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University of Turku

Faculty of Social Sciences
Political Science
Department of Philosophy, Contemporary History and Political Science

Supervised by

Maija Setälä
Professor of Political Science
University of Turku

Hannu Nurmi
Professor emeritus
University of Turku

Reviewed by

Madeleine O. Hosli
Professor of International Relations
Leiden University

Mikko Mattila
Professor of Political Science
University of Helsinki

Opponent

Mikko Mattila
Professor of Political Science
University of Helsinki

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Abstract

In contemporary political economy, it is often argued that multiparty government contributes to sustainability problems in the public economy. This is because parties have incentives to offer targeted policies to narrow-based voter groups while neglecting a large share of the costs associated with such policies. The structure of the situation is arguably similar to overconsumption and under-saving problems often encountered in the management of natural resources, which has given rise to the notion of the budgetary or fiscal common-pool problem. In this view, multiparty government is associated with increases in public spending, taxes and debt as well as persistent budget deficits; such phenomena becoming clearer as the number of parties in government grows.

This work challenges the view by arguing that such problems are not inherent features of multiparty politics, but rather follow from the combination of multiparty decision making and the breakdown of programmatic linkages between voters and political parties. In particular, when corruption and other forms of favouritism and partiality are prevalent in the public sector, the credibility of programmatic goals and statements that parties make decreases. This creates room for non-programmatic, distributive objectives and hence encourages the exploitation of the tax base, which becomes visible in empirical associations between the number of government parties and fiscal policy aggregates. In contrast, impartial and efficient state institutions make it possible to present and implement programmes with far-reaching and universalistic implications, whereby the programmatic stances rather than the number of government parties explain policy outcomes. This makes it possible to manage the 'budgetary commons' in a sustainable way.

These arguments are tested on data that covers the current 28 member states (as of 2017) of the European Union from the early 1970s or mid-1990s to 2012. The results are largely in line with the expectations, although the effects of political variables differ somewhat between the post-communist member states and the rest. The number of parties in government explains fiscal policy outcomes mainly in those post-communist countries where favouritism and partiality in the use of state authority are most prevalent. However, in the post-communist area these effects disappear when state institutions are more impartial, whereby the effects of variables capturing programmatic aspects of politics have explanatory power. Outside the post-communist area, political variables generally have little effect on fiscal policy aggregates, especially since the early 1990s. However, in that group of countries, those countries with most impartial state institutions have been most likely to adopt stringent and encompassing fiscal rules.

Keywords: budget, commons, corruption, European Union, fiscal policy, party systems, proportional representation, public finance

Tiivistelmä

Nykyisessä poliittisen talouden tutkimuksessa on tavallista väittää, että monipuoluehallinto on omiaan johtamaan julkistalouden kestävyysongelmiin. Tämä johtuu siitä, että puolueilla on kannustimia tarjota kohdennettuja etuja kapeapohjaisille äänestäjäryhmille ja jättää suuri osa toimenpiteiden kustannuksista huomiotta. Rakenteeltaan tilanteen väitetään usein muistuttavan luonnonvarojen hallinnassa usein ilmeneviä ylikulutus- ja alisäästämisongelmia. Siksi budjettiyhteisvaranto-ongelman käsite on tullut suosituksi. Tämän näkemyksen mukaan monipuoluehallinto on yhteydessä julkisten menojen, verotuksen ja velan kasvuun sekä sitkeisiin alijäämiin siten, että nämä ilmiöt käyvät sitä voimakkaammiksi, mitä suurempi määrä puolueita on jakamassa hallitusvaltaa.

Tämän tutkimuksen mukaan edellä mainitut ilmiöt eivät ole monipuoluehallinnon välttämättömiä seurauksia. Pikemminkin ne seuraavat siitä, että monipuoluepolitiikkaa tehdään äänestäjien ja puolueiden välisten ohjelmallisten yhteyksien ollessa heikkoja tai puuttuessa kokonaan. Erityisesti korruption ja muiden puolueellisuuden muotojen ollessa julkisella sektorilla yleisiä puolueiden esittämien ohjelmallisten tavoitteiden ja väittämien uskottavuus heikkenee. Tämä luo tilaa ei-ohjelmallisille jakopoliittisille motiiveille ja kannustaa käyttämään veropohjaa jakopoliittisten resurssien lähteenä, mikä ilmenee hallituspuolueiden lukumäärän ja julkistaloudellisten muuttujien välisinä empiirisinä yhteyksinä. Puolueettomat ja tehokkaat valtioinstituutiot sen sijaan mahdollistavat laajojen ja pitkävaikutteisten ohjelmien esittämisen ja toimeenpanemisen, jolloin puolueiden esittämät ohjelmalliset linjat, hallituspuolueiden lukumäärän sijaan, selittävät politiikan lopputuloksia.

Näitä väittämiä testataan aineistolla, joka kattaa Euroopan unionin nykyiset 28 jäsenmaata (vuoden 2017 tilanteen mukaan) 1970-luvun alusta tai 1990-luvun puolivälistä vuoteen 2012. Tulokset ovat pitkälti odotusten mukaisia, joskin poliittisten muuttujien vaikutukset poikkeavat toisistaan jälkikommunistisissa ja muissa jäsenmaissa. Hallituspuolueiden lukumäärä selittää julkistaloudellisia lopputuloksia lähinnä niissä jälkikommunistisissa maissa, joissa puolueellisuus julkisen vallan käytössä on kaikkein yleisintä. Jälkikommunistisella alueella nämä ilmiöt kuitenkin häviävät valtioinstituutioiden käydessä puolueettomammiksi, jolloin politiikan ohjelmallisia puolia kuvaavat muuttujat saavat selitysvoimaa. Jälkikommunistisen alueen ulkopuolella poliittisilla muuttujilla on vain vähän vaikutusta julkistaloudellisiin mittareihin erityisesti tarkasteltaessa 1990-luvun alun jälkeistä ajanjaksoa. Kuitenkin jälkikommunistisen alueen ulkopuolisista maista ne, joiden valtioinstituutiot ovat kaikkein puolueettomimmat, ovat todennäköisimmin ottaneet käyttöön vahvoja ja kattavia budjetointisääntöjä.

Asiasanat: budjetti, Euroopan unioni, finanssipolitiikka, julkistalous, korruptio, puoluejärjestelmät, suhteellinen vaalitapa, yhteisvaranto

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Writing this book has taught me many things, and I hope that this can be seen on the pages that follow. One of the most important lessons, however, would not receive the attention it deserves unless it is explicitly mentioned. That lesson is the fact that academic research is never an individual performance (although it sometimes certainly looks and feels like it) but a collective effort; therefore, I am most indebted to a host of people.

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Chapter 1
Introduction: Sustaining and Exploiting the Tax Base Together

According to a popular saying, known in some form in several languages, too many cooks spoil the broth. Each cook comes with his or her own idea of what is good and what would improve the final product, but if no-one takes on the task of coordinating the master chefs' efforts, the guests are served an outlandish mixture of ingredients that is unlikely to please anyone.

The appeal of such sayings and metaphors comes from the fact that they seem to capture something universal and compress it into a few words. One setting where the saying appears to apply is decision making by multiple political parties. It often seems to be the case that a number of parties, each with their own demands they have propagated before going to the bargaining table, enter the negotiating room and eventually come out with a policy package that no-one had advocated, at least not in public. Instead, each party has secured some victories but has also been obliged to give up some of its demands in return. What the balance of wins and losses looks like for a given party depends not only on the content of its list of priorities but also on its ability to make or break winning coalitions and to blackmail or eloquently persuade others to support its cause. It is easy to believe that in the bargaining table, partisan interests trump general interests as everyone seeks to secure their own priorities while expecting that someone else takes care of those of the society at large.

Far from being a satirical illustration of how party politics is analysed in letters to the editor in popular newspapers, the sketch of a bargaining process depicted above has strong foundations in contemporary approaches to public finance, political economy and party system research. Political parties competing for votes are assumed to target their efforts at specific segments of the society, giving rise to a process that resembles the exploitation of natural and physical resources – only in this case, the 'appropriators' are electorally accountable politicians and parties and the resource base being appropriated consists of taxable resources of the society. This, in turn, produces outcomes that are akin to those that follow from the exploitation of physical resources: the scope of activity tends to exceed the sustainable level, and over time the resource deteriorates and produces diminishing amounts of benefits before it is, in the worst-case scenario, completely destroyed. Is multiparty politics really like this? As will be argued later, this question is somewhat misplaced. However, it is useful to begin by briefly thinking about the implications of this analogy and reviewing some possible signs of the over-exploitation of the 'budgetary commons' in the European Union.

Tragedies of Natural and Budgetary Commons

In contemporary literature on public finance, party systems and comparative political economy, it has become popular to draw an analogy between the management of the public economy and the management of common-pool resources (Raudla 2010). Specifically, it is often claimed that decision making on the allocation of taxable resources and the utilisation of certain kinds of goods are liable to similar overconsumption and under-saving problems. Those goods, known as common-pool resources, are basically characterised by two features: it is impossible, difficult or at least non-trivial to exclude others from using them, and resource units consumed by one actor are not fully available to others (Ostrom 2003). The traditional way of thinking about such resources is such that once multiple actors gain access to and start consuming them, overexploitation follows, and the resource ultimately ceases to provide the benefits it originally provided.

A classical formulation of the problem is provided by Garrett Hardin (1968) in a famous article titled 'The Tragedy of the Commons'. Hardin's argument proceeds by means of an example involving herders who face the decision of how many animals to bring to an unfenced pasture. Each individual herder compares the changes in benefits and costs associated with each additional animal and ceases bringing additional animals once cost increases are as large as benefit increases – in other words, a herder maximises net benefit by bringing animals to the pasture up to the point where marginal benefit equals marginal cost. But while an individual herder internalises the entire benefit increase coming from an animal, he or she only internalises a fraction of the cost – after all, the cost is borne by all herders as they all face the same erosion and the same congestion of the pasture. Therefore, as a large fraction of costs remain externalised, the herders end up bringing excessive amounts of animals to the pasture. The tragedy is the fact that individually, rational herders end up producing a collectively irrational outcome and destroying the pasture.

While Hardin's argument is probably best known for the example he uses for making his point, his ultimate aim is to highlight the causes of a major global problem, overpopulation, and to argue for limitations of individual freedom that, in his view, underlie the problem. The overpopulation problem has not been solved since the late 1960s when Hardin's article was published. Instead, it is accompanied by other global problems that are characterised by individually rational decisions leading to collectively irrational outcomes, the global climate change being probably the most notable example. Other examples include the fact that oceans are increasingly polluted by plastic waste that firms, individuals and communities find profitable to dump into the nature instead of processing it. Tropical rainforests are also being cut down at an alarming pace, contributing not only to the disappearance of species but also to climate change as carbon sinks are destroyed.

In the beginning of the 21st century, we indeed seem to be living in the middle of crises that have already materialised, are materialising at the moment or whose threat is

imminent. To the problems associated with the depletion of natural resources, one could add the problems of public finance that have riddled Europe, as well as other parts of the world. In the aftermath of the so-called Great Recession of the late 2000s, which in turn was ignited by financial turmoil that affected almost all parts of the world, a number of European Union member states plunged into an outright fiscal crisis and had to rely on financial assistance from other countries and international organisations. However, debt levels were already rising and difficulties were encountered in keeping budgets balanced in a host of countries even before the economic crises at the turn of the decade.

Did the dynamics of multiparty government contribute to this development? More generally, does the participation of several parties in the formulation of policies with budgetary implications lead to the waste of resources and unsustainable deficits? After all, it is easy to perceive politicians as behaving like the herders in Hardinian commons. Jürgen von Hagen (2006, 465) summarises the idea in a way that is easily reconcilable with many people's everyday experiences of political events: '[t]he common-pool problem arises when politicians can spend money from a general tax fund on targeted public policies.' As political parties do not draw support from the public at large but from segments of the public, they are encouraged to keep their target groups happy even if it imposes costs on the rest of the society (Bawn and Rosenbluth 2006). The smaller the segments relative to the society are, the stronger are the incentives that parties face to spend sub-optimally large amounts on the policy priorities of their constituencies (see Weingast *et al*. 1981). Consequently, the larger the number of parties participating in policymaking – government parties being especially relevant in parliamentary systems – the more closely the political system resembles an unfenced commons that the herders end up overexploiting.

This work focusses on a set of explanations for differing fiscal policies, drawing on the number of decision makers able to affect the level, composition and temporal profile of public spending and revenue. Such explanations, however, are relevant not only with an eye on improving our understanding of the factors affecting the state of a public economy. Another reason for the relevance of such explanations lies in the fact that they make more or less implicit claims about the nature of representative democracy. In particular, works analysing connections between the number of decision makers and fiscal policy outcomes seek to make general statements about how representative systems work and seldom acknowledge the possibility that such systems may work differently in different settings. For example, the Danish multi-party system is likely to work differently from the Romanian multi-party system. It is not self-evident that tendencies to over-exploit the taxable resources of a society are the same in both cases. Furthermore, if the strength of such tendencies varies systematically with some other variables, it is also not evident that those tendencies are an inherent feature of representative politics, but rather of some other factors that interact with specific features of the party system.

The notion of the budgetary common-pool problem is appealing in its simplicity.

After all, models are purpose-related simplifications of reality (Clarke and Primo 2012), and the fact that they make it feasible to analyse the complex empirical world is why we use models in the first place. However, as Elinor and Vincent Ostrom (2014, 67) note, '[m]odels are useful in policy analysis when they are well tailored to the particular problem at hand' but 'when applied to the study of problematic situations that do not closely fit the assumptions of the model' they can be used inappropriately. The apparent diversity of practices that are encountered in representative democracies, that may look similar when it comes to formal rules and institutions and the quantifiable features of party systems, makes one wonder whether the story about the appropriation of the budgetary commons evolves similarly in all political systems.

Models of fragmented decision making – fragmentation here refers to the fact that decision makers do not internalise the costs of their actions in full (Perotti and Kontopoulos 2002) – focus on the distribution of material benefits and on the factors affecting distributive pressures. Politics is undoubtedly about 'who gets what, when and how', as the title of Harold Lasswell's (1951 [1936]) classic says, but it is also about ideas, universal programmes, public goods and the development of the society over the long term – that is, what is good, right and worth pursuing. Ideally, multiparty politics is about the settlement of opinion differences and the search for the best outcome based on different viewpoints represented in the decision-making arena, and electoral competition is competition of ideas rather than auctions of targeted benefits (see Gutmann and Thompson 1996; Powell 2000). Both aspects of representative politics undoubtedly co-exist in any political system, but their relative weights are likely to vary. Hence, models that draw on the notion of the common-pool problem shed light on one part of political life, but it is not certain that that part is equally dominant in all societies. Hence, understanding the conditions that are favourable to the development of overexploitation problems is essential before imposing alleged solutions intended to rectify such problems.

Representative Politics and the Quality of Government

Simplistic ways of thinking about common-pool resource management have long been deemed outdated in the burgeoning literature on natural and physical common-pool resources. A seminal work in the field is *Governing the Commons* (1990) by Elinor Ostrom, who vehemently opposed imposing one-size-fits-all models on situations that in the end are not similar and warned against the lures of 'blueprint solutions'. The notion of the common-pool problem has been eagerly adopted in contemporary research, but in many respects the ways in which the notion is used resembles the situation in the literature on physical common-pool resources before the publication of Ostrom's path-breaking work. To put it shortly, problems are assumed to follow from the fact that multiple appropriators have access to a depletable resource, not from the specific ways in which the interactions between the appropriators are ordered. The

blueprint solution that has come to dominate academic and especially political discourse is the imposition of more and more stringent fiscal rules, with the assumption that they function similarly in all kinds of societies.

The literature on the consequences of fragmented decision making has been primarily concerned with formal institutions and quantifiable features of party systems. However, the wider context in which the management of the budgetary commons takes place has received less attention – the concepts of *society* and *state* are seldom encountered in this literature despite their obvious centrality to the political and social sciences, including economics from which a large part of the literature in question stems. However, the fact that the management of the budgetary commons is both representative and collective, these points being elaborated in greater detail in Chapter 3, means that a host of issues not directly related to formal institutions needs to be considered. Importantly, one has to ask which actors are actually involved in the formulation of policy, what those actors expect from each other and how credible and trustworthy actors are in the eyes of each other.

Policymaking in a representative system takes places in several stages (e.g. Norris 2012, 34–39). To begin with, in what can be called the agenda-setting stage, issues are brought to the decision making arena, and thereafter policies are formulated and decisions are made on their approval or rejection. As will be highlighted in the following chapter, the literature on the budgetary consequences of multiparty government has tended to restrict its attention to these stages and the players that are relevant therein, like political parties. However, the policy process does not end there as policies also need to be implemented before they can affect society. Furthermore, implementation and the realisation of policy outcomes are followed by feedback loops that again affect agenda setting. These latter phases of the process, alongside the institutions involved, have come under increased scrutiny.

The quality of government has been given several meanings. It is tempting to define quality in terms of outcomes, so that a good government is a government that produces good things. The quality of government is here, however, understood in procedural terms, more specifically as impartiality in the exercise of government authority (Rothstein and Teorell 2008). This means that when implementing laws and policies, officials do not take into consideration anything related to the case in question or the persons involved that is not prescribed by the law or policy. A high quality of government understood in this way rules out a host of practices including corruption, clientelism and nepotism. It is related to the implementation or the output side of the political system, to evoke the familiar Eastonian notion, and therefore its relationship to the input side of the system is not self-evident. However, an impartial and competent public administration that is capable of implementing large-scale policy programmes is a precondition for the credibility of such programmes, and that credibility is also backed by the trust in public institutions, and other people in general, that such an administration fosters. Moreover, public policy in developed societies is not only about the actions of citizens and elected politicians. In a complex world, the input of competent administra-

tive officials responsible for much of policy preparation is essential. A competent bureaucracy that is sufficiently independent of electorally accountable politicians is likely to bring to the policy process not only expertise that facilitates the recognising of appropriate solutions to difficult problems. It is also likely to bring a longer time horizon akin to that of a stable community of appropriators; an important ingredient for the successful governance of physical common-pool resources (Raudla 2010; Rothstein 2012).

Budgetary common-pool problems, like other social dilemmas, are greatly alleviated by the perceived trustworthiness of the actors involved (Ostrom 2010; Rothstein 2005). The lack of high-quality government institutions paves way for a variety of particularist practices that in turn breed distrust and hence contribute to the development of overexploitation problems in the use of taxable resources. Coupled with a weak civil society and historical experiences that foster cynicism and distrust, the connection between multiparty government and fiscal policy outcomes should be especially clear in those post-communist countries that have not been able to build impartial state administrations.

Exact mechanisms that may bring about such an association between low-quality state institutions paving the way for particularist practices and party politics resembling the exploitation of common-pool resources are potentially many, and they may exist in different mixtures in different societies at different times. Plausible mechanisms are reviewed in greater detail in Chapter 5 that also tests the claim that the effects that the number of government parties and the programmatic outlook of the cabinet have on fiscal policy outcomes indeed depend on the quality of government. The argument does not, however, depend on a specific mechanism and therefore its empirical tests do not apply variables that would expectedly capture some particular mechanism. To put it in more eloquent terms, it is worth recalling the opening of Leo Tolstoy's (1998 [1875–1877]) *Anna Karenina*, according to which '[h]appy families are all alike; every unhappy family is unhappy in its own way.'

High-quality state institutions rule out a host of practices and, in this sense, make all political systems characterised by high institutional quality alike. In the absence of high institutional quality, diverse practices ranging from elite-level bribery to nepotism in recruitments to public agencies and further to vote buying at the level of city blocks and villages may co-exist. For the present purposes, it is relevant to establish a connection between governance institutions, party politics and fiscal policy outcomes. As with common-pool resource management in general, finding workable solutions requires information on local-level practices and tailoring solution proposals to the particular case, which is outside the scope of this work. However, the role of state institutions and historical contexts – such as post-communist heritage – points to the conclusion that electoral accountability as such is not behind the observed associations between multiparty government and fiscal problems, but rather a combination of factors of which electoral politics is only one part.

The quality of government literature has expanded considerably since the control of

corruption entered the agenda of major international organisations, most notably the World Bank, in the 1990s. The 'QoG factor' has become central to attempts to explain differences in economic and social development as well as in diverse aspects of human welfare. At present, however, relatively little is known about how the quality of government is related to representative politics, especially when it comes to the effects of variables related to the government of the day, e.g. the location of the cabinet between the extreme right and extreme left, instead of regime-level variables such as the placement of a country on the free–not free continuum. This work therefore contributes to the quality of government literature by arguing that the quality of state institutions also affects the extent to which politics is programmatic or non-programmatic, hence also affecting the prospects of managing public funds in a sustainable way. As far as the prevalence of programmatic aspects is taken as a yardstick of a well-functioning representative democracy, a strong state machinery is an important precondition.

Even high-quality state institutions, well rooted civil societies and other factors that should be conducive of well-functioning representative democracy do not guarantee that outcomes are 'optimal.' From an economic point of view, a society may deliberately choose inefficient or unsustainable policies. From the perspective of democracy, politics may decline into the bureaucratic management of public affairs. The importance of high-quality state institutions and civil society lies rather in the fact that they facilitate combining meaningfully democratic government with sustainable policy outcomes. Not only is political will required, but also the institutional environment needs to enable the public sector to stick to programmes that have been adopted in the political process. In contrast, even an apparently centralised decision-making structure is unlikely to foster so-called fiscal discipline if the polity is permeated by clientelist networks, widespread bribery and other forms of particularism.

Rules and Popular Influence

The approach drawing on the quality of government and programmatic politics is rather unconventional as it runs, in a sense, counter to prevailing views stressing the role of electoral accountability and the inherent vices of open political processes; openness being the flip side of fragmentation as both pertain to the number of actors that can influence policy outcomes. It is also a potentially frustrating approach from the perspective of policy makers concerned with the sustainability of public finances. There is no quick and watertight way of establishing high-quality government or ensuring that programmes adopted in the political process are favourable to fiscal sustainability. In fact, since a completely satisfactory theory of the origins of impartial and meritocratic public administration is lacking in the first place, it is not very well known how so-called best practices could be transferred from one setting to another. Fiscal rules, however, have received considerable attention as promising solutions to overexploitation tendencies.

This is visible in the work of major supranational organisations, such as the European Commission and the International Monetary Fund (IMF), that for some time have collected detailed data on fiscal rules in place in national states and also provide recommendations on fiscal governance – and in the case of the Commission closely monitor national fiscal policies. Since the signing of the Maastricht Treaty, or more formally the Treaty on European Union, in 1992, rules on allowable debt and deficit levels have existed at the level of basic treaties in the European Union. The rules have been revised a few times, and in 2012 the member states (with a few exceptions) signed the so-called Fiscal Compact that contains new, stricter regulations on allowable imbalances and their rectification.

Despite these kinds of commitments made by the member states, the data provided by the Commission and the IMF point to considerable variation in the rules countries have actually adopted. According to some accounts, countries have also engaged in gimmickry and creative accounting in order to give the appearance of complying with fiscal rules without actually doing so (Alt *et al.* 2014). Moreover, while a number of studies have concluded that fiscal rules indeed tend to mitigate budget imbalances and other assumedly problematic developments like spending increases, some recent works have questioned the extent to which rules can be considered truly exogenous (Heinemann *et al.*, forthcoming; Rommerskirchen 2015). In short, the adoption of rules that appear to be conducive of so-called fiscal discipline may just reflect political commitment to fiscal discipline instead of causing it.

The approach to fiscal governance that has been adopted in the European Union relies heavily on numerical rules that specify boundaries of allowable deficits and debt. Such restrictions, if effective, plausibly impact the spending and revenue sides of the budget as well, as the avoidance of deficits forces policy-makers to restrict spending and raise more revenue. Hence, they may have implications also for the allocation of resources between the public and private sectors, not only the temporal profile of spending.

The reliance on fiscal rules faces a risk analogous to the one that has materialised in numerous anti-corruption programmes: after the adoption of ambitious policies supposed to curb corruption, often accompanied by the establishment of anti-corruption agencies, it has turned out that there is no actor that is beyond the corrupt political, economic and social system that could credibly implement the policies (Persson *et al.* 2012). Similarly, if everyone in the political field is playing a game of short-sighted distributive politicking, no-one may take charge of seeing that seemingly strict fiscal rules are obeyed. Moreover, external rules may become a scapegoat for national decision makers pushing for unpopular reforms, which may be risky given that the legitimacy of the EU is weak in the eyes of a large share of EU citizens (see Molander 2001, 37). Consequently, the anti-EU populist movements that have risen especially in the 2010s have actively utilised the image of the EU as excessively restricting political choices, one culmination of this style of politics being the so-called Brexit referendum in the United Kingdom in 2016.

Fiscal rules should not be condemned as restrictions on democracy although they evidently place restrictions on the choices of elected decision makers. One might suppose that the less rigid the rules guiding collective will-formation are, the better the outcome reflects the 'will of the people.' From the theory of social choice, however, we know that the aggregation of individual preferences does not generally produce a logical preference ordering unless basic fairness conditions are violated (Arrow 1970), and the outcomes of preference aggregation are generally open to manipulation (McKelvey 1976). Hence, appeals to the popular will are not very convincing. Rules may in contrast be argued to improve the quality of democracy in so far as they encourage the adoption of a long-term perspective, hence taking future interests into account, reduce political instability by compressing the inherently multidimensional nature of budgeting into fewer dimensions, improve the feasibility of collectively beneficial outcomes, enhance the use of information in decision making and encourage the reconciliation of competing demands by means of discussion (Molander 2001). In this sense, fiscal rules may be akin to the rules the appropriators of a common-pool resource adopt. Choosing and enforcing rules, however, is a second-order problem that also needs to be solved (see Ostrom 2010).

It is plausible that high-quality state institutions facilitate the adoption of the kinds of beneficial fiscal rules Per Molander (2001) has in mind. Molander discusses the Swedish case, where the budgetary procedures were substantially revised after serious budget imbalances in the early 1990s, so that the process transformed from one of the least regulated to one of the most stringently regulated in Europe. But the effects of rules as such do not suffice to explain why Sweden made such a revision, whereas other countries, such as Italy and Greece that have experienced almost constant deficits for decades, have been much less enthusiastic in adopting the kinds of reforms Sweden did. While all differences are not likely to go back to the quality of government, it can be noted that Sweden largely succeeded in creating an impartial public administration recruited on a meritocratic basis already in the 19th century (Rothstein and Teorell 2015; Teorell and Rothstein 2015), while that process was never completely finished in Greece and (large parts of) Italy (Fukuyama 2014).

In so far as the quality of government explains the adoption of fiscal rules, the argument concerning the relationship between the institutional structure of the state and representative democracy being advocated in this work is strengthened: high quality of government does not guarantee that optimal or efficient policies are chosen, but it greatly improves their odds.

The Cases of This Work

This work focusses on the current (as of 2017) member states of the European Union. The empirical material hence comes from 28 countries, and covers the time period extending from the early 1970s, for the so-called old member states, or the mid-1990s,

for the so-called new member states, to 2012. 'Old' member states here refer to the EU15 or the countries that joined the Union in 1995 or earlier. 'New' member states are those that became EU members in 2004 or later.

The focus on EU countries stems, first, from the practical fact that the sustainability of the public economy is constantly on the agenda of EU institutions. Already in the Maastricht Treaty of 1992, basic rules on allowable deficits and debt levels were laid down – those rules subsequently being routinely breached by a number of member states. Since their introduction, the rules in question have been modified several times, and nowadays the European Commission closely monitors the fiscal standing of national governments. The reliance on rules and monitoring has caused legitimate concerns about the quality of democracy in the EU, and therefore it deserves to be asked what the role of political variables has been in the development of public finances in the area.

Another justification for focussing on EU countries goes back to questions of comparability. Membership in the Union implies that states have ceded some of their sovereignty – not least in economic matters – to a supranational organisation. The set of European democracies, another natural reference group of EU member states, is of course larger and includes highly developed and strongly established democracies like Iceland, Norway and Switzerland. Despite having decided not to join the EU, they are heavily affected by what the EU does. However, they are not bound by the fiscal governance framework of the Union, and hence analysing them side by side with a much larger group of EU members in matters of fiscal policy would not be completely unproblematic. The new member states joined the Union relatively recently, but even before that they were required to meet the so-called convergence criteria, and accession was a lengthy process with budgetary implications even before the actual date of accession. It is here fully acknowledged that even the EU does not constitute a homogeneous set of countries; as will be discussed at length later, historical experiences of communism and capitalism are important dividing factors, despite the disappearance of the former from the European landscape a quarter of a century ago.

Thirdly, despite its at times faltering progression towards deeper integration – the so-called Brexit referendum of 2016 being a horrendous shock to federalists throughout the continent – the EU has developed into a political unit in its own right. From that perspective, studying the politics of its constituent parts is a study of its domestic politics, like studying the politics of US states is a study of American politics.

The start of the time-series for the old member states – the early 1970s – coincides with the end of what has become known as the 'golden age of capitalism' in the then-industrialised world. From the Second World War to the energy crises of the 1970s, Western economies were largely characterised by strong economic growth, low unemployment, decreasing income inequality and Keynesian policies that sought to manage business cycles and capital movements. Public debt, deficits and the curbing of spending increases became widely shared concerns in the 1970s; this was accompanied by changes in intellectual winds that marked the end of the Keynesian doctrines justifying

an active state (e.g. Buchanan and Wagner 1977). However, as Tanzi (2011, 94) notes, the decades from the 1960s to the 1990s saw the largest increases in the economic activities of governments. However, reliable data on a host of relevant variables (reviewed in Chapter 4) is not available before the 1970s. Moreover, for a large part, the analyses in this work can only use data from the mid-1980s onward as data on the quality of government and fiscal rules – both essential to the present study – become available after that time.

The formerly communist countries of Eastern and Central Europe transitioned to an electoral democracy and market economy in the end of the 1980s and the beginning of the 1990s. There is, however, a gap between this point in time and 1995 when the countries enter the dataset used in this work. This is because almost no comparable data on fiscal and economic variables is available for those countries before the mid-1990s. The same applies to the two Mediterranean countries, Cyprus and Malta, that accessed the EU in 2004.

The period covered in this study ends in 2012, the year when the so-called Fiscal Compact was adopted. The Fiscal Compact is a set of rules and targets to which most member states committed themselves in the aftermath of the global financial crisis and the associated European fiscal crises. The early 2010s also saw changes in party systems and political cleavages as populist and anti-EU movements started to gain prominence in a number of European countries, in many cases after living for some time in the margins of political systems. Hence, the year 2012 is a natural end point of the study period.

All member states of the European Union use some form of the parliamentary system of government, which sets them apart from most American and post-Soviet countries. The political systems considered here share the defining feature of parliamentarianism that in order to survive, the cabinet has to enjoy the confidence of the parliamentary majority. This is so even in those countries that are often labelled as semi-presidential to account for the role of the head of state that is more visible and less ceremonial than in the rest of the republics and constitutional monarchies of the area.

Despite similarities in the basic structures of their political systems, the member states of the EU vary considerably when it comes to their historical backgrounds. European integration was for long a project of traditionally capitalist countries, most of which had also been democracies at least since the Second World War, Greece, Portugal and Spain being exceptions in the latter respect as they were ruled by military regimes until the 1970s. In 2004, ten countries joined the Union, eight of them being so-called transition countries that used to be under communist rule until the turn of the 1990s. The set of post-communist EU member states subsequently grew as Bulgaria and Romania joined in 2007 and Croatia in 2013. At this point, it is worth pointing out that the political institutions in those post-communist member states that subsequently joined the EU were largely crafted after Western European models. The constitutional choices those countries made differed from most other post-communist countries, par-

ticularly those that now form the Commonwealth of Independent States, that most often chose presidential institutions.

Most of the formerly communist countries that have made their way to the European Union did not adopt market institutions without any previous experience. In those countries, communist regimes came to power in the aftermath of the Second World War and the communist period lasted about 45 years. Before that, economic life was organised on a capitalist basis with the accompanying institutions, albeit the instability of political life and government institutions that by modern standards were, for the most part, of relatively low quality meant that markets did not have an entirely solid backing of public institutions. Experience of representative democracy even before the instalment of communist regimes was generally weak in the area. Hence, given the overarching argument of this work, that the management of the 'budgetary commons' is heavily affected not only by formal institutions and quantifiable features of the party system but also by the historical context, the EU countries are analysed both together and by differentiating between post-communist and non-post-communist countries.

Analysing quantitative data that covers a relatively restricted number of cases over an extended period of time is nowadays common in comparative political economy. The present work applies methods of so-called time-series cross-sectional analysis (see Chapter 4), observations being country-years. Extensive use is also made of the analysis of interactions and conditional effects, given the emphasis this work gives on identifying factors and circumstances that affect the relationships between political and budgetary variables.

An Overview of Spending and Debt in the EU

At this point, it is useful to take a preliminary look at what some key fiscal policy indicators look like in the EU countries and how they have developed over time. The notion of the budgetary common-pool problem suggests that government spending is the primary driver of sustainability problems: as parties distribute taxable funds to their target populations, the level of spending rises and makes it necessary to either increase revenue or incur debt, or both. The labels of the fiscal policy aggregates reviewed here are quite self-explanatory. For more detailed definitions the reader is advised to consult Chapter 4.

Figure 1.1 shows the development of general government spending from the early 1970s (in the 'old' member states) or 1995 (in the 'new' member states) to 2012. Total spending is here measured as a percentage of gross domestic product. If total spending is used as an indicator of the size of the public sector, there appears to be no evidence of monotonic 'growth of government'. Relatively clear trends from the beginning to the end of the period are only visible in a handful of countries, such as Cyprus, France, Greece and Portugal. In some countries, such as Denmark, Finland, Italy and Spain, the

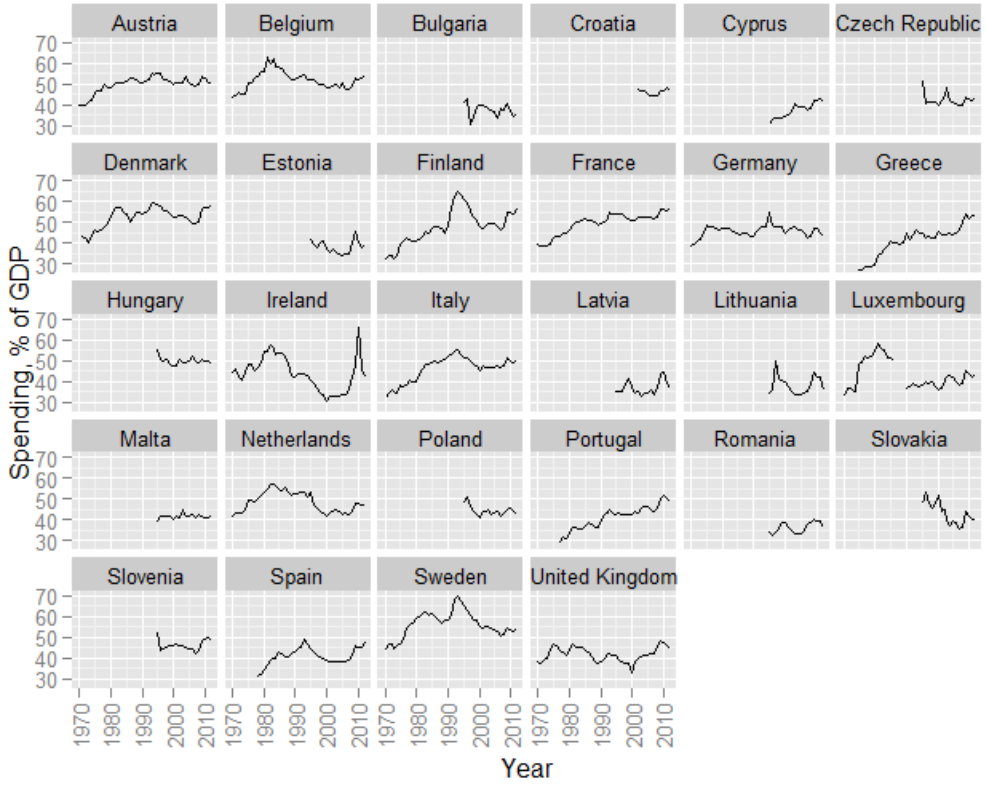

Figure 1.1. Total general government spending in the European Union member states, 1970–2012.

difference between the start and end levels is clear but there are considerable ups and downs in the curve. The early 1990s is marked by peaks in all of these countries, which suggests that developments in the macroeconomic environment are a major source of variation. Especially the Nordic countries were at that time hit by an economic crisis, which is also visible in the Swedish data. The Irish data exhibits the importance of the macroeconomic environment particularly well as spending peaked during and after the financial crisis of the late 2000s. In some countries, including Belgium, the Netherlands and Sweden, there is a peak visible in the late 1970s and 1980s. This may be partly due to the energy crisis and the prolonged stagnation of the 1970s, but the expansion of spending during the growth years of the 1980s may indicate that tax-financed programmes increased in an economically favourable environment.

In the post-communist countries, the time series tend to start with a drop reflecting the retrenching of the state from the economy. However, the decrease of government spending has not been continuous, and spending seems to have settled on levels that differ across countries. Whereas the spending levels have ended up on relatively high levels in Hungary and Slovenia, for example, they are considerably lower in Estonia

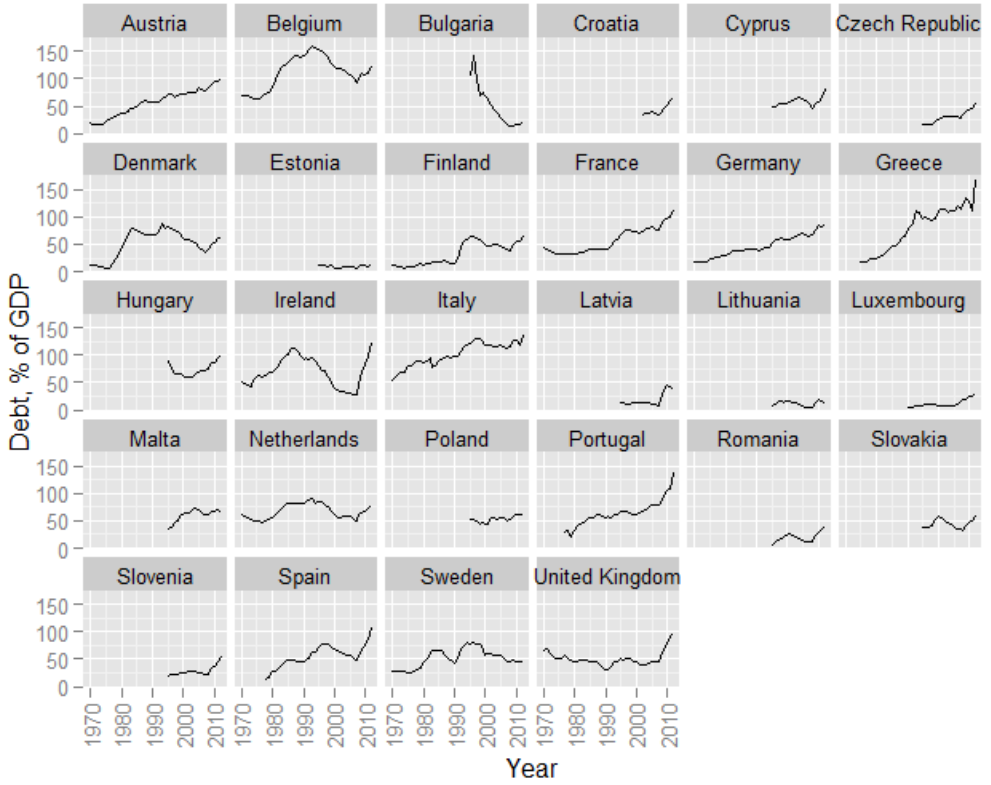

Figure 1.2. Government debt in the European Union member states, 1970–2012.

and Romania. Finally, two countries exclusively or almost exclusively ruled by single-party cabinets, Malta and the United Kingdom, show fairly stable spending levels. As noted, this is not the case for all countries that have predominantly been ruled by single-party cabinets, such as Greece.

The political discourse on the state of the public economy in the European Union is not so much centred on the level of spending but on debt and deficits. As for government debt, trends toward higher levels are more readily discernible than in the case of spending. This is visible in Figure 1.2 which shows the ratio of government debt to the gross domestic product in the EU countries. Debt levels have been on the rise almost monotonously since the 1970s in Austria, Germany, Greece, Italy and Portugal. In France, steep increases and plateaus have taken turns. It has to be noted, however, that the slope of the (imaginary) trend line differs across countries and is, for example, much smaller in Germany than in Greece. Some countries, including Belgium, Ireland, Spain and Sweden, have made notable reductions in debt levels, albeit in almost all countries the financial crisis of the late 2000s is visible in rising debt levels at the end of the time-series. In the new member states, debt levels tend to be lower than in the old member states. The clearest reduction of debt has happened in Bulgaria, and some

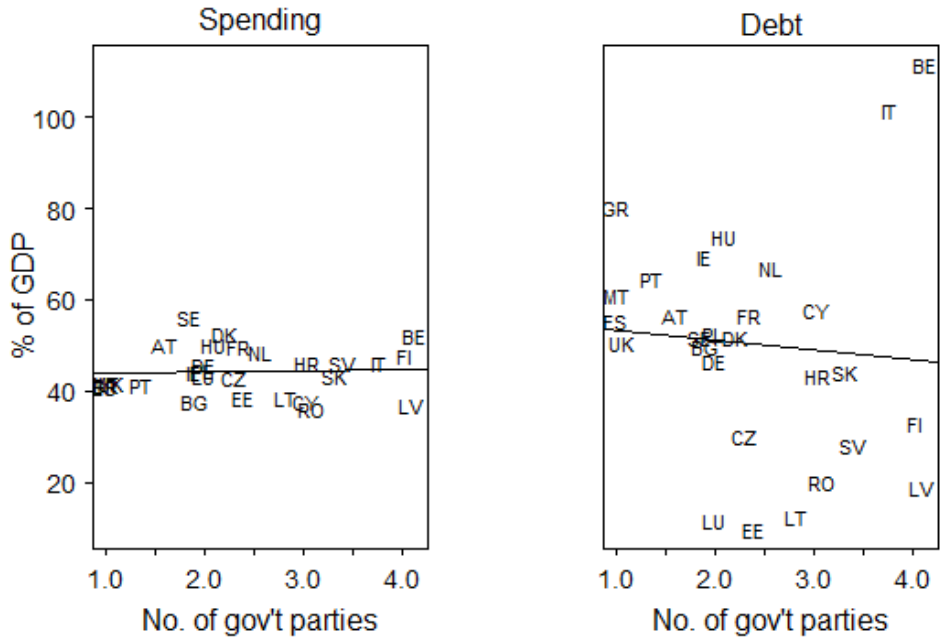

Figure 1.3. The average levels of spending and debt plotted against the average number of government parties in the EU countries.

countries like Estonia and Lithuania have remained virtually debtless throughout the period. However, the Czech Republic shows an upward trend and in Hungary debt has, despite a period of considerable reduction around the turn of the millennium, remained at a comparably high level.

There is hence considerable variation in key fiscal policy variables both across countries and over time. In addition, there is little evidence of a uniform 'growth of government', at least as far as spending levels go, although spending has increased quite considerably in some countries. Debt levels have also generally risen since the 1970s, but even in this respect countries exhibit considerable differences.

At this point, it is also useful to make a preliminary assessment of the plausibility of the claim that the number of cabinet parties is associated with the 'growth of government' and the accumulation of debt. The average levels of spending (i.e. averaged over time) and debt in the EU countries are plotted against the number of parties in government in Figure 1.3. Based on the existing literature, a positive correlation ought to be discernible in both panels. The panel on the left, however, shows practically no connection as the linear trend line is almost horizontal. The message conveyed by the figure would not change even if post-communist countries and the rest of the countries were examined separately. In the panel on the right, the correlation between the number of cabinet parties and debt is actually slightly negative. Moreover, if Belgium and Italy, located in the upper corner on the right, were removed, the trend line would be-

come more clearly negative. However, why countries are located as they are is perhaps a more relevant, and more difficult, question to answer than what sign the empirical relationship has in the entire set of countries.

Merely looking at the level of spending reveals little about how efficiently or inefficiently the resources are actually used or why the level of spending is what it is. The rest of this book seeks to assess whether and to what extent the differences reflect overexploitation problems connected to multiparty government, and what the explanatory power of this set of explanations tells about democracy in the European Union member states.

Plan of the Book

The contributions of this work to political science and political economy lie in the fact that it discusses the notion of the budgetary commons, which has been used rather loosely in previous research, and highlights the conditions in which the management of taxable funds is likely to resemble Hardinian commons. The chapter-by-chapter content of the work is as follows.

This chapter has taken a cursory look at the strands of literature that are relevant for understanding the fiscal policy implications of multiparty government. Chapter 2 provides a more extensive discussion on the political economy literature on 'fragmented' decision making and the measures that have been proposed as a means of achieving 'centralisation', or decision-making patterns, where costs and benefits are both considered in full. In this literature, potentially serious shortcomings stem from the fact that both theoretical and empirical analyses have tended to operate on the level of party systems, while the wider societal and historical context of party politics has been downplayed. Consequently, much emphasis has been placed on formal fiscal rules, although the genuinely independent effects of such rules are debatable. Chapter 2 also provides an overview of literature on quality of government and its consequences.

Chapter 3 focusses on the notion of budgetary or fiscal commons. While a popular metaphor, the presuppositions on which it builds and indeed its entire applicability have remained largely uncharted. In particular, the analytical distinction between common-pool resource situations that may or may not be problematic, on the one hand, and common-pool resource dilemmas, on the other, has seldom been evoked. It is pointed out that while the taxable resources of the society can be seen as a 'budgetary commons', the budgetary commons also differs from most physical and natural common-pool resources in that its management is representative and necessarily collective. It is also not entirely unproblematic to define the optimum from which outcomes deviate in a commons dilemma. The optimum can hardly be defined objectively as long as one subscribes to the view that in a democracy, opinions legitimately differ and there is no indisputably correct answer to a host of societal questions, such as those pertaining to the distribution of income or the scope of the public sector vis-à-vis markets. Hence,

in assessing the existence of dilemmas, one needs to consider not only measurable outcomes but also the preferences prevailing in the political process – which in turn is a complicated task.

Chapter 4 is methodological. It presents the operationalisations of the key variables used in the later chapters as well as the sources of data. Special emphasis is given to operationalising programmatic tendencies in politics. Such tendencies tend to be downplayed in works where the focus is on fragmented decision making. Consequently, some indicator of political actors' programmatic or ideological positions is routinely included in empirical analyses, but its effects are seldom discussed at any length. However, as a key argument in this work goes, representative politics is likely to take on features of resource exploitation when the credibility of programmatic statements collapses, and therefore it is important to carefully think about the ways in which programmatic orientations are operationalised. The chapter also presents the analytical techniques used in the empirical chapters. The time-series cross-sectional nature of the data as well as the need to test conditional hypotheses poses some methodological challenges that render standard statistical techniques designed for cross-sectional data potentially inappropriate.

The role of state institutions was already alluded to in this chapter. In Chapter 5, the issue is discussed more thoroughly. The chapter starts by highlighting the ways in which the environment of party politics plausibly differs between post-communist countries and the rest. The chapter then goes on to discuss several ways in which the quality of government may affect the relationships between the number of parties, programmatic pledges and policy outcomes. The analysis of European data suggests that the spending side of the budget tends to react more directly than the revenue side or the budget balance to changes in political variables, and in general political variables have clearer effects in the post-communist member states. The results point to a trade-off between programme-driven policymaking styles and non-programmatic ones that depend on the quality of government, at least in the post-communist countries.

Chapter 6 considers the notion of fragmentation from a new angle that draws on bargaining power. The management of the budgetary commons is not only representative but also collective in the sense that parties in a coalition cabinet cannot just grab funds as they please. Instead, they need at least the tacit consent of other parties, and the extent to which they are able to withdraw funds to their partisan ends depends on their ability to put pressure on their coalition partners. In a nutshell, the number of parties should affect policy outcomes if bargaining power is evenly distributed, whereas the number of parties should be largely inconsequential if bargaining power is centred in the hands of one party or a small subset of parties. Given the role of the quality of government in the emergence of common-pool-problem-like situations that was highlighted in the preceding chapter, the number of parties should have the strongest effects on fiscal policy outcomes when power is equally distributed and the quality of government is low. This can also be interpreted so that when the society is pervaded by particularism, policy outcomes depend on the distribution of resources with which to

pressurise others to cede confessions in bargaining over material benefits, rather than on programmatic outlooks. The chapter makes use of an index of *a priori* voting power that can also be interpreted as a measure of bargaining power, given that bargaining outcomes are subject to approval by a body where majority voting is applied. Hence, when the fragmentation of decision-making settings is concerned, not only the number of decision makers and procedural rules but also the distribution of bargaining strength ought to be taken into account.

It was alluded to above that the notion of the budgetary common-pool problem also contains statements about the functioning of representative democracy. Hence, the notion has important normative implications. These implications are highlighted along the way but are returned to in a more systematic fashion in Chapter 7. Previous literature has tended to consider the liability to common-pool problems as an inherent feature of representative politics, with electoral accountability as its basis. The argument in this work, in contrast, is such that not all representative systems follow the same logic, as the extent to which universalism and particularism govern the allocation of resources and the implementation of laws and policies varies. Hence, common-pool problems are likely when the accountability of political decision makers takes specific forms that are, in the light of most normative accounts, undesirable and in a sense represent 'degenerate' forms of democracy. A high quality of government, creating conditions in which the number of government parties is less likely to affect policy outcomes, instead strengthens the connection between policy outcomes and the position of the median voter, the position towards which government policies should gravitate according to both normative and empirical accounts. The quality of government is also connected to the adoption of fiscal rules especially outside the post-communist area, so that countries exhibiting a higher quality of government tend to adopt more stringent and comprehensive rules. These connections between variables imply that scholars and policymakers alike should not rely too much on fiscal rules in solving problems of public finance.

The strings are pulled together in a concise form in the concluding Chapter 8. It summarises the main findings, how the results possibly deviated from expectations and what the plausible reasons for these deviations are. Directions that future research could profitably take are also commented on.

Chapter 2
The Perils of Fragmented Politics

This work draws on veins of literature between which there has been relatively little interaction thus far. Fragmented decision making has been the topic of one category of literature, questions of representation of another, while the quality of government, for the most part, has been discussed separately from these two – not to mention the literature on the management of common-pool resources that has provided some basic terminology to the political economy of fiscal policy, while otherwise remaining almost without impact on the ways in which the 'budgetary commons' is analysed. Yet all these strands of research are relevant for understanding what might cause representative politics to resemble the exploitation of scarce resources.

The review of the literature starts with the political economy of fragmented decision making, alongside the increasingly popular theme of fiscal rules and institutions that have become the standard solution to budgetary common-pool problems. This literature has obvious connections to the literature that considers the effects of the proportionality and majority principles and party system fragmentation on a more general level, i.e. outside the realm of fiscal policy. Hence, how the two literatures relate to each other is also briefly discussed, followed by a concise review of the quality of government literature, bearing in mind that the theme will be picked up in greater detail in Chapter 5.

The Role of the State: Some Starting Points

As was highlighted in the previous chapter, this work focusses on the notion of the budgetary common-pool problem that draws connections between the number of interests with access to decision-making arenas and budgetary outcomes This is done by evoking an analogy between the management of the public economy and the management of certain kinds of physical resources.

At least on a superficial level, the development of the economic role of the state and that of the utilisation of natural resources resemble each other. The intrusion of human intentionality into the nature (Autto 2014) has risen to unpreceded levels since the start of the industrial revolution. Similarly, especially in the industrialised world, the economic role of the state, which could also be thought of in terms of the intrusion of political intentionality into the economy, has become more pervasive than ever before in human history. The two developments are connected at least in light of the so-called Wagner's Law. The German economist Adolph Wagner (1883) noted already in the late 19th century how the modernisation of society, obviously related to industrialisa-

tion and the increasingly intensive use of natural resources, increased the demand for a more active state with larger amounts of economic resources at its disposal.

Later historical events, such as the world wars and changes in intellectual winds, served to increase the economic role of the state even further. An important development was the emergence of Keynesian economic doctrines in the aftermath of the Great Depression. The new economic ideas tended to see the national economy as a system or even as a machinery that can be rationally managed and regulated. James M. Buchanan and Richard E. Wagner (1977) point to the importance of ideas and doctrines by claiming that Keynesian doctrines – not forgetting the ways in which those doctrines transformed in political and administration practice – contributed strongly to the normalisation of deficits and the accumulation of debt.

Attempting to depict changes in prevailing ideas and doctrines is risky because one can mistakenly create the impression that at any given time people were happily unanimous, which is certainly not the case when it comes to economics and politics. However, while acknowledging this risk, one can argue that for decades, economic thinking, especially in the Anglo-Saxon world, tended to give much weight to the ways in which markets can fail. Normative public finance (e.g. Musgrave 1959) shows that the state has a role in rectifying such shortcomings as the failure of private markets to provide public goods or an acceptable distribution of income. Normative theories of this sort, however, can be seen as advice given by experts to rulers, whereby it is on the rulers' responsibility to make use of the advice. In the latter half of the 20th century, a renewed interest in the interplay between politics and the economy led to a body of research according to which governments do not, after all, make choices that are rational or optimal in the light of normative theories (see Tanzi 2011 for an overview). This is also the body of research in which models of 'fragmented' fiscal policy have their roots.

Fragmented Decision Making and the Commons Problem

Despite – or perhaps exactly because of – the popularity of the notion of the budgetary or fiscal common-pool problem, it is not possible to track the first user of the concept with any certainty. It is in any case evident that the problems of the differential treatment of benefits and costs in political decision making have long been on the agenda of political economy. James M. Buchanan and Gordon Tullock's (1962) influential book *The Calculus of Consent* is one of the founding works of the public choice approach to political research and economics. One set of models Buchanan and Tullock analyse pertain to logrolling or vote trading in decision-making bodies where the majority rule applies. Buchanan and Tullock show that in the settings they analyse, the majority rule generally produces outcomes that deviate from what they label as the Kantian solution – the solution that would follow if everyone independently thought about the generally desirable level of provision of goods and based their decisions on internal deliberation.

The authors conclude that

> [m]ajority voting will, under the assumptions about individual behaviour postulated [i.e. that people maximise individual utility, J.Y.], tend to result in an overinvestment in the public sector when the investment projects provide differential benefits or are financed from differential taxation. There is nothing in the operation of majority rule to insure that public investment is more "productive" than alternative employment of resources, that is, nothing that ensures that the games be positive-sum. (Buchanan and Tullock 1962, 169.)

Credit for the first formalisation of the common-pool problem of budgeting is usually given to Barry R. Weingast, Kenneth A. Shepsle and Christopher Johnsen (1981) and their widely cited article published in the *Journal of Political Economy*. Weingast *et al.* do not explicitly use the concept of the common-pool problem or any of its synonyms or affiliated concepts. Their work has, however, inspired much research and applications to different kinds of problems in different institutional contexts – something that may have led to some misleading conclusions as a model developed in one context has been transferred to another.

Weingast *et al.*'s model is concerned with distributive politics in a legislature whose members are elected from single-member districts with well-defined geographical interests. Specifically, Weingast *et al.* seek to provide explanation for the apparently excessive provision of pork-barrel projects, i.e. geographically targeted spending whose benefits are restricted to the recipient district. Projects are financed from a pool of tax funds collected from society as a whole. In Weingast *et al.*'s model, overprovision occurs because the way in which politicians treat benefits and costs differs from their economic definitions. Moreover, representatives only consider a fraction of the cost of projects provided in their districts.

To begin with, politicians consider part of the cost of a project as a benefit. This follows from the fact that resources spent on providing a project are income for some other actors, and from the perspective of the representative of those actors, that income is beneficial. Therefore, the mere fact that decisions on the provision of projects are made in a political process shifts the level at which projects are provided above the economically optimal level, i.e. the level that would be chosen if benefits were compared to true costs. The mismatch becomes more prominent as the number of represented districts grows, which conversely means that the segment of the society that each politician represents becomes narrower. In addition to considering some costs as benefits, the representative of a given district perceives that most of the costs associated with a project in the district are borne by residents of other districts. Weingast *et al*. assume that what they call the norm of universalism applies in the legislature, so that all districts are entitled to tax-financed projects if their representatives so wish. The assumption stems from Weingast's (1979) earlier work in which he argues that legislators adopt universalism as an insurance against the instability of winning coalitions.

One of the corollaries of Weingast *et al.*'s (1981) model is the 'law of 1/*n*', according to which the inefficiency of project provision increases with *n*, the number of electoral districts. Somewhat more formally, while district i bears $1/n$th of the cost C, the benefit it receives from project x_i, or $B(x_i)$, is larger, and therefore the representative of the district seeks the level of provision where $B'(x_i) = \frac{1}{n}C'(x_i)$. The socially optimal level, in contrast, is given by $B'(x_i) = C'(x_i)$, which is simply the provision level where marginal benefit equals marginal cost. Weingast *et al.* consider projects whose social net benefit is larger than zero. Shepsle and Weingast (1981), however, generalise the model so that it also covers projects with negative social net benefit, i.e. projects whose provision is a waste of resources in any case.

The institutional environment in which Weingast *et al.* develop their argument is distinctively American. Although empirical tests of the argument on American data have produced somewhat differing results, they generally support the conclusion that public spending tends to increase with the number of legislators, especially as far as the upper chamber of bicameral legislatures is concerned (Gilligan and Matsusaka 1995, 2001; Primo 2006). Weingast *et al.*'s model has also provided inspiration for a large number of studies focussing on different institutional settings and seeking to explain different phenomena, to which we will return shortly.

The metaphor of the budgetary common-pool problem bears close resemblance to Mancur Olson's (1971) theory of collective action and theoretical constructions based thereon, theories of institutional sclerosis (Olson 1982) and market-augmenting government (Olson 2000). In *The Logic of Collective Action* (Olson 1971), Olson highlights the difficulties of providing collective goods. In Olson's view, the goal of organising a group is the provision of a collective good to the members of the group, none of whom can be excluded from benefitting from the good once it is provided. This creates free-riding incentives as it is tempting for potential members to refrain from contributing resources and instead to wait that others contribute and provide the good. Consequently, it is not at all obvious that the good is provided even if group members clearly benefitted from it. Selective incentives or benefits that can be provided to individuals on the condition that they contribute can alleviate the problem of collective action, as well as the presence of 'large' actors who have a strong interest in providing the good and may provide some of it unilaterally. Conversely, a large number of potential members makes the problem more difficult to overcome. Hence, the distribution of interests in a society cannot be inferred from the constellation of organised interests.

In *The Rise and Decline of Nations,* Olson (1982) provides an explanation for differing rates of economic growth based on the logic of collective action. In stable societies, Olson argues, more and more groups succeed in overcoming the problems of collective action and organise. However, groups that are small relative to the entire society only internalise a fraction of the potential costs of their actions while they enjoy the entire benefits. It may hence be more profitable for groups to distribute resources to themselves, despite the costs this inflicts, instead of engaging in productive activities – in other words, they may seek to secure pieces of an existing cake instead of making

the cake larger. Over time, the proliferation of distributive coalitions leads to more and more resources being diverted to distributive activities instead of productive ones; one of the main consequences of this 'institutional sclerosis' being the stagnation of the economy. However, encompassing interests internalise a large fraction of the benefits as well as the costs associated with their actions due to the large ratio of their membership base to the size of the society. These kinds of interests counteract the development – Swedish labour market parties being one of Olson's examples of such interests (see also Olson 1990).

Olson's posthumously published *Power and Prosperity* (Olson 2000; see also Olson 1993 and 1995) seeks to tackle the puzzle of why the former fascist dictatorships achieved significant growth rates after they were defeated in World War II and became liberal market economies, while the former communist countries faced severe economic problems after the transition to democracy and market economy. Olson argues that the stable communist societies provided a platform for a dense network of distributive coalitions to emerge. Communist regimes, in contrast to the fascist ones, disintegrated relatively peacefully and there were no upheavals comparable to the military defeat of the fascist regimes which wiped out distributive coalitions in those countries. On the contrary, freed from the communist regimes that oppressed political action, distributive coalitions were able to more freely and more openly seek the distribution of resources to themselves, which in turn gave rise to economic hardship.

What is common between the metaphor of the budgetary common-pool problem and what could be called 'an Olsonian setting' is the idea that a society governed by minorities with narrow interests is not likely to achieve efficient outcomes, even if those minorities together contained a large share of all individuals in the society. Instead, resources are misallocated between distributive and productive uses and, in the long term, the society runs into growing problems; absent societal upheavals, improved outcomes may be achieved by encouraging the emergence of encompassing interests (see Olson 1986). Olson paid little attention on the exact mechanisms by which distributive coalitions exert influence on the laws and policies the society adopts. The budgetary common-pool problem can be seen as a special case of an Olsonian setting, where distributive sectional interests operate through electoral politics in generating sub-optimal outcomes.

To apply the terminology that has become established in the literature, the problem is one of fragmentation. By fragmented decision making, Kontopoulos and Perotti (1999; see also Perotti and Kontopoulos 2002) refer to the fact that decision makers do not fully internalise the costs associated with their decisions. The opposite of fragmentation is centralised decision making, where costs are internalised, and efficient decisions require that centralisation is achieved by some means. Perotti and Kontopoulos furthermore distinguish between 'size fragmentation' and 'procedural fragmentation'. The former is related to the number of decision makers, the latter to the properties of the decision-making process. Size fragmentation increases with the number of decision makers, procedural fragmentation with the number of access points the process gives to

different actors. Before turning to procedural fragmentation and rules that are intended to mitigate the consequences of fragmentation, works analysing size fragmentation in parliamentary systems are briefly reviewed.

Common-Pool Problems in Parliamentary Democracies

Above, a reference was made to the impact of the Weingast *et al.* (1981) model on studies of various institutional settings, and it was also pointed out that the model in its original form pertains to a rather clearly delimited institutional environment where specific norms are in force and where decisions pertain to specific kinds of policies. However, the basic message – inefficiency increasing with fragmentation – has been extended to parliamentary systems as well; systems generally characterised by party discipline and the central role of the executive in policy formulation. In these studies, fragmentation has typically been understood and measured in terms of the number of parties, not the number of legislators or electoral districts with which the original model operates.

In a widely cited working paper, Carlos G. Scartascini and W. Mark Crain (2002) start with the assumption that the norm of universalism, in the sense Weingast *et al.* use the term, applies in parliamentary systems so that all parties are entitled to spending. Consequently, Scartascini and Crain argue that as political parties channel funds to their constituencies, the volume of government spending tends to grow with the fractionalisation of the parliamentary party system.

Others have argued that the partisan composition of the cabinet, rather than that of the parliament, is of primary importance in parliamentary systems. This also seems to have become the dominant view in the literature. Kathleen Bawn and Frances Rosenbluth (2006) argue that in inter-party bargaining, costs of policies targeted at parties' constituencies are not fully internalised and that the mismatch between internalised costs and benefits grows as the number of parties participating in the bargaining process increases. This leads to the expansion of public spending or, to apply the terminology especially popular in public choice literature, the growth of government with the number of government parties. In a similar vein, Torsten Persson, Gerard Roland and Guido Tabellini (2007) argue that in a multi-party system, electoral accountability encourages parties to provide distributive goods that benefit specific recipients instead of public goods whose benefits are diffused across the society. This, in turn, is visible in the higher spending levels of countries with a high incidence of coalition cabinets, compared to countries that tend to be ruled by one-party governments.

Bawn and Rosenbluth's article was published in one of the most highly esteemed journals in the discipline, the *American Journal of Political Science*, from where it turned out to be quite influential. Subsequent works published in other distinguished journals such as *The Journal of Politics* (Martin and Vanberg 2013) and *Public Choice* (Bäck et al. 2017) have built on Bawn and Rosenbluth's work by accepting its basic

argument and looking at how formal rules and comprehensive coalition agreements, respectively, may help solve the common-pool problem inherent in decision making by coalitions of parties. What Bawn and Rosenbluth's as well as Persson *et al.*'s arguments have in common is that they see electoral accountability as *the* source of the association between the number of parties and spending levels, which in turn signifies a process that is akin to the overconsumption of physical resources. It is useful to consider Bawn and Rosenbluth's argument in somewhat greater detail.

Bawn and Rosenbluth (2006) assume that society is divided into groups, and each party draws its electoral support from specific groups and is electorally accountable to them. Groups, moreover, prioritise certain issues, and policies based on those priorities have both benefits and costs. Importantly, benefits are enjoyed by the members of the group, whereas costs are diffused across the society as a whole, much like in Weingast *et al.*'s (1981) model of pork-barrel politics. Therefore, what members of a group perceive as optimal differs from what a benevolent social planner would consider optimal, and how close a political party is to either of these depends on the number of groups to which it is accountable.

A somewhat more formal presentation helps introduce the idea in a concise form. Denote by k the number of groups in the society, each with a policy dimension or a 'project' it is concerned with, x_i being a policy parameter on dimension i; x_i can be interpreted as the amount of funds allocated to finance a programme associated with that dimension. $B(x_i)$ is a benefit function with the standard properties $B' > 0$ and $B'' < 0$, i.e. the benefit increases with the funds allocated to the programme at a decreasing rate. $C(x_i)$ is a cost function whose value increases with x_i at a constant or increasing rate, so that $C' > 0$ and $C'' \geq 0$. Together the assumptions made about the forms of the benefit and cost functions imply that preferences are finite, i.e. no actor wants to have infinite amounts of his or her project provided. As costs are diffused across all k groups, the net benefit $NB_i(x_i)$ the recipient group obtains from the programme is $B(x_i) - \frac{1}{k}C(x_i)$. From the society's point of view, however, the net benefit is simply $NB_{SOC} = B(x_i) - C(x_i)$, the subscript SOC indicating the social net benefit. If m is the number of the party's target groups, the party seeks to maximise

$$NB_P = \sum_{i=1}^{m} NB_i(x_i) = \sum_{i=1}^{m} B(x_i) - \frac{m}{k}\sum_{i=1}^{m} C(x_i) - \frac{m}{k}\sum_{j \neq i} C(x_j)$$

where subscript P denotes the net benefit of a political party and j denotes the target groups of other parties. Hence, the maximisation problem of a party can be expressed as the benefits its target groups receive from decisions on policy dimensions they prioritise, minus the share of costs of those decisions that the target groups have to bear, minus their share of decisions prioritised by the target groups of other parties.

Assuming that the benefit and cost functions are well-behaved, the provision levels x_i on which NB_i, NB_{SOC} and NB_P are maximised can be found by setting the derivative of the respective net benefit function to zero. It is straightforward to show that the

level of x_i a party prefers is more deviant from the efficient level as the segment of the society it represents becomes smaller. The end result of joint decision making then becomes increasingly inefficient as the number of parties increases. Note that the last term in the expression above makes the expression different from Bawn and Rosenbluth's model as they do not assume that the maximisation problem of a party includes the decisions intended to serve the target groups of other parties. The exclusion of the last term appears to follow from the fact that Bawn and Rosenbluth assume a specific form of cabinet decision making where the party most concerned with a policy dimension sets the policy on that dimension. Parties thus cannot control each other's actions and the decision-making situation is essentially choice-theoretic, not interactive like the one implied by the expression above. Political decision making is not necessarily only about securing benefits but also about preventing damages to oneself or one's target groups. Hence it would be sensible to assume that in so far as they can, parties seek to guard the interests of their target groups by restricting the costs that others inflict. This observation will be central to the argument developed in Chapter 6, where the distribution of bargaining power is argued to condition the effect of coalition size on fiscal policy, especially spending.

Thus, an important assumption that underlies Bawn and Rosenbluth's (2006) argument is that the bargaining outcome is efficient *for the parties themselves* (cf. Schwartz 1994): they let the party with the highest priority for a given policy dimension set x_i on that dimension. Parties, of course, choose the policy parameters so that the sum of net benefits as they perceive it is maximised. Spending thus depends on the number of parties taking part in the policy-setting process. Based on an analysis of data from 17 Western European countries from the early 1970s to 1998, Bawn and Rosenbluth conclude that total government spending indeed increases with the number of government parties. Given the theoretical construction underlying their empirical analysis, they interpret this as evidence for inefficiencies in joint decision making which is due to the mismatch between internalised costs and benefits.

What was said above about the budgetary consequences of multi-party decision making pertains to the level of spending. Assuming that budgets must be balanced, the level of government revenue must change with the level of spending. However, budgets generally need not be balanced as governments can finance spending by borrowing. An argument resembling the one presented above can also be formulated in intertemporal terms to show that access to public funds by a number of interest groups gives rise not only to increased transfers but also to deficits and, over time, higher levels of public debt. Andrés Velasco (2000) presents a model in which the society contains a number of interest groups, denote that number again with k, with access to tax funds. As property rights to the tax funds are not assigned, each interest group uses the entire pool of tax funds as the basis of spending decisions, not a fraction $1/k$ of the pool as they would if property rights were assigned and divided among the groups. Moreover, when making saving decisions, interest groups consider not only the rate of return but also what other groups extract. This means that incentives to save are weak-

ened by the fact that most of what one group saves would be spent by the others in the future. Accordingly, those with access to tax funds are encouraged to spend more than the socially optimal level specifies, and moreover to spend sooner rather than later.

Velasco considers the problem as one of decentralised decision making. Combined to what was said above about the features of decision making by coalitions of parties, the weight of interest groups' demands should increase with the number of parties, as each party has stronger incentives to cater for narrow-based interests. The 'spending bias' of coalition cabinets should therefore be coupled with a 'deficit bias', contributing to increased debt levels over time. Hence, the openness of the political system to competing interests should not only encourage the inefficient allocation of resources between private and state controlled uses, but also between time periods. Indeed, Alessandro Lizzeri and Nicola Persico (2005) argue that barriers of entry to the political arena, such as disproportional electoral rules and electoral thresholds, have an efficiency justification as they restrict the particularism of party platforms and enhance the possibilities of goods with diffuse benefits being provided.

Fiscal Rules and Procedural Fragmentation

Budgetary rules have had a prominent place on the research agenda since the early 1990s, which is also when formal rules started to break through in real-world politics. Not only did fiscal rules become more popular on the national and sub-national levels. The Treaty on European Union, more colloquially the Maastricht Treaty, signed in 1992 contained limitations on allowable deficits and debt levels. The basic rules, according to which government debt must not exceed 60 per cent of gross domestic product and the annual budget deficit must remain below 3 per cent of gross domestic product, are still in force, although later revisions of the basic treaties have introduced some changes in the definitions of deficits as well as clauses pertaining to special circumstances and situations in which the limits have been exceeded.

In the late 1990s, in the introduction to an edited volume on *Fiscal Institutions and Fiscal Performance*, James M. Poterba and Jürgen von Hagen (1999, 3) summarised the prevalent view that 'budgeting decisions under an unmitigated common-pool problem are inefficient in the sense that all actors involved would choose lower levels of spending and deficits if they took the full costs into account' and 'that fiscal rules that lead participants in the budgeting process to internalize the costs of budget deficits will lead to smaller budget deficits.' The contributions in the aforementioned volume generally support the claim that stringent rules tend to increase 'fiscal discipline' which is visible in smaller frequencies of budget deficits, lower debt levels and smaller spending increases.

Rules governing the crafting of budgets are not restricted to targets and other numerical rules that can be said to form the backbone of fiscal governance in the European Union. They may also pertain to the structure of the budgetary process, regulating,

to name a few features of the decision-making process, agenda setting, negotiations preceding the introduction of the budget bill and parliamentary amendment powers. In their influential book on budgetary rules in European Union member states, *Fiscal Governance in Europe*, Mark Hallerberg, Rolf Rainer Strauch and Jürgen von Hagen (2009) argue that in order to be effective in solving underlying common-pool problems, procedural rules must fit into the general institutional structure of a country. Specifically, countries with institutions exhibiting the norm of proportionality, e.g. multiparty systems and coalition cabinets, should opt for a 'contracting approach' whereby limits on fiscal choices are set in contracts between political actors. For countries conforming to the principles of majoritarian democracy, exemplified e.g. by cohesive parliamentary majorities and single-party majority cabinets, a 'delegation approach' where a central role in the formulation of budgets is delegated to a strong prime minister or minister of finance is suitable. In proportional systems where the number of parties is large and coalition cabinets the rule, a delegation approach would not be feasible as other parties could not be confident that the finance minister or another applicable central figure would refrain from setting policies based on his or her partisan preferences. Based on an analysis of European data, Hallerberg *et al.* conclude that countries indeed tend to adopt rules that suit their other political institutions and moreover that rules serve to constrain debt and deficits.

Recently, increased attention has been given to interactions between size and procedural fragmentation, especially whether rules condition the fiscal consequences of size fragmentation. Lanny W. Martin and Georg Vanberg (2013) argue that procedural rules of the kind analysed by Hallerberg *et al.* also dampen the effect that the number of cabinet parties has on public spending. Building on Bawn and Rosenbluth's (2006) analysis, Martin and Vanberg argue that in a sample of 15 European countries, the marginal effect of coalition size becomes weaker as procedural rules reduce the possibilities of individual parties to push for increased spending in the areas they prioritise, on the one hand, and create opportunities for parties to resist spending increases demanded by other parties, on the other. Joachim Wehner (2010b) argues that large coalitions, especially when measured in terms of the number of ministers, are associated with higher spending and larger deficits. However, the effect is dampened if procedural rules limit the amendment power of the parliament. Jakob de Haan, Richard Jong-A-Pin and Jochen O. Mierau (2013) conclude that procedural rules, independently of whether they fall into the delegation or contracting category (Hallerberg *et al.* 2009), help reduce budget deficits in the presence of strong ideological differences between parties.

It has also been pointed out that rules and procedural norms need not be strictly budgetary in order to condition the relationship between coalition size and policy outcomes. Hanna Bäck, Wolfgang C. Müller and Benjamin Nyblade (2017) argue that comprehensive coalition agreements reduce the effect of the number of cabinet parties on government spending, especially in the absence of a strong prime minister. This is because coalition agreements limit the room for manoeuvre of individual parties and

help parties commit to pre-set goals and targets.

The aforementioned studies rely on detailed information on the features of decision-making processes in national cabinets and parliaments. Countries have also introduced targets and restrictions on fiscal outcomes, such as balanced budget rules or limitations on allowable expenditure increases. As was mentioned above, the fiscal governance in the European Union relies largely on numerical rules and targets. Accordingly, the European Commission monitors the fiscal rules in place in the member states and provides annual data on the strength of numerical fiscal rules through the fiscal rule index (see Chapter 4 for details). Wim Marneffe *et al.*'s (2011) empirical results based on relatively short panel data suggest that higher values of the index, indicating stronger rules, are associated with lower government spending, smaller deficits and smaller increases in public debt. Other international organisations, notably the International Monetary Fund, have also started to show increased interest in fiscal rules. In practice, procedural and numerical rules have common components, such as those pertaining to the enforcement of the rules. However, it is important to keep the two conceptually distinct; the difference could be summarised by saying that whereas numerical rules pertain directly to outcomes, procedural rules pertain to the processes in which outcomes are attained. The distinction between the two can naturally blur in empirical reality, as procedural norms can be reformed so that numerical targets could be attained.

Procedural fragmentation is thus to be understood in terms of the details of decision-making processes, or what different actors can do in different phases of the process and in what order decisions are made. What has not attracted much attention is the fact that although the crafting of a budget, or any other piece of legislation, is a process of multiple phases, the end result must survive a parliamentary vote. Hence, parties' abilities to affect the level and distribution of spending and revenue may not only depend on their roles in the formal decision-making process but also on their ability to affect voting outcomes. Fragmentation in this sense would also be a function of the distribution of power that decisiveness in majority voting yields. This approach is elaborated in Chapter 6.

The Empirical Record

In the previous sections, allusions have already been made to some of the central empirical findings. According to the existing literature, what can by now be considered the received wisdom can be summarised so that larger cabinets – cabinet size measured either in terms of the number of parties or the number of ministers – tend to spend more than smaller or more compact cabinets, and they also find it harder to avoid budget deficits and prevent public debt from accumulating (Bawn and Rosenbluth 2006; Dahl 2014; Harrinvirta and Mattila 2001; Persson *et al.* 2007; Roubini and Sachs 1989a, 1989b; Wehner 2010a). This is so especially if there are no fiscal or procedural

rules in place or if those rules are too weak to prevent elected decision makers from behaving profligately. In sum, the empirical record seems to be in line with the law of 1/*n* that Weingast *et al.* (1981) specified with reference to pork-barrel politics in American legislatures.

What has been said above pertains to decision making on the national level. Common-pool problems have also been traced on regional and local levels of government. Examples include Baskaran (2013) on German states, Borge (2005) on Norwegian municipalities, Egger and Koethenbuerger (2010) on Bavarian municipalities as well as Hansen (2014) and Saarimaa and Tukiainen (2015) on municipal mergers in Denmark and Finland, respectively. Berry (2008) analyses overlapping levels of government in American counties and concludes that such an overlap tends to create spending increases. Sub-national data often allows controlling for a host of unobservable country-specific effects that potentially confound cross-national analysis, and sometimes sub-national data also makes it possible to utilise institutional reforms or other events that resemble natural experiments. Results are not completely supportive of the standard argument about the consequences of fragmented decision making. Per Pettersson-Lidbom (2012) looks at the variation in the sizes of municipal councils in Sweden and Finland, municipalities in those countries, within certain limits, being free to determine the number of councillors independently of the size of the municipality. Pettersson-Lidbom's results do not, however, support the law of 1/*n*: instead of leading to spending increases, increases in the number of councillors tend to suppress spending. Pettersson-Lidbom argues that this is because larger councils are better equipped to monitor bureaucracies seeking to maximise their budgets (see Niskanen 1994).

The applicability of models of fragmented decision making in different contexts has scarcely been explicitly studied. Robert Elgie and Iain McMenamin (2008) find that the effect of size fragmentation on the budget balance is only visible when regimes with long democratic traditions are considered, but not when newer democracies are analysed; which operationalisation of size fragmentation turns out to have a statistically significant effect varies across model specifications. Elgie and McMenamin argue that this is because measures of the fragmentation of the party system are only meaningful in established democracies where the party system is institutionalised, not because fragmented decision making in the sense of an unbalanced internalisation of benefits and costs is only a feature of established democracies. This claim can be, however, contrasted with Torben Iversen and David Soskice's (2006) argument, according to which the embeddedness of political parties in the society is likely to encourage them to adopt a long time-perspective and avoid hampering macroeconomic objectives by engaging in excessive deficit spending, for instance.

The empirical record is thus somewhat mixed and little work has been done on the applicability of the standard argument in different contexts. Moreover, in those cases where the connections between policy outcomes and political variables differ from expectations, explanations tend to have an *ad hoc* flavour and are subject to plausible counter-arguments. Another aspect that has remained unexplored is the relationship

between spending and deficit pressures assumedly coming from fragmented party systems, on the one hand, and programmatic aspects of politics, on the other. In the empirical works referred to in this and the preceding sections, with only a few exceptions, some indicator of the programmatic tendencies prevailing in the set of decision makers is included in the set of regressors. Most often that indicator pertains to the orientation of the decision makers on the right-left dimension, and often that indicator is found to have statistically significant effects. However, those results are most often effectively disregarded, even though programmatic orientations are related to policymaking styles that are quite different from those that make outcomes depending on the number of decision makers. One could expect that some underlying factors affect the predictive power of programmatic orientations and measures of fragmentation, so that there is a trade-off between the two; that possibility seems to have escaped scholars' attention.

The Proportionalism vs. Majoritarianism Debate

G. Bingham Powell (2000) draws a distinction between two major visions of representative democracy. What he calls the majoritarian vision sees democracy fundamentally as competition that should produce clear winners, which is the case in the archetypal setting where two parties compete for majority status in first-past-the-post elections. Thanks to clear responsibility for policy outcomes and the challenge coming from the opposition, the winner of the election is encouraged to act in the interests of the public. In the proportional vision, in contrast, popular rule is based on representativeness. That is, different opinions and interests should gain representation in proportion to their support in the electorate, and in so far as electoral majorities do not exist, policies are set in inter-party negotiations and bargaining.

The two visions have their roots deep in intellectual history. For example, in *Considerations on Representative Government* John Stuart Mill (1962 [1861]) criticises the British majoritarian electoral system from the perspective of the quality of democracy. Specifically, Mill argues that the electoral system leads to the under-representation of minorities and makes genuine choices impossible. The opposing view is exemplified by the arguments A. Lawrence Lowell (1896, 69–74) presents in favour of the majoritarian vision in *Governments and Parties in Continental Europe*. In Lowell's view, in order to function effectively and consistently, a parliamentary system requires that governments are one-party majorities challenged by a unitary opposition. The proliferation of parties, in contrast, would make it possible for a party to wield 'great power, without feeling the restraint that comes from a sense of responsibility' (Lowell 1896, 82).

Normative discussions on the relative virtues and vices of majoritarian and proportional institutions often operate with fairly general notions, such as responsibility, representativeness and fairness. However, the literature on the budgetary consequences of multiparty government seems to provide an argument in favour of the majoritarian

vision. This is so at least in so far as majoritarian institutions, such as disproportional electoral rules, limit the number of parties and hence increase the likelihood of cohesive one-party majorities. Moreover, the 'ungovernability' inherent in joint decision making by multiple electorally accountable actors (Streeck 2013) makes it necessary to have rules that limit the excessive responsiveness of the political system to demands arising from the electorate, insofar as the 'received wisdom' about fragmented decision making is taken seriously.

As a rule, the literature reviewed above makes the assumption that party politics is fundamentally similar everywhere and that relevant variation is in the quantifiable features of the party system, in rules pertaining to fiscal choices, or both. However, less attention has been given to the possibility that variation in other aspects of the political system may be relevant as well. Regularities in actors' choices and expectations about other actions' behaviour do not always go back to formal institutions. The quality of government is quite distinct from the features of political systems that were considered central in the works reviewed above. However, based on earlier research it is plausible that the ways in which the public sector operates also affect how party politics works, and neglecting that possibility may lead to a seriously skewed picture of the possibilities of sustainable management of the 'budgetary commons'.

Quality of Government: What It Is and What It Achieves

The introductory chapter already alluded to the renewed interest in state institutions in the social sciences, as well as to the fact that this interest has had little influence on the works on the fiscal consequences of multiparty politics. As will be pointed out below, 'institutional quality' has occasionally entered empirical analyses, but its potential theoretical importance has scarcely received attention. The following sections make an overview on the concept of the quality of government and on the consequences of high- and low-quality government.

The Notion of the Quality of Government

It was argued earlier that a high-quality government may alleviate common-pool problems encountered in budgetary politics. One might claim that this is trivial because surely a government that succeeds in avoiding and solving problems is of high quality. Such a tautology is indeed a risk if one builds outcomes into the definition of the quality of government. 'Quality' is obviously a value-laden term that can invite users of the concept to include a host of desirable objectives into the definition, leading to what Norris (2012) calls a 'kitchen-sink approach'. The argument, however, becomes much less trivial if one defines quality of government in thin, procedural terms.

Rothstein (2011; see also Rothstein and Teorell 2008) defines quality of govern-

ment in terms of impartiality: 'When implementing laws and policies, government officials shall not take into consideration anything about the citizen/case that is not stipulated beforehand in the policy or the law' (Rothstein 2011, 13). This definition remains silent about the content of laws or policies being implemented; it is not ruled out that they are intended to favour some specific group, for example. Impartiality does, however, rule out favouritism based on bribes, family ties, membership in clientelist networks, and so forth. Quality of government in this view is distinctly connected to the output-side of the political system, to evoke the familiar Eastonian model. The concept does not apply to the input side of the political system where many of the relevant actors are by definition partial, such as political parties. Quality of government does, of course, imply that laws regulating access into political decision-making arenas, such as electoral laws, are impartially applied.

Norris (2012) criticises the definition of quality of government as impartiality on the basis that it elevates an important principle, but only one such principle, as the defining feature. In her work on the implications of democracy and administration on well-being, Norris uses the notion of governance by which she primarily refers to state capacity, or the extent to which '*regime authorities can achieve their goals and perform functions essential for collective well-being*' (Norris 2012, 44, original emphasis). Rothstein (2011; 2014), however, argues that in practical terms, impartiality implies meritocratic recruitment (see also Dahlström *et al.* 2012) and hence is conducive to a competent and efficient state administration. It can also be argued that impartial implementation presupposes sufficient autonomy from political pressures (see Fukuyama 2014). Hence, it is difficult to see a fundamental contradiction between these conceptions of what defines a high-quality government.

Quality of government is related to the prevailing norms in the exercise of government authority. An important feature in contemporary quality of government literature is the distinction between systemic and non-systemic aspects. That is, non-systemic deviations from the norm of impartiality are just that: deviations or exceptions. This implies that the norm of impartiality is the prevalent rule that is expected to be generally respected. It may be the case, however, that the norm is not even expected to be respected and hence deviations are systemic.

For example, research on corruption or the abuse of public power for private gain was long dominated by the notion that the phenomenon can be analysed using the tools of agency theory (for a more thorough discussion on political applications of that theory, see Besley 2006). In this view, corruption basically follows from a conflict of interest and information asymmetry between two types of actors, principals and agents. The basic setting in agency theory is such that a principal empowers an agent to act on her behalf, the problem being that the agent may have interests of his own that deviate from those of the principal while the principal cannot fully monitor what the agent does. When it comes to corruption, principals that are often conceptualised as embodiments of public interest, such as voters or elected representatives, cannot fully monitor their agents, the public officials, while the latter possess information that their princi-

pals do not. Moreover, the agents are assumed to be opportunistic and use the public resources at their disposal for their own benefit rather than that of the society if an opportunity opens. If corruption is a problem, it can be tackled by improved monitoring and more suitable schemes of rewards and sanctions.

Persson *et al.* (2012) see systemic corruption as a collective action problem rather than a principal-agent problem. The nature of the problem follows from the fact that as people expect that others are engaged in corruption, they realise that refusing to 'play along' would only leave them worse off as others would benefit at their cost. Therefore, there is no principal assumed by agency-theoretic approaches and hence no actor that could be trusted to enforce the rules and sanctions included in anti-corruption schemes.

The view of corruption as an agency problem is also related to another theme relevant to the present study, the size of the public sector. According to an influential argument, large public sectors are conducive of corruption because they create more opportunities for officials to extract resources for their own benefit (e.g. Alesina and Angeletos 2005; Goel and Nelson 1998). However, in contemporary literature this view has been questioned by pointing out that on a global scale, the least corrupt countries tend to have the largest public sectors. Persson and Rothstein (2015) argue that a large public sector creates a sense of ownership among the public and encourages people to monitor their officials more carefully, which reduces rather than creates possibilities for misusing public resources.

Corruption is a major issue but not the only phenomenon ruled out by the quality of government. For example, using the public sector as a source of patronage, like jobs and housing, for the political supporters of rulers runs counter to the notion of impartiality. The same applies to racism and discrimination on ethnic grounds. The impartial implementation of electoral laws was already mentioned as one implication of high-quality government. However, when this is not the case, clientelist practices such as more or less open vote buying, whereby campaign donations from firms expecting a privileged status in public procurements may play a role (Gherghina and Volintiru 2017), can often thrive.

Although the number of ambitious programmes aimed at curbing corruption and strengthening public bureaucracies is large, their success rate has been somewhat unimpressive. This is probably related to the fact that such programmes have largely drawn on agency-theoretic solution proposals and thus have not been able to address systemic aspects of low-quality government. However, some countries do exhibit high performance on almost any measure related to the quality of government. For example, in the annual rankings published by the anti-corruption organisation Transparency International, the countries of North-Western Europe systematically come to the top – whereas many of the former communist countries of Central Europe and the Balkans fall far behind.

Mungiu-Pippidi (2015) argues that government based on the norm of universality is actually an unnatural state of affairs as people have a natural tendency to favour those

of their own kind, i.e. to behave contrary to the prescriptions of impartial government. Hence, it is impartial rather than partial government that requires explanation.

Often the development of such institutions has its roots far back in history. Acemoglu and Robinson (2013) argue that small differences in countries' institutional structures in the distant past may develop into notable variations due to path-dependent processes. In some cases, the switch from traditional, particularist forms of administration to modern, impartial and meritocratic administration was, in turn, abrupt (e.g. Rothstein and Teorell 2015; Teorell and Rothstein 2015). Generally speaking, the order in which democratisation and state building took place seems to matter. Clientelist party systems and politicised administrations have often emerged in countries where democratisation preceded the establishment of a predominantly meritocratic public administration (Fukuyama 2014). In contrast, in many of those countries that are today characterised by high-quality state institutions, the public administration was already there when the country democratised. In those countries, administrations often enjoyed autonomy from political influences and they were not as likely to fall prey to attempts to fill administrative offices on partisan grounds. The origins of high-quality state institutions cannot be discussed here in detail. It suffices to conclude that the variation in the quality of government is largely historically determined and hence exogenous to the politics of the day.

What Quality of Government Yields

One of the major consequences of impartial public administration is allegedly the fact that it creates trust, which in turn has been recognised as an important facilitator of overcoming problems of collective action (Ostrom 1998). That is, in societies with high-quality government, people more often perceive public officials and other people in general as trustworthy, compared to societies where favouritism in the use of government power is prevalent. Rothstein (2011; 2014) argues that people make inferences based on the behaviour of public officials, the interactions of other people with public officials, and their own behaviour. That is, the actions of public officials provide information about the functioning of the society, and people use that information when forming expectations. If people perceive public officials as partial and corrupt and other people as participants in favouritist practices, they have evidence that other people, including public officials, are untrustworthy. People may also be introspective in the sense that if they themselves engage in corruption and related phenomena, they can infer that other people are likely to do so as well. Hence, perceptions of partial government may create a low-trust equilibrium that is hard to escape. Rothstein's argument highlights the importance of government institutions, rather than culture or civic activity (cf. Putnam 1993; de Tocqueville 2006 [1835/1840]) in creating generalised trust and social capital.

In line with Rothstein's claim that impartial government institutions foster trust,

Grönlund and Setälä (2012) conclude that perceptions of public officials' honesty tend to increase people's trust in public institutions, i.e. parliaments and the legal system. These effects are visible in cross-country data as well as in individual-level survey data. Trust in institutions also tends to increase with social trust and satisfaction with policy outputs. Moreover, Grönlund and Setälä's results support the claim that the demand for impartial public officials is virtually universal, rather than culturally bound. According to a related argument, the lack of trust that corruption breeds tends to decrease turnout in elections (Stockemer *et al.* 2013).

In the literature, the quality of democracy and the quality of government have often been presented as rival explanations for policy outcomes, policies related to different aspects of development and welfare being often on the agenda (e.g. Halleröd *et al.* 2013; Holmberg *et al.* 2009). Similarly, democratic responsiveness and quality of government have been presented as alternative explanations for popular satisfaction with democracy (Dahlberg and Holmberg 2014). However, in *Making Democratic Governance Work*, Pippa Norris (2012) argues that the combination of high-quality democracy and high-quality government is most conducive to economic growth, various aspects of human well-being, such as health, and peace. Norris calls such regimes 'bureaucratic democracies' where people are able to influence their authorities by democratic means, on the one hand, and state capacity is high so that the authorities are capable of achieving their goals and performing functions that collective well-being requires, on the other. Francis Fukuyama (2014) also sees political development as a three-dimensional phenomenon, whereby quality of government needs to be accompanied by state capacity and democratic accountability.

Norris operates with regime-level concepts like state capacity and liberal democracy. How the quality of government is related to the policy consequences of variables that pertain to the political actors and institutions *within* the regime, such as parties, parliaments or cabinets, has been the topic of a relatively small number of works. Hence, the amount of 'received wisdom' is at present quite modest. What the existing literature points to, however, is that the quality of government affects the extent to which policy choices are driven by programmatic considerations.

As for observational research using time-series cross-sectional data, Bo Rothstein, Marcus Samanni and Jan Teorell (2012) argue that the quality of government is an important qualifier for the so-called power resource theory of the welfare state. The well-known theory states that where actors who prioritise extensive social policies, e.g. leftist parties and trade unions, have been strongest, the role of the state in providing social security has expanded most dramatically. However, Rothstein *et al.* argue that this has happened only in so far as institutions have been of sufficiently high quality, i.e. characterised by low levels of corruption, meritocratic and autonomous public bureaucracy and a strong rule of law. Where this condition has not been met, the actors concerned with extensive welfare-state policies have not been able to use the state as a means to their ends and hence the connection between their strength and the extensiveness of the welfare state has not materialised. In a similar vein, Carl Dahlström, Johan-

nes Lindvall and Bo Rothstein (2013) argue that governments are unwilling to allocate funds to social policies giving considerable discretion to implementing officials if the bureaucracy is characterised by corruption and a lack of competence.

Works based on survey and experimental data point to the same conclusion. Stefan Svallfors (2013) argues, based on European Social Survey data, that the trust people have in government institutions, conditions their willingness to entrust politicians with the resources needed to attain the outcomes people prefer. That is, trust affects whether preferences for outcomes translate into support for policies. Specifically, those who prefer the levelling of income differences are willing to support government policies intended to tackle inequalities only if they trust public officials. Svallfors uses a subjective, survey-based measure of trust but shows that it correlates with the quality of government indicator used in the later parts of this work (see Chapter 4). Alan M. Jacobs and J. Scott Matthews (2017) provide experimental evidence for the claim that people are more willing to give resources to officials they perceive as trustworthy. In particular, results from an online survey show that research subjects' willingness to pay for an infrastructure project is affected by the ways in which the officials responsible for the implementation of the project are described: if descriptions suggest that the officials have incentives to renege on their promises, people's willingness to pay decreases.

While state institutions have not had a central place in the literature on fiscal policy outcomes, it would be an exaggeration to claim that the theme has been entirely neglected. In an extensive empirical analysis of the background factors of budget deficits, Jaejoon Woo (2003) also considers the effects of a measure of the quality of government institutions that takes into account different aspects of institutional quality, including corruption, rule of law and the risk that the government repudiates contracts or expropriates property. Woo concludes that higher institutional quality is associated with larger surpluses (or smaller deficits) and dampens fiscally adverse consequences of conflicts between socio-economic groups. However, Woo does not provide a systematic discussion on the reasons why institutional quality should be expected to have those kinds of beneficial effects, but does mention some plausible reasons, such as the efficiency of tax collection and spending monitoring that accompanies high institutional quality.

In sum, based on theoretical and empirical work one can conclude that the quality of government affects the extent to which people trust each other and public institutions, what kinds of strategies they expect to be profitable when dealing with other people and actors of the public sphere, how they expect to be treated by the public sector and how likely they are to expect that programmatic goals can be attained with political action. Therefore, it appears important to take the implementation phase of the political process into account also when analysing the fiscal consequences of multiparty government.

Conclusion

The metaphor of the budgetary common-pool problem goes back to influential neoclassical models of distributive pork-barrel politics in American-style legislatures, although the first uses of the concept as such cannot be tracked with certainty. However, the metaphor has become very popular and it has been applied in analyses of a vast array of policy outcomes in a variety of institutional contexts.

The existing literature is primarily concerned with party systems and electoral accountability as well as with fiscal and procedural rules. There has been a strong tendency to assume that party politics is fundamentally similar everywhere. Accordingly, there have been few attempts to introduce wider historical and societal contexts into the analysis, except in the form of control variables that enter regression models but eventually remain undiscussed. Recent works do investigate interactions between features of party systems and institutional arrangements. However, such analyses are still centred on representative institutions and the rules governing their activities, as if those institutions existed virtually apart from the society and the wider institutional environment of the state.

The literature on the quality of government, in turn, focusses on the implementation side of the political system, i.e. the bureaucratic machinery of the state that is responsible for the implementation of laws and policies. Quality of government can be defined as the impartiality of public officials, but according to a large body of evidence, its consequences reach far beyond the implementation of individual policies. Impartial, high-quality state bureaucracies are associated with high levels of trust in the society, attainment of development and well-being goals (especially when combined with a high quality of democracy) and programme-driven politics. It has to be noted that the evidence on the latter aspect is still fairly limited. However, it gives credence to the claim put forward in the introductory chapter, that is, that a high quality of government may help avoid and solve budgetary common-pool problems by creating room for programmatic policymaking styles. Therefore, the quality of government should affect the extent to which the conclusions derived from models of pork-barrel politics travel to budgetary politics in parliamentary systems.

Chapter 3
The Notion of the Budgetary Commons

A common-pool problem logically presupposes a common-pool resource that is either exploited or otherwise taken care of insufficiently. The notion of the budgetary common-pool problem is popular in the literature, despite the fact that the resource, the common pool, around which the problem develops has scarcely been defined. The sensibility of the notion has thus not been charted and it faces the risk of standing on feet of clay. The purpose of this chapter[1] is to delve deeper into the notion, beyond its conventional uses as a shorthand way of making a statement about the background factors of outcomes that are perceived as problematic. It is pointed out that considering the characteristics of the 'fiscal commons' helps recognise not only the limits of the metaphor but also connections between political and budgetary variables that have scarcely received attention so far.

It can be argued that despite its popularity, the notion of the common-pool problem has not been taken very seriously in the political economy literature on fiscal policy. This conclusion is motivated by the fact that the large and growing body of work on the management of common-pool resources outside the sphere of fiscal policy has seldom been referred to. Against this background, it is perhaps not surprising that fiscal commons literature has stuck to ways of thinking about the prospects of successful common-pool resource management that have largely been discredited as outdated in research on natural and physical commons. Traditionally, the standard view used to emphasise the lack of well-defined ownership rights and the ensuing overexploitation (see Gordon 1954; Scott 1955). The introductory chapter already alluded to more recent work pointing to many ways in which common-pool resources can be and actually are sustainably managed, even in the absence of property rights that are well-defined in a standard economic sense (e.g. Ostrom 1990).

Given the meagre amount of communication between these veins of research, the purpose of this chapter is to draw a closer connection between them. Ringa Raudla (2010) has a somewhat similar emphasis as she asks what fiscal commons literature could learn from the work of Elinor Ostrom on solving and avoiding common-pool problems. Raudla's article appears to be unique in that it explicitly reflects on the lessons that can be learnt from the management of physical commons with respect to fiscal policy. The present chapter is intended to complement rather than challenge Raud-

[1] Parts of this chapter, especially in sections 'Common-Pool Resources, Situations and Dilemmas,' 'Subtractability of the Common Pool of Tax Funds,' 'Appropriators in the Budgetary Commons' and 'Representative Management' are drawn from an article originally published in *Homo Œconomicus* (Ylisalo 2015).

la's article by focussing on the common-pool resource, not so much on the ways of governing it.

The chapter first asks what a common-pool resource is in the first place and what could be its analogue in fiscal policymaking. This is followed by distinguishing between common-pool resource situations and common-pool resource dilemmas; it is also pointed out that while the distinction is essential yet conceptually clear, telling dilemmas and non-dilemmas apart in budgetary politics is not simple given the democratic principle of the legitimacy of opinion differences. The chapter ends with a discussion on the implications of the aforementioned aspects for the interpretation of empirical findings.

Common-Pool Resources, Situations and Dilemmas

Without a common-pool resource around which actions are taken, it hardly makes sense to speak about common-pool problems. 'The problem with many names' or the failure of mutually beneficial collaboration (Rothstein 2013) may materialise in diverse settings, such as collective action (Olson 1971), but it is important to keep those settings analytically distinct. A simple classification of goods that draws on two dimensions is sufficient for the present purposes as it helps distinguish between common-pool resources and other kinds of goods that may be objects of competition, consumption and joint management efforts. The dimensions are labelled *exclusion* and *subtractability*, to follow Ostrom *et al.* (1994; see also Ostrom 2003). Exclusion refers to the ease with which actors can be prevented from using the good. Subtractability, in turn, refers to the degree to which one unit used by one actor decreases the amount available to others. A familiar typology presented in Table 2.1 is obtained by combining these dimensions.

Table 3. 1. A typology of goods.

		Exclusion	
		Easy	Difficult
Subtractability	Low	Club (toll) goods	Public goods
	High	Private goods	Common-pool resources

Note: Modified from Ostrom *et al.* (1994).

The four resource categories must be understood as ideal types as most real-world goods are located on continuums whose endpoints are located in the cells of the table. For example, the ease with which actors can be excluded from using a given good may vary with the available technology. However, the following characterisations can be given to the different types. *Private goods* exhibit high subtractability and easy or low-

cost exclusion. Physical consumption goods such as food and clothing are typical examples, but many services also have these characteristics, including many services often provided by the public sector like health care. *Club* or *toll goods* are non-subtractable but potential users can be easily excluded. An example is a fenced park: the access to the area can be controlled but someone's enjoyment of the park does not diminish others' ability to enjoy it – provided that the park is not overly crowded.

Public goods are non-excludable and non-subtractable, and in their purest form they must be consumed in equal amounts by everyone once the good is provided. A given amount of national defence is 'consumed' by everyone in the territory of the country in question and that amount remains the same regardless of the number of people in the territory. Public goods are often provided by the public sector as the difficulty of creating markets for such goods means that private actors may have no incentives to provide them, even if they were considered beneficial; the definition of public goods does not, however, depend on who provides them. Finally, *common-pool resources* are characterised, first, by subtractability and, second, by difficult, costly or at least non-trivial exclusion. Fisheries and groundwater basins are classical examples of such goods. The amount of fish drawn by one fisherman or firm decreases the amount available to others, as does the amount of water pumped from a groundwater basin. Without any institutional and technological devices suitable for preventing potential users from extracting units from such resources, they are open to numerous actors. If no limits are placed on the utilisation of a fishery or if those limitations are not enforced, anyone can sail to the fishery and start catching fish, and everyone – or at least everyone owning land above a groundwater basin – can dig wells and start consuming groundwater.

The placement of a good in this typology does not address the number of actors actually using the good. According to Gardner *et al.* (1990; see also Ostrom *et al.* 1994), a *common-pool resource situation* has two characteristics. The first one is resource unit substractability or the condition that a unit of resource consumed by one actor is not fully available to others. The second characteristic is the presence of multiple appropriators. That is, even if a resource were a common-pool resource in the light of the preceding typology, it might be used by one actor or by no-one; a common-pool resource situation emerges only when two or more actors utilise the resource. Note that the definition of the common-pool resource situation says nothing about the desirability of the outcomes reached by the appropriators. Instead, a *common-pool resource dilemma* requires that two additional conditions are met. One is the fact that outcomes are sub-optimal and the other that alternatives are constitutionally feasible. In other words, outcomes would be better if actors adopted different strategies and at least one set of such strategies were possible under existing institutional arrangements. Even if an outcome was bad, objectively speaking, it could not be considered a dilemma if other feasible alternatives were even worse or if no other outcome could be possibly attained. This is essentially the generic definition of a social dilemma (Rothstein 2005), which is combined to the definition of a generic common-pool resource situation.

Another important set of distinctions pertains to the issues that the appropriators

have to overcome in order to manage the resource sustainably. Ostrom and colleagues have repeatedly pointed out that instead of 'the' common-pool problem, appropriators face several kinds of problems (see also Raudla 2010, 212–214). *Appropriation problems* include decisions about the allocation of the subtractable flow of resource units as well as appropriation externalities, where one actor's appropriation activities diminish the yield available to others (Ostrom *et al.* 1994, 10). *Provision problems*, in turn, 'are related to creating a resource, maintaining or improving the production capabilities of the resource, or avoiding the destruction of a resource' (Ostrom *et al.* 1994, 9), and they can be further divided into demand- and supply-side provision problems. The former are about devising appropriation activities that alter the productive capacity of the resource, the latter about contributing resources for the provision or maintenance of the resource.

In the realm of economic and fiscal policy, provision problems can be understood as contributing resources to strengthening the tax base so that larger amounts of units can be 'harvested' without endangering the sustainability of the tax base or, alternatively, so that a harvest can remain the same although the potential yield increases. These issues cover not only the incentives to allocate resources between productive and purely distributive or non-productive uses (Raudla 2010, 214) but also the creation of the tax base itself, as it does not exist before it has been defined. Provision problems of this latter type can materialise, for example, if disputes about the incidence of tax burdens make the creation of an adequate tax base impossible.

Subtractability of the Common Pool of Tax Funds

A distinction should hence be made between common-pool *resources*, common-pool resource *situations* and common-pool resource *dilemmas*. A fiscal common-pool resource can be thought of as (monetary) resources that are collected from various sources and allocated to various purposes. Ylisalo (2015) proposes a general framework for analysing budgetary common-pool resource situations, whereby the productive capacity of the society is seen as analogous to what Ostrom *et al.* (1994, 8) call the common-pool resource facility that 'creates the conditions for the existence of resource units,' where the *stock* of resource units is the tax base from which a *flow* of resource units can be drawn by the appropriators or the participants of the collective decision-making process. The notions of collective decision making and appropriators are interlinked in ways that distinguish the budgetary commons from most physical commons, this aspect being elaborated later in this chapter.

Collective decision making pertains to the 'difficult exclusion' dimension, but the subtractability dimension deserves some comments as well, especially as different policy instruments affect economic activity and hence the resource base of policymaking in different ways. There are considerable schisms on the exact consequences of diverse instruments and attempts to solve them are not made here. However, to high-

light some opinion differences, neo-classical thinking tends to consider lump-sum taxation Pareto efficient in that it does not change relative prices determined by the market mechanism. From Keynesian economics, in turn, it is often possible to derive the recommendation to redistribute income from the rich to the poor because the latter have a higher marginal propensity to consume – i.e. they consume a larger share of each euro they receive – and thus redistribution increases aggregate demand and economic activity. There is also no unanimity on the risks associated with government debt: some claim that it displaces private investments while others do not see this as a serious problem.

Government spending can be consumptive, purely redistributive or outright counterproductive, on the on hand, or productive, on the other. Productive spending here refers to policy investments whereby resources sacrificed today are expected to bring net benefits in the future (Jacobs 2011). In the latter case, whether the subtractability criterion is met depends on the temporal dimension one considers. In the short run, even productive spending decreases funds available to other purposes, although in the long term the opposite is true. Moreover, the distinction between productive and non-productive spending is not always clear when it comes to actual spending items, as both aspects are often present. Consider a party that primarily draws support from blue-collar workers and advocates public investment and construction works. Such investments may be beneficial over the long term, but they may also bring additional income to blue-collar workers and enhance the electoral prospects of the party.

Appropriators in the Budgetary Commons

Any common-pool resource situation presupposes multiple appropriators, and the effects that the number of appropriators has on policy outcomes are central to the fiscal commons literature. The actors or collective bodies identified as 'appropriators' have varied from individuals to legislative committees and cabinet parties, and even layers of government. Their number has also been counted in various ways, i.e. in raw numbers or using some more sophisticated indices that also take sizes or voting weights into account. A more fundamental question, however, is who counts as an appropriator – capable of withdrawing resource units for their own ends.

The classical tragedy of the commons, as depicted by Hardin (1968), is a phenomenon associated with unmanaged commons (Hardin 1998) – pastures to which any herder can bring animals, a fishery that anyone can exploit or an atmosphere to which anyone can emit pollutants. In contrast, the constitutions of parliamentary countries typically state that decisions on the budget are made by the parliament on the basis of a government proposal. Nominally, decision-making power is hence already centralised into the hands of the parliament or, more exactly, the parliamentary majority. This is of course an idealisation, but it points to an important feature of the fiscal commons: it is obviously not an open-access resource, as the set of those making decisions on its use

is limited to those that have gained authorised access. In a representative system, this set is much smaller than the entire population. This fact, however, raises the question about the groups and factions of the society that have access 'via' the representatives.

There are institutional arrangements for the management of physical commons that require collective decisions to be made. However, often it would be possible for the appropriators to ignore the requirement and exploit the resource unilaterally, albeit subject to potential sanctions. In the budgetary commons, such unilateral action is not possible, assuming that outright kleptocracy and serious forms of corruption like large-scale embezzlement of public property are ruled out. Instead, appropriation requires coalition building as decisions must ultimately be accepted by a legislative majority.

This is relevant in light of the 'difficult exclusion' criterion defining a common-pool resource. At most, exclusion is difficult with respect to the members of a decisive coalition, whereas access to the resource can be denied from others. Even within the decisive coalition, individual members cannot extract resources however they please. The decision-making structure must be such that members can be treated 'as if' they were appropriators, and this depends on the parameters of the bargaining or voting situations taking place within the structure. That is, there must be a number of actors capable of influencing the policy package adopted collectively.

As the focus in this work is on multiparty politics, it ought to be justified why parties, which in multiparty systems seldom can form decisive majorities on their own, can be counted as appropriators and why their number matters. If votes on the policy priorities of a set of minority parties were taken one by one, each proposal would presumably be defeated if no agreements on mutually supporting each other's proposals are made. However, at the same time as the requirement of collective management makes decision making nominally centralised, it offers an arena where bargaining and vote trading can take place. The existence of such an arena does not necessarily imply that each party is equally capable of affecting outcomes.

The norm of universalism in the sense that Weingast *et al.* (1981) use the term can be considered a special or an extreme case. Recall that universalism implies that each geographical unit represented in the legislature is entitled to pork-barrel spending. In the absence of such a norm, the position of a party in coalition building plausibly affects the extent to which it can be considered an 'appropriator'. Actors' possibilities to affect outcomes as members of coalitions have been extensively analysed in cooperative game theory and especially in the literature on power indices (e.g. Felsenthal and Machover 1998). In this literature, an actor's power is basically thought of in terms of the actor's ability to turn losing coalitions into winning ones and vice versa: the more often an actor is able to do this, the more the actor has power. The number of alternative measures of voting power is large and different measures do not produce equivalent results, but according to a recurring conclusion all actors are generally not equally powerful and power is not always proportional to actors' voting weights.

In short, the assumption underlying the 'law of 1/*n*', according to which each of the *n* actors is equally capable of affecting policy outcomes, is only one possible pattern of

joint decision making. How relevant an actor is can also depend on the context, including both formal and informal institutions, and it can vary over time. Parties may, of course, also negotiate in a more issue- or programme-driven fashion, in which arguments for specific choices rather than the bargaining strengths matter for the negotiation outcome. Hence, when assessing the fulfilment of the criterion of multiple appropriators, and when estimating the consequences of the number of appropriators, these aspects should be considered as well.

'The Commons' and Other Consequences of Joint Decision Making

One can also ask what the appropriators do in the budgetary commons. Overconsumption and underinvestment problems do not exhaust the possible consequences of joint decision making by multiple actors. It is useful to briefly explicate the relationship of what can be called common-pool effects and other effects that for the sake of brevity are here labelled multi-actor effects. The classification of multi-actor effects discussed here is based on Franzese's (2010) account to which a rarely recognised problem category, anti-commons problems, is added. While differences between multi-actor effects are analytically clear, it is not always possible to tell them apart in empirical research – in fact, the distinction can also become blurred in theoretical constructions.

By *common-pool effects*, Franzese (2010) refers to the kinds of collective action problems that are familiar from the seminal Weingast *et al.* (1981) model: as decision makers only consider a fraction of the cost associated with policies benefitting their target populations, the demand for such policies exceeds the socially optimal level and therefore the decision-making body is likely to spend sub-optimally large amounts of resources on targeted policies. Drawing on Olson's theory of collective action (Olson 1971, 1982), Franzese argues that 'large' actors tend to counteract this tendency as they internalise a larger share of the costs. In short, as some actors are larger than $1/n$, they internalise a larger share than $1/n$'th of costs and therefore have stronger incentives to curb the inefficiency of policy outcomes.

Another set of multi-actor effects that Franzese identifies stems from the presence and number of *veto players* (Tsebelis 2002). Veto players are actors whose consent is needed for policy changes, and they may be either institutional or partisan. The basic message of veto player theory is such that the more veto players there are and the stronger the disagreement between them is, the less likely and the more gradual policy changes are expected to be. Hence, whereas common-pool effects pertain to policy levels, veto player effects rather pertain to policy changes. Franzese argues that the difference between the two also has consequences for the counting of actors, as common-pool effects require size-weighted numbers and veto player effects require raw numbers (i.e. all actors are weighted equally). This point will be returned to in Chapter 4 when discussing the operationalisation of the number of decision makers.

Bargaining effects follow from the fact that a policy or an outcome can only be

adopted if actors with different preferences agree on it. Franzese (2010) points out that while there are numerous bargaining models (e.g. Baron and Ferejohn 1989; Rubinstein 1982) that differ in many important respects, they all tend to point towards a general conclusion. If actors' ideal policies are presented as points in a policy space, the bargaining outcome is a convex combination of those points, i.e. a point that lies somewhere in the area demarcated by the ideal points. The weighted average of actors' ideal points is one possible convex combination, where the weights represent actors' bargaining strengths or the ability to draw the outcome towards their own ideal.

Anti-commons problems form a category of phenomena associated with multi-actor decision making that have gained very little attention when it comes to fiscal policy. As the name suggests, an anti-commons problem is an inverse of a classical common-pool problem in which a resource is over-exploited due to the joint effects of multiple actors' choices. An anti-commons problem, in contrast, implies that a resource is *under*-utilised because of multiple actors having rights with respect to the resource. As with classical common-pool problems, the root cause lies in property rights that are ill-defined in a standard economic sense. Whereas over-exploitation problems arguably arise when exclusion is difficult or infeasible but a number of actors have the right to use the resource (Gordon 1954; Scott 1955), anti-commons problems are potential features of situations where a number of actors hold exclusion rights but no rights to use the resource unilaterally. Consequently, resources that could have been put to beneficial use remain idle.

The notion of the anti-commons was popularised by Michael A. Heller (1998) who argued that property rights bundles peculiar to post-Soviet systems led to under-utilisation of productive assets. In Heller's view, anti-commons are characterised by the ability of several actors to exclude each other from using a resource ('privileges of exclusion') while no-one has effective 'privileges of use'. Heller uses as an example the myriad of kiosks that appeared in the streets in front of empty stores in Moscow after the fall of the Soviet system as the ownership of real estates was fragmented among diverse actors unable to agree on the uses of their property. The central feature that anti-commons problems share with veto player effects is that the participation of multiple actors can stall changes to the status quo. However, anti-commons problems differ from veto player effects in their inherent normatively problematic nature. Whereas veto player effects may hinder beneficial and damaging policy changes alike, anti-commons problems are problems exactly because they hinder the beneficial use of resources. When it comes to budgetary choices, distinguishing between the two is not entirely straightforward. For example, governments may not be able to finance socially beneficial programmes because they are not able to raise the needed revenue as some actor is withholding its consent, and consequently resources remain in less beneficial uses.

Veto player effects, common-pool problems and anti-commons problems share a host of features. However, whereas normative implications are built into the definition of commons and anti-commons problems, the same is not true for veto player effects.

They may prevent beneficial as well as damaging changes to the status quo. Confidence in their ability to prevent bad outcomes is reflected in the constitutions of several countries, such as the United States and the Federal Republic of Germany, that require the consent of several actors – not only legislative majorities in the lower chamber of the federal legislature but also upper chambers, federal states and the judiciary – for far-reaching policy changes. The flip side is that veto player effects may also prevent the abolition of outdated policies and adjustment to changing circumstances.

Because of the different normative implications of different multi-actor effects, it is important to keep them analytically distinct. However, keeping some things analytically distinct does not necessarily imply that they can be neatly separated in specific applications. To anticipate the central argument of Chapter 6, the ability of parties in a parliamentary system to exploit the tax base is related to their ability to veto the formation of coalitions needed to pass decisions on the extraction and distribution of taxable funds. Policy outcomes in such settings may be best explained by the ways in which actors' veto power translates into ability to appropriate units from a common pool in a bargaining process. This is because the management of the budgetary commons is necessarily collective and the appropriators must make explicit or implicit deals about using the resource base, unless of course one appropriator is able to make decisions unilaterally.

Representative Management

Most applications of the fiscal commons metaphor are concerned with budgetary politics in legislatures and governments. When this is the case, processes of representation should be considered alongside the requirement of collective decisions. Factors stemming from relationships between representatives and the represented can affect the dynamics of bargaining between decision makers and vice versa. Moreover, taking representation into account is necessary in order to address a normatively important issue, that is, whether the preferences of the public or distortions arising in the democratic chain of command are at the root of fiscal difficulties.

Representative processes are very complex as they contain chains of delegation and accountability. Instead of a set of appropriators that can be relatively easily demarcated (such as the users of a groundwater basin), representative politics involves voters (both as individuals and as members of various organised and unorganised groups), pressure groups, political parties, bureaucracies, various organs of state as well as international and supranational organisations that are intertwined in complex webs of interaction. The question is, then, which subset of actors should be focussed on. This has consequences not only for the derivation of empirical hypotheses but also for the interpretation of results from empirical analyses. An important aspect of such interpretations pertains to the success or failure of democratic processes.

Depending on the specific formalisation of the setting, the root cause of problems

can be either in citizens' preferences as such or in the distortionary effects that supposedly democratic institutions have – relatively similar institutions can thus either amplify or dampen the problematic consequences of distributive pressures. For example, take the chain of representation that is familiar in parliamentary democracies. Voters choose from a more or less wide array of political parties, and once seats in parliament are allocated to parties, some subset of them forms the government that in practice formulates most policies and is able to pass its proposals by means of its parliamentary majority. A common-pool problem of budgeting can arise because of two basic mechanisms.

One is compatible with the one presented by Bawn and Rosenbluth (2006). In this scenario, different groups of voters seek to keep their representatives – the parties that prioritise their 'projects' in order to gain electoral support – accountable for outcomes on different policy dimensions so that no party is accountable for the overall policy package. In this setting, representative decision making can only dampen distributive pressures arising from the society, assuming that the number of parties is smaller than that of societal interest groups. Electoral institutions that restrict the number of parties can be seen as partial solutions to problems that emerge at the level of the electorate. This can be the case when the society can be neatly divided into groups with material interests, as together they may want to use restrictive institutions to ensure mutual restraint.

Another possible mechanism is based on distortions along the way from people's preferences to policy outcomes. That is, voters may be concerned with achieving an outcome that is socially optimal, or they may be primarily interested in non-distributive, universalistic programmes. However, it may be impossible for them to induce good outcomes from their representatives because the spending preferences of the representatives differ from those of the voters. Consequently, agency problems may materialise (Besley 2006; Kiss 2009): information may be limited, the dynamics of electoral competition may allow bad representatives to get elected (adverse selection) or it may not be possible for voters to set credible accountability schemes, making ex post sanctioning ineffective (moral hazard). However, as was alluded to in the previous chapter, when discussing the consequences of favouritism in the public sector, people may be alienated from politics to the extent that they expect little from their representatives, which plausibly paves the way for the influence of special interests. This notion brings to the fore the fact that not all actors to which parties may be responsive exert influence through elections. The distinction between systemic and non-systemic aspects of favouritism that was also made in the preceding chapter is a reminder of the fact that the tools of agency theory may not be suitable in all cases, including cases where those with public power appear to make decisions that are at odds with the (presumed) interests of the public.

To summarise, it appears that the setting with which this work is concerned – fiscal policymaking in parliamentary systems with multiple parties – conforms to the general characteristics of common-pool resource situations, i.e. resource unit subtractability

and multiple appropriators, although it was highlighted that the budgetary commons has its special features. The subtractability of resource units is, among other things, a question of the time perspective one adopts as well as of the uses to which tax funds are put. The number of appropriators, in turn, does not necessarily equal the number of (government) parties as parties may be more or less capable of affecting the collectively adopted policy package. Moreover, the appropriators are connected to a host of other actors, which makes it necessary to carefully think about whether *electoral* accountability brings problems about.

Resource unit subtractability and the presence of multiple appropriators do not yet constitute a common-pool resource dilemma, which also requires that outcomes are sub-optimal, even though better alternatives are feasible. Neither does sub-optimality necessarily follow from the criteria of a common-pool resource situation. What constitutes an optimal or a sub-optimal outcome in the budgetary commons is, however, far from self-evident.

Questions of Optimality

Theoretical accounts of common-pool problems in the budgetary sphere routinely operate with concepts like optimality and efficiency, whereas empirical analyses intended to test those accounts use data on observable policy outputs like spending and deficits. Consider the relationship between the number of government spending, for example. Suppose that careful regression analysis shows that spending increases with the number of parties in government. What should one do with the result? Data seldom 'speaks for itself' as data is interrogated by constructing empirical models which, like theoretical models, are purpose-related simplifications of reality and therefore not 'true' or 'false' (Clarke and Primo 2012). The results must be interpreted somehow, and this is done with the help of the theoretical construction underlying the empirical analysis. If one starts with the assumption that budgeting is liable to common-pool problems and that those problems become more serious as the number of parties increases, one is likely to interpret the positive regression coefficient as a sign of an acute problem.

The question is whether the data actually supports such reasoning. It would be possible to construct a theoretical model with an identical empirical implication concerning the relationship between the number of parties and spending but very different normative implications. For the sake of illustration, a possible alternative model can be sketched as follows (see also Ylisalo 2015, 348–349). The starting point could be the assumption that the government has an inherent tendency to underspend. That assumption may appear out of place given the fact that in modern democracies the ratio of government spending to gross domestic product sometimes exceeds 50 per cent. It is not completely implausible, however, as Anthony Downs (1960) has argued. In Downs's view, budgets tend to be too small because people are more sensitive to taxes that interfere in their private incomes than they are to benefits that flow from tax-

financed goods and programmes. Downs thus considers a case that is opposite to the logic of concentrated benefits and diffused costs that underlie the by now familiar models of fragmented fiscal policymaking. From this initial assumption, one could proceed by assuming that when a large number of parties participates in decision making, responsibility for tax increases that public perceives as undesirable is diffused, which in turn allows the government to bring the provision of tax-financed goods and programmes to the socially optimal level.

Another possible mechanism linking the number of parties to the level of spending would draw on the representativeness of the political system. When few parties are in government, only a few legitimate interests are represented in the decision-making tables and hence the level of spending remains too low and normatively undesirable. When more parties are in the ruling coalition, a larger number of interests are given their due, which is reflected in a higher spending level.

These examples of imaginable theoretical constructions producing identical empirical predictions about relationships between observable variables show that one empirical phenomenon or regularity can be given different explanations that, however, have conflicting normative implications. Whether something ought to be done about the level of spending depends crucially on which mechanism is at play. Those starting from the budgetary commons metaphor tend to interpret the relationship between the number of parties and public spending, where such a relationship is discernible, as an indication of inefficiency and sub-optimality.

Those working with other theoretical frameworks have arrived at conclusions that are very different in the normative sense. Nisha Mukherjee (2013) analyses the effects of party systems on human well-being, measured in terms of infant mortality, child mortality and life expectancy. Mukherjee argues that systems with many parties, measured as the effective number of parliamentary parties,[2] are both representative and competitive. Therefore, multiple interests are taken into account in political decision making, and parties are encouraged to enact efficient policies as well as to seek support from several groups. According to Mukherjee's empirical results that are based on time-series cross-sectional data from 68 democracies, systems with more parties are associated with lower infant and child mortality as well as a somewhat higher life expectancy, although the evidence for the latter effect is not as robust. Mukherjee's view of decision making in multi-party systems resonates with the view that is common in the political economy literature on fragmented decision making, with small but apparently consequential differences: 'Multiparty systems are characterized by participation, deliberation, consensus and compromise among groups representing diverse interests, which leads to the formulation of comprehensive policies that incorporate the welfare needs of multiple segments of the society, thereby resulting in welfare-enhancing outcomes for the society as a whole' (Mukherjee 2013, 604). Whereas the literature on

[2] The effective number of parties here refers to the Laakso-Taagepera (1979) index of party system fractionalisation that takes into account parties' seat shares. See Chapter 4 for further details.

fragmented decision making assumes interest-based *bargaining* among parties, Mukherjee assumes *deliberation* that implies argument-based reasoning whose aim is to achieve a mutually acceptable decision (Gutmann and Thompson 1996).

It might appear that the problem is about establishing what the optimal policy combination is in empirical terms and measuring whether, how and to what extent actual outcomes deviate from it. It is relatively straightforward to define the optimal policy in a simple theoretical model, but it is much more difficult to define it in a world where values clash and the desirability of diverse goals is justifiably disputed.

Democracy builds on the idea that legitimate opinion differences exist and that policymaking is about competition between – and reconciliation of – those differences. People have different opinions on the proper extent of the public provision of goods and services, on the desirable income distribution and on moral issues, to name only a few issue categories. Highlighting the costs of some choices does not solve the lack of 'correct' policies. For example, deadweight costs are associated with taxation and income transfers affect incentives to engage in productive activities. Hence, a stronger involvement of the state in the redistribution of income may suppress economic growth. The loss of national income thus lost might be argued to be a reason not to mix with the distribution of market income in the first place; but it can also be seen as a price that society pays for achieving an objective – in this case a more even income distribution.

The notion of the budgetary common-pool problem comes with the risk of seeing any influence of political factors on economic outcomes as a sign of a dilemma. In that view, the economy is a self-regulating system that allocates resources to their best uses and politics can only negatively interfere with this. It is, however, well known that a market economy does not generally produce optimal outcomes, as private markets tend to underprovide public goods, overproduce negative externalities and produce an undesirable income distribution without some rectifying measures taken by the government. How the government should do that is subject to much political action and the government is naturally not guaranteed to succeed. However, too little activity may imply as much sub-optimality as too much activity.

Numbers that often enter empirical analyses of fragmented decision making, such as the ratio of government spending to the gross domestic product, measure inherently political things. Some weight in assessing the optimality or sub-optimality of outcomes must therefore also be given to collective will formation. This exercise is of course notoriously complicated by the fact that a 'collective will' can seldom be recognised, so that one can be sure it has not been forged by the specific method of aggregating individual wills (e.g. Riker 1982).

In the light of these points, the sub-optimality criterion of the commons dilemma seems to approach triviality as outcomes are, with all likelihood, never optimal and could always be improved in some way. The necessarily collective nature of the management of the budgetary commons even raises the possibility of cyclical collective preferences, whereby the appropriators end up considering outcome *A* better than *B*, *B*

better than *C*, and again *C* better than *A*. If common-pool problems of budgeting are insolvable in the sense that sub-optimality can never be avoided, the usefulness of the entire term, of which so much use has been made, becomes questionable as it cannot distinguish between any two states of affairs.

To make any use of the notion of the common-pool resource dilemma in budgetary politics, it must be acknowledged that undisputedly optimal outcomes are unattainable simply due to the fact that the optimum cannot be identified. In theory, an outcome could be optimal in the sense that resources are distributed Pareto efficiently so that no-one's utility can be increased without decreasing someone else's utility. Still, there is no guarantee that resources are distributed justly, which follows from the fundamental theorems of welfare economics (e.g. Feldman 1980, 47–58). It could also be the case that, for whatever reason, people do not consider such a distribution desirable. In so far as one demands from democracy at least some responsiveness to popular preferences, the identification of optimal outcomes is quite infeasible.

Probably the best one can do is to assess outcomes from multiple angles, taking into account the conditions in which they emerged. For example, in the light of what was said above, an empirical association between the number of parties in government and spending increases does not as such constitute evidence of a commons *dilemma* in budgeting. However, one can ask if the association is connected to phenomena that are known to be problematic, such as corruption; this should be accompanied by an assessment of whether corruption is a plausible ingredient in the process that brings the effect about. While it is generally not possible to determine anything like the 'general will', one can still ask whether outcomes are in line with basic democratic ideals, such as the responsiveness to some reasonable indicator of the programmatic orientation of the electorate. Another relevant basic norm is honesty, i.e. whether policy outcomes correspond to what representatives have said they would do in office.

Conclusion

The notion of the budgetary common-pool problem is often used but seldom subjected to scrutiny. It has for the most part been used as a handy summary of an idea that appears simple: that the participation of several decision makers in a process where resources are distributed between private and public uses, among societal groups and between future and present generations is likely to lead to overspending and undersaving. This chapter has attempted to provide a more thorough treatment of the metaphor by borrowing from the literature on the management of physical and natural common-pool resources. That literature, unlike the literature on the budgetary commons, has long ago proceeded from treating any common-pool resource situation as inherently problematic. What that literature has pointed out, moreover, is that the imposition of 'blueprint solutions' may make things even worse.

It is important to distinguish between common-pool resource situations and com-

mon-pool resource dilemmas. The former is characterised by what is called resource unit subtractability and the presence of multiple appropriators. In the literature applying the notion of the budgetary common-pool problem, there has been a more or less implicit tendency to assume that sub-optimal outcomes automatically follow from the two aforementioned characteristics, and that a common-pool resource situation is necessarily also a dilemma. However, the existence of dilemmas should be demonstrated, not assumed.

The failure to distinguish between problematic and non-problematic instances of common-pool resource management has led to potentially hasty interpretations of empirical results. For example, if only political parties and groups of voters are included in a theoretical construction, it is entirely possible to argue that an empirical association between the number of parties and spending increases marks movement towards an optimal outcome, not away from it. Yet results have generally been interpreted through the lens of common-pool resource dilemmas, which may have contributed to unduly pessimistic views about the possibilities of sustainable fiscal policies.

It may naturally be the case that the empirical associations between political and fiscal variables are a manifestation of the kinds of processes that lead to the over-exploitation of physical common-pool resources. In light of the knowledge we currently have, it is not possible to say with certainty whether this is so. Therefore, the rest of this book focusses on identifying the circumstances in which variables related to the number of parties vs. variables related to programmatic aspects of politics have explanatory power. While optimal policy outcomes are difficult if not impossible to recognise, it will hopefully be possible to gain some conception of the conditions in which party politics is most likely to resemble the Hardinian commons.

Chapter 4
Analysing the Budgetary Commons

This chapter presents the operationalisations of the theoretical concepts used in this work, alongside the sources of data and analytical methods. The operationalisation of the key variables is discussed at greater length than what usually has been the case in the literature drawing on the notion of the budgetary commons.

In particular, this pertains to variables related to programmatic aspects of politics, such as the programmatic 'colour' of the cabinet. Such variables are routinely included in empirical analyses as controls, and operationalisations have varied considerably. Operationalisations are, however, seldom justified at any length. This probably follows from the fact that previous works generally have not been concerned with potential trade-offs between programmatic and non-programmatic styles of policymaking, although fiscal policy effects of party system fragmentation are more likely to be features of environments in which programmatic linkages are weak. The programmatic orientation of the cabinet should therefore be seen as equally important an aspect to be measured as the number of 'appropriators'. The question is not so much about finding an indicator of the 'true' programmatic orientation of the cabinet, but rather about identifying the conditions in which an indicator based on what parties say they will do in office can be treated as an indicator of their 'true' positions, in the sense that they enact policies in line with those positions.

The data used in this work covers a number of countries over a relatively long period of time, which means that the same units are observed over and over again. This data structure is common in comparative political economy, but it also poses some analytical challenges that are normally not encountered in the analysis of conventional cross-sectional datasets. In practical terms, what happens this year often depends on what happened last year, and what happens in this country is related to what happens in other countries. Moreover, countries are different for cultural, historical and other reasons that are not easy to observe, let alone quantify. Neglecting these issues could lead to seriously misleading conclusions.

Another set of analytical challenges stems from the nature of many claims made in this work. They often point to conditional relationships between variables, e.g. that the effect of the number of cabinet parties on spending depends on the quality of government. Therefore, interactions between variables must be investigated and the results must be interpreted with care. Specifically, one needs to consider whether effects that are visible in regression results tables are empirically relevant at all, that is, whether effects actually are discernible in existing cases.

Operationalisations of Political Variables

All data used in this work is obtained from existing sources that are freely open to anyone. However, in many cases data had to be processed so that the end product is a dataset with a number of variables that were previously not available. The refinement process especially pertained to political data which is described first, before turning to fiscal, macroeconomic and socio-economic variables.

Counting Heads

In a work studying the consequences of multiparty government, a central variable is naturally the number of parties. Counting the number of parties may appear straightforward at first, but on second thoughts two decisions have to be made before one starts counting: which parties to count and whether to treat all parties in that group equally. The first decision pertains to the set of parties that should be considered the relevant appropriators or 'herders' in the budgetary commons, i.e. whether one should take into account all parties that exist, those that receive votes in elections, those that gain parliamentary representation or those that are in government. The equal treatment dimension refers to the fact that parties differ when it comes to the number of votes they attract, the parliamentary seat shares they control and their importance in coalition building, to name some asymmetries.

The countries included in the analysis apply some form of the parliamentary system of government, although some countries like France also have relatively strong presidents.[3] However, all share the fundamental norm of parliamentarianism that the government may govern only as long as it retains the confidence of the parliament or, in more precise terms, a parliamentary majority does not express its non-confidence in the government. Although this norm and the very notion of parliamentarianism appear to give primacy to the parliament of all organs of state, the role of the cabinet is central in such systems. Much of legislative activity revolves around government proposals, and governments usually have policy preparation machineries at their disposal that parliaments lack. This means that many of the policies finally accepted by parliamentary majorities have been subject to negotiations, deliberation and bargaining among the cabinet parties.

Accordingly, Bawn and Rosenbluth (2006) argue that the degree of inefficiency that arises in multi-party decision making depends on the number of parties taking part in coalition formation, and the number of parties in parliament is consequential only in so far as it affects the number of parties that are needed to form a government. In line with this emphasis on the partisan composition of the executive, the focus in this work is

[3] The heads of some states are hereditary monarchs who generally do not take part in the day-to-day politics of their countries. The distinction between monarchies and republics is not considered relevant in the present context.

also on the number of cabinet parties. However, the importance of the partisan composition of the parliament must not be downplayed, either. This will become clear later when the discussion turns to parties' bargaining leverages that depend on the distribution of voting weights among *all* parties.

Next, it must be decided whether to use the number of parties as such, i.e. the unweighted 'raw' number, or whether some weighting scheme ought to be used. Franzese's (2010) classification of different kinds of effects of multi-party decision making was referred to in the previous chapter. According to Franzese, the class of effects under investigation affects the way in which the number of parties ought to be counted: when analysing common-pool effects, size-weighted numbers should be used, whereas unweighted numbers should be used when analysing veto player effects. Franzese builds this argument on Olson's (1971) theory of collective action and George Tsebelis's (2002) theory of veto players.

According to Olson, the participation of 'large' actors, i.e. actors that draw a lot of benefit from the provision of a collective good, facilitates collective action and increases the likelihood that the collective good is provided. In Franzese's (2010) view, large parties counteract the law of 1/*n* (Weingast *et al.* 1981) because they internalise a larger fraction of the cost simply because their size is larger than 1/*n*. In this sense, large actors facilitate the avoidance of a collective bad, which should be taken into account when counting the number of parties. Franzese therefore recommends using the effective, size-weighted number instead of the raw number.

Although pointing to a relevant difference between the types of issues that are faced in multi-party decision making, Franzese's argument does not take into account features of collective action and joint decision making that do not (entirely) go back to actors' sizes. If size-weighted numbers are used, it is assumed that smaller actors have a smaller impact on the outcome or that small parties extract fewer resource units than large actors. However, small actors may succeed in free-riding on the cost-restriction efforts of large actors (see Olson and Zeckhauser 1966) so that while large actors are concerned with limiting the cost burden, small actors may seek additional benefits as large actors restrict the amount of resources they spend. A size-weighted number of parties does not fully capture the fact that small parties may seek larger amounts of spending relative to their sizes than larger actors. Moreover, as was highlighted in the previous chapter, the ability of parties to appropriate funds from the pool of tax funds cannot entirely be divorced from their chances to use veto power (see also Chapter 6). Hence, given that party sizes may have contradictory effects on parties' willingness and ability to extract tax funds to their purposes, there are grounds to use the raw number of parties as the primary operationalisation of the number of appropriators.

Using the raw number of government parties also makes the results easily comparable not only to the Bawn and Rosenbluth (2006) study but also to Martin and Vanberg (2013) and Bäck *et al*. (2017). In the subsequent chapters, the *number of government parties* is the number of parties that Döring and Manow (2016) identify as cabinet parties. In order to reduce repetition in the text, 'the number of cabinet parties,' 'the num-

ber of parties in government,' 'coalition size' and, when context allows no risk of confusion, simply 'the number of parties' are used synonymously.

When the number of government parties is found to have significant effects on fiscal policy outcomes, however, the robustness of the results is checked using the effective cabinet parties. The effective number of parties (ENP) or the Laakso-Taagepera (1979) index is calculated on the basis of government parties' seat shares, that is,

$$ENP = \frac{1}{\sum_{i=1}^{n} s_i^2}$$

where n is the number of parties in government and s_i is party i's share of the seat total of all government parties. The calculations are based on seat shares in the lower chamber of the parliament in case of bicameral parliaments. Checks using the effective number of cabinet parties are not made when voting power is also included in the model, as accounting for parties' voting weights and their voting power simultaneously could seriously restrict the interpretability of the results (see Chapter 6 for a more extensive discussion on voting power).

Despite the importance of negotiations between government parties and the central role of government proposals in legislative work, parliaments may make non-negligible changes to government proposals or legislate on their own initiative. Therefore, the fragmentation of the parliamentary party system is controlled for in most regressions. The effective number of parties is used for this purpose. The *effective number of parliamentary parties* is calculated using all parliamentary parties' shares of all parliamentary seats, and the calculations are based on data provided by Döring and Manow (2016).

The data includes countries in which caretaker cabinets have been in office at some point. Such cabinets primarily look after the everyday administration of the state and lack the political mandate for significant policy reforms. They therefore cannot be treated in the same way as cabinets with a political mandate. In the case of caretaker cabinets, all cabinet-related variables are set to zero: there are zero parties in government, the effective number of government parties is zero and the programmatic centre of masses (see below) is zero, which indicates an exactly centrist position. *Caretaker time*, the fraction of the year a caretaker cabinet was in office, is controlled for in most regressions, except for a few models in Chapter 7. As caretaker cabinets are often appointed during political crises, caretaker time can also be interpreted as an indicator of exceptional political circumstances.[4]

The number of players is hence measured entirely in terms of parties. Some authors argue for using the number of spending ministers as a measure of fragmentation and

[4] Preliminary analyses suggested that an indicator of the non-majority status of the cabinet behaves much like *caretaker time* when it comes to regression results. Due to its more direct linkage to crisis periods, *caretaker time* was included in the analyses instead of the non-majority status.

find that fragmentation thus operationalised is associated spending increases and deficits (Perotti and Kontopoulos 2002; Volkerink and De Haan 2001; Wehner 2010a). Using this operationalisation as an explanatory variable is not entirely unproblematic since, as Perotti and Kontopoulos (2002) note, it is usually not fixed and can be easily changed within some boundaries. The number of spending ministers can therefore be considered a part of the bargaining outcome, just like the policy choices that number is supposed to explain. Empirical connections between the number of spending ministers and fiscal policy outputs are hence not surprising, but treating the former as a cause of the latter is highly questionable.

Programmatic Orientations

Empirical analyses in the existing literature routinely contain an indicator of the programmatic outlook or orientation of the government. It is typically treated as a 'control variable' whose effect is not considered that central and consequently is seldom discussed at any length. Some authors even neglect it completely (e.g. Elgie and McMenamin 2008). This is somewhat peculiar given the fact that many ideological debates and programmatic pledges pertain to issues that have more or less direct budgetary consequences. The operationalisation of programmatic features of politics deserves to be discussed at some length given the claim made in the previous chapters that common-pool-problem-like tendencies are at their strongest where programmes have little weight.

Many different operationalisations have been used in the literature, such as the share of ministerial portfolios held by leftist parties (Harrinvirta and Mattila 2001), the right-left position of the prime minister or the chief executive (Dahl 2014; Wehner 2010a) and the weighted mean of government parties' right-left positions (Bawn and Rosenbluth 2006). Moreover, the programmatic positions of parties can be estimated, i.e. given numerical values that indicate the locations of their ideal points in a policy space, using different methods. One of them draws on expert surveys. Country experts are asked to indicate the positions of the parties of their country on different policy dimensions, typically including a general left-right dimension (e.g. Castles and Mair 1984; Huber and Inglehart 1995; Benoit and Laver 2006). Party positions are then defined as averages of the scores given by the experts. Responders may also be asked to assign scores to parties in mass surveys (e.g. Comparative Study of Electoral Systems, www.cses.org), or positions can be estimated by analysing legislative voting (e.g. Hix *et al.* 2006). Yet another approach draws on the analysis of party programmes and other text material that parties produce. The most notable effort in this vein of party position estimation is the Comparative Manifesto Project (Budge *et al.* 2001; Klingemann *et al.* 2006) whose database (manifestoproject.wzb.eu) at the moment covers more than 50 countries over a period that, in many cases, reaches back to the immediate post-World War II era. Scores obtained using different methods tend to correlate but are not

identical, so the choice between them may have important consequences for the results one reaches when analysing the policy consequences of party positions.

In this work, scores obtained from the Comparative Manifesto Project (henceforth CMP) are used. This is because the contents, information value and credibility of programmatic statements are central to the theoretical argument. As parties' scores are, for the most part, based on their electoral programmes, they provide a relatively straightforward operationalisation of the phenomenon of interest: what parties say they would do in office. That is, what is needed is an indicator of what parties bring to the negotiation table, and while expert surveys and other approaches produce useful data on party positions, they do not as clearly differentiate between what parties bring to and what they take out of inter-party negotiations (Budge 2000).

One can raise the legitimate concern that CMP scores do not necessarily reflect 'true' positions, as parties may tailor their message to election-specific opinion climates. This does not, however, undermine the usefulness of CMP scores but rather supports them in the present context. 'True' party positions are less relevant in light of the objectives of this work as the compatibility of actual policy outcomes and the *ex-ante* statements parties make about their aims and priorities are of primary importance.

CMP scores are based on counting quasi-sentences (i.e. individual statements contained in programmes) that contribute to specific programmatic outlooks, which follows from the fact that the approach draws on a specific theory of party competition. Standard spatial models of party competition, which assume that parties' positions can be presented as points in a policy space, are often undermined by the observation that parties do not so much take different stances on same issues, but instead take largely similar stances but prioritise different issues. Hence, in the view on which the CMP is based, the programmatic outlook of a party is not so much determined by the stances it takes but rather by the issues it emphasises. In this view, parties do not want to go against the prevailing majority opinion on an issue, and their programmatic 'colours' are more readily visible in the issues they focus on.

The assignment of CMP scores starts by counting quasi-sentences in party programmes that fall into specific issue categories, and emphasis given on an issue is defined as the ratio of quasi-sentences in that category to all quasi-sentences. Positions on the right-left dimension are used in this work because that dimension is especially relevant when it comes to the kinds of policy outputs that are of concern here, i.e. the volume of spending and revenue and the priority given to balancing the budget. The right-left score included in the CMP data is composed of a number of categories that contribute to either a 'leftist' or a 'rightist' orientation. Mentions of economic orthodoxy (including the reduction of budget deficits), free enterprise and the limitation of social services, among others, are counted as rightist emphases. Quasi-sentences including references to the regulation of capitalism, the expansion of social services and controlled economy and so forth are counted as leftist emphases.[5] The right-left score of a

[5] Right emphases are 1) military (positive), 2) freedom, human rights, 3) constitutionalism (positive), 4) effective authority, 5) free enterprise, 6) economic incentives, 7) protectionism (nega-

party is obtained by subtracting the sum of left emphases from the sum of right emphases, which yields a score ranging from –100 (theoretical minimum) to 100 (theoretical maximum) where larger numbers indicate more rightist orientation.

CMP scores have the additional advantage that they vary over time, reflecting the possibility that parties' programmatic outlooks are not constant. Scores are also comparable across countries as scores are obtained using a uniform methodology. While expert surveys may more accurately reflect parties' 'true' positions when parties in the same system are compared to each other, comparisons across party systems may be much more open to interpretation. For instance, being 'rightist' in Sweden may mean quite different things than being 'rightist' in the United Kingdom when it comes to attitudes towards tax-funded higher education or labour market programmes. As CMP scores are not based on comparisons between parties in the same system, they allow for assessing parties' locations not only relative to their current competitors but also relative to parties in other party systems and at different times.

As a rule, government parties in this work are assigned their right-left scores from the latest election preceding the installation of the cabinet. There are some cases in which that score is not available. This may result from the fact that a party does not win any parliamentary seats, in which case its programme is not coded by the CMP team, but still participates in government. However, as the weight of such parties would be zero in any case when calculating the programmatic barycentre of the cabinet, the lack of scores is inconsequential. More troublesome are cases where parties splinter or merge during a parliamentary term and splinters or merger parties enter the cabinet. In those cases, the history of the splinter or merger was studied using the Political Data Yearbook of the European Journal of Political Research and other sources to determine whether some other party's score could sensibly be used as an approximation of the position of the new party. When splinters did not appear to follow primarily from programmatic disputes, the score of the mother party was used for the splinters. In the case of mergers, the average of the scores of the constituent parties was used, if scores were available for more than one party. If they were not, the score of one party was used. If no scores were available, merger parties were omitted. In cases where no sensible approximation was available, the new party or parties were omitted from calculations. In most cases, it was possible to calculate a right-left score of a cabinet even though some individual parties lacked scores – it also deserves to be stressed that the problem of lacking scores was relatively rare in the first place and mostly pertained to smaller parties that had little weight in determining the cabinet's position, which means that the weighted averages used in the actual analyses do not depend crucially on the

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tive), 8) economic orthodoxy, 9) social services limitation, 10) national way of life (positive), 11) traditional morality (positive), 12) law and order and 13) social harmony. Left emphases are 1) decolonisation, 2) military (negative), 3) peace, 4) internationalism (positive), 5) democracy, 6) regulate capitalism, 7) economic planning, 8) protectionism (positive), 9) controlled economy, 10) nationalisation, 11) social services (expansion), 12) education (expansion) and 13) labour groups (positive) (Budge *et al*. 2001, 22).

use of approximations. However, in some cases the party system changed considerably so that scores could not be found even for the main parties. When no sensible way of assigning right-left scores to government parties was feasible, the country-years in question were omitted completely. For example, Cyprus before 1997 had to be excluded from the analysis for this reason.

The *programmatic position of the cabinet* is the weighted average of the right-left positions of individual government parties, where parties' shares of the total number of parliamentary seats held by the cabinet parties are used as weights. That is, what can also be called the programmatic centre of masses,[6] c, is obtained from

$$c = \sum_{i=1}^{n} s_i^G p_i$$

where s_i^G is party i's share of the parliamentary seats of all government parties and p_i is its right-left score, $p_i \in [-100, 100]$. Again, s_i^G refers to the lower house if the parliament is bicameral. The centre of masses is intended to convey the idea that larger parties contribute more to the programmatic outlook of the cabinet. It is also based on parliamentary seat shares rather than shares of ministerial portfolios. In empirical terms, the two are strongly connected (Browne and Franklin 1973; Browne and Frendreis 1980; Bäck *et al*. 2009).

Given the construction of the programmatic centre of masses, a leftist orientation should be favourable to the expansion of the public sector, visible as increases in the volume of spending and government revenue relative to the size of the national economy. Conversely, a rightist orientation should lead to the contraction of the public sector as well as greater efforts to decrease debt and avoid budget deficits. The conditional form 'should' is intentional as it refers not only to empirical predictions but also to normative expectations: a government with a rightist programmatic outlook should enact rightist policies as this is what it communicated to the voters before elections, the same naturally applying to leftist governments as well.

One might ask why a size-weighted measure of programmatic orientation is used while a non-weighted measure of the number of government parties is used as the primary operationalisation of coalition size. This is due to the different normative implications of a relationship between the government's programmatic outlook and policy outputs vis-à-vis those of a relationship between coalition size and policies. Why this is so requires some explanation. When it comes to programmatic pledges, it is normatively justified that larger parties have a stronger effect on policy outputs than small parties, because large parties fared better in elections. As one of the goals of this work is to assess decision making in different contexts in a normative light, it is important that the operationalisation of the programmatic orientation of the cabinet captures this fea-

[6] To avoid excessive repetition in the text, the programmatic position, the programmatic centre of masses, the programmatic outlook, the programmatic orientation, the right-left position and the programmatic barycentre of the cabinet are used synonymously.

ture. Coalition size, however, lacks that connection to the normatively desirable features of representative government.

In Chapters 5 and 6, only the programmatic orientation of the cabinet is considered. In Chapter 7, however, the position of the *median voter* is introduced in order to assess citizens' influence on policy outputs. It deserves to be stressed that 'voter' here refers to a voter in a parliamentary election, not a member of parliament. It is notoriously difficult to define the 'popular preference' or 'the will of the people' as the outcome of collective will formation is generally dependent on the method of aggregating individual preferences (Riker 1982). However, under a set of assumptions, the position of the median voter emerges not only as an empirical predictor of policy outputs but also as a normative benchmark against which to assess outcomes actually reached (Black 1948; Downs 1957).

Assume that the policy space is unidimensional, i.e. that policy alternatives can be arranged on a single left-right continuum. In the case analysed here, the extreme left end of the continuum can be interpreted as a maximally large public sector and the right end as a minimally small one. Similarly, the budget deficit decreases from left to right. Also assume that voters have ideal points that can be expressed as placements on the continuum, so that each voter has a single-peaked preference and the utility a voter draws decreases (quasi-)monotonically when moving either to the left or the right from the ideal point. Now, if voters could make proposals about the size of the public sector, it could be shown that the position of the median voter would prevail, the median voter being the voter who has as many voters on his or her left as on his or her right. The policy alternative at that point of the continuum cannot be beaten in a majority vote, so its adoption has a democratic justification.

The position of the median voter, M, is here defined in terms of party programmes: to simplify somewhat, the median voter's position is the position of the party the median voter supported. It is calculated as

$$M = L + \frac{50 - C}{F} W$$

where L is the lower end of the interval containing the median, C is the cumulative vote share up to the interval containing the median, F is the vote share in the interval not containing the median and W is the width of the interval containing the median (Kim and Fording 1998).[7]

[7] Median voter positions were obtained using the 'manifestoR' package in R.

The third central variable alongside the number of government parties and the right-left position of the cabinet is the quality of government. It is obviously difficult to obtain 'hard' data on the impartiality and effectiveness of the public administration. By their nature, acts of corruption and other deviations from impartiality remain largely unobservable, and therefore reliable objective data on their prevalence is unlikely to exist. Some scholars have, however, attempted to collect and use such data. For example, Goel and Nelson (1998) use data on criminal convictions for corruption on different administrative levels in the United States. However, as Charron and Lapuente (2012, 118) point out, such measures may actually measure the effectiveness of the legal system of a country; they hence assume that the state machinery contains at least a component that functions both fairly and effectively. Another set of indicators is based on perceptions of corruption and other phenomena related to the quality of government, especially on perceptions held by experts. This also applies to the quality of government measure used here.

The indicator used in this work stems from the International Country Risk Guide (ICRG) produced by the PRS Group, a firm specialised in analysing and quantifying political and country risks potentially faced by investors and other economic actors. The political risk assessments are based on assessments by ICRG staff members (Howell 2012). ICRG data is widely used in the field (e.g. Bäck and Hadenius 2008; Norris 2012; Rothstein *et al.* 2012; Woo 2003). The specific variable used here is a composite index obtained from the Quality of Government Standard Time-Series Dataset (Teorell *et al.* 2015). It draws on three components that pertain to different aspects of the quality of government.

The first component measures *corruption* or, more precisely, the extent to which a country is free from corruption. In this connection, corruption is understood in a relatively wide sense as it refers not only to bribery and demands for special payments but also to, for example, the prevalence of secret party funding, suspiciously close ties between politics and business as well as patronage and nepotism. The second component measures *law and order*. This means, on the one hand, strength and impartiality of the legal system and, on the other, popular observance of the law. The third component of the indicator is *bureaucracy quality*. It ought to be borne in mind that the ICRG data is intended to facilitate risk assessments and consequently considers low-risk environments better. Accordingly, high bureaucracy quality scores reflect bureaucratic autonomy and independence from political superiors rather than responsiveness – high-quality bureaucracy is in this view a 'shock absorber' (Howell 2012, 7) that restricts policy changes when governments change. However, as Howell points out, in low-risk environments the bureaucracy also has established recruitment and training mechanisms. Moreover, as Fukuyama (2014, 511–519) notes, quality of government presupposes a certain amount of autonomy from elected decision makers, so that the public sector does not degenerate into a source of rents for politicians and their networks. The

index is an average of these three scores, transformed so that the values of the index vary between 0 and 10. As Norris (2012, 50) notes, this indicator distinguishes between patronage-based administration, on the one hand, and rational and impartial Weberian bureaucracy, on the other.

The index, as it is reported in the Quality of Government Dataset, ranges from 0 to 1, larger values indicating a higher quality of government. For the present purposes, the index is simply multiplied by ten so that its theoretical minimum and maximum values are 0 and 10. This is done to facilitate the interpretation of regression results: by transforming the index this way, regression coefficients become larger and easier to interpret, while statistical significance and the effects of all other variables naturally remain unchanged.

Any quality of government indicator is imperfect, including the one used here, and therefore it is important to consider the feasible alternatives. Few exist, especially when it is required that the indicator takes over-time variation into account. Another widely used set of indicators is the Worldwide Governance Indicators (WGI) provided by the World Bank (http://info.worldbank.org/governance/wgi/). The WGI consists of six indicators that pertain to different aspects of government and administration. However, the WGI are only available from 1996 onward, and until the early 2000s the data is biannual, i.e. every second year is missing from the time-series. Moreover, the over-time comparability of the WGI is weakened by the fact that they are based on rank-orders rather than absolute measures, and ordinal data is then transformed so that it is normally distributed. The performance of a country in a given year therefore depends partially on the performance of other countries in the same year, and therefore it is difficult to assess what within-country changes in governance scores over time mean. Empirical research has also made extensive use of the Corruption Perceptions Index (CPI) produced by Transparency International. However, that index only pertains to one aspect of the quality of government and is therefore of limited use in the present context. Moreover, the CPI is only available from the mid-1990s onwards, and the comparability of scores from different years is limited (Rydland *et al.* 2008). Given the limitations in both the availability and the comparability of the WGI and CPI, ICRG data emerges as the best feasible alternative.

Dispersion of Bargaining Power

One aspect of multi-actor decision making that has received very little attention in the literature is the distribution of bargaining power. In particular, the policy consequences of the number of parties can be expected to be clearest when bargaining power is evenly distributed, whereas the concentration of power in the hands of one party can make the number of parties as such largely irrelevant. As the setting analysed in this work is such that parties have to take majority voting in the parliament into account, the distribution of bargaining power can be argued to be a function of parties' voting weights in

the parliament. The distribution of bargaining power is here measured using the standard deviation of the Shapley-Shubik indices of government parties. As the measurement of power is the subject of a large vein of literature, while applications to the subject matter of this work are few, a more thorough discussion is deferred to Chapter 6.

Changes during a Year

The fiscal, economic and societal data used in the analysis is measured annually. Thus, government spending, for example, is defined as the total amount of money that the government spends during a calendar year, divided by the total gross domestic product in that year. As the variables are measured in this way, their values cannot change during the year.

The values of the political variables often do change during the year, however. It is highly uncommon that a government comes into office on January 1st and resigns on December 31st, the same applying to national parliaments. However, the structure of the data makes it necessary to assign only one value to each political variable per year. In cases where the composition of the cabinet or the parliament or the location of the median voter changes during the year, weighted averages of the respective variables are used. Weights are the fractions of the year the corresponding cabinet or parliament was in office. Hence, each cabinet or parliament that was in power during a year is assumed to contribute to budgetary outcomes.

One could argue that one should use the values pertaining to those cabinets and parliaments that were in power when the budget was passed. Such an approach would, however, miss the possibility of supplementary budgets and the fact that pieces of legislation initiated or passed throughout the year may have budgetary implications.

Lagged Effects

As decisions on the budget of a given year are for the most part made in the previous year, all political variables are lagged by one year. That is, when the outcome variable is the change of spending in t, for example, the values of the political variables in $t - 1$ are used as explanatory variables. It is acknowledged that this lag structure may not always be optimal as some programmes started (or abolished) by one government may not be easily changed (or re-started) by the next government even if it wanted to, in which case the true lag may be longer. Unobserved differences in the institutional structures or political cultures of different countries may also imply that lag structures differ (Plümper *et al*. 2005). Given the absence of a generally agreed-upon method for determining optimal lag structures, lagging the political variables by one year is here considered a reasonable modelling choice, which is also widely applied in the literature (e.g. Bawn and Rosenbluth 2006; Martin and Vanberg 2013). Moreover, as will be

discussed later, the regression models are dynamic in the sense that the effect of any variable is distributed across all subsequent years. It is, however, true that even this feature does not render the lag structure optimal.

Describing the Herders

Having defined the political variables used in the subsequent chapters, it is useful to take a preliminary look at the variation in some of them across countries and over time. Consider first the number of government parties (Figure 4.1). There are clear differences in the average number of parties in government between countries, but there are also clear differences in the amount of variation within countries over time. To begin with, some countries have been ruled by one-party cabinets throughout or almost throughout the entire period. The United Kingdom is often presented as the archetypal majoritarian democracy, and except for the two-party coalition that assumed office in 2010, the number of government parties has been one. Malta and Spain, in turn, show no variation in their patterns of one-party rule; Greece had a brief experience of coalition government in 1989–1990, and at the end of the time-series, a caretaker cabinet was appointed.[8] Luxembourg and Germany have had two-party coalitions throughout the period.[9] In other countries, coalition sizes have varied. Whereas coalition sizes have been rather stable in Austria where regular single-party cabinets were replaced by regular two-party cabinets in the 1980s, the large but unstable Belgian and Italian coalitions have occasionally given way to caretaker cabinets, which leads to highly uneven plots. Other countries where relatively large cabinets have been the rule include Finland, Latvia, Romania, Slovakia and Slovenia. However, none of the countries exhibit clear movement towards larger or smaller coalitions over time, although it has to be acknowledged that the number of cabinets in some post-communist countries is so small that clear trends would be difficult to discern anyway.

Another key variable is the right-left position of the cabinet, shown in Figure 4.2. Variation over time appears to be larger with respect to the programmatic orientation of government parties than with respect to their number: the up-and-down movement of the plots indicates that government parties with rightist programmes have been replaced by parties with leftist programmes and vice versa. The fluctuation of the programmatic orientation appears to be somewhat larger in the old member states than in the new ones, although again differences in the lengths of the time-series make definitive comparisons difficult.

[8] The caretaker cabinet that took office in 2011 is responsible for the fact that Greece is the only country in the dataset whose average number of government parties over the period is slightly smaller than one.

[9] It is not entirely self-evident whether German CDU-CSU should be counted as one or two parties. Here it is treated as one party since Döring and Manow (2016) and the CMP database do not differentiate between CDU and CSU.

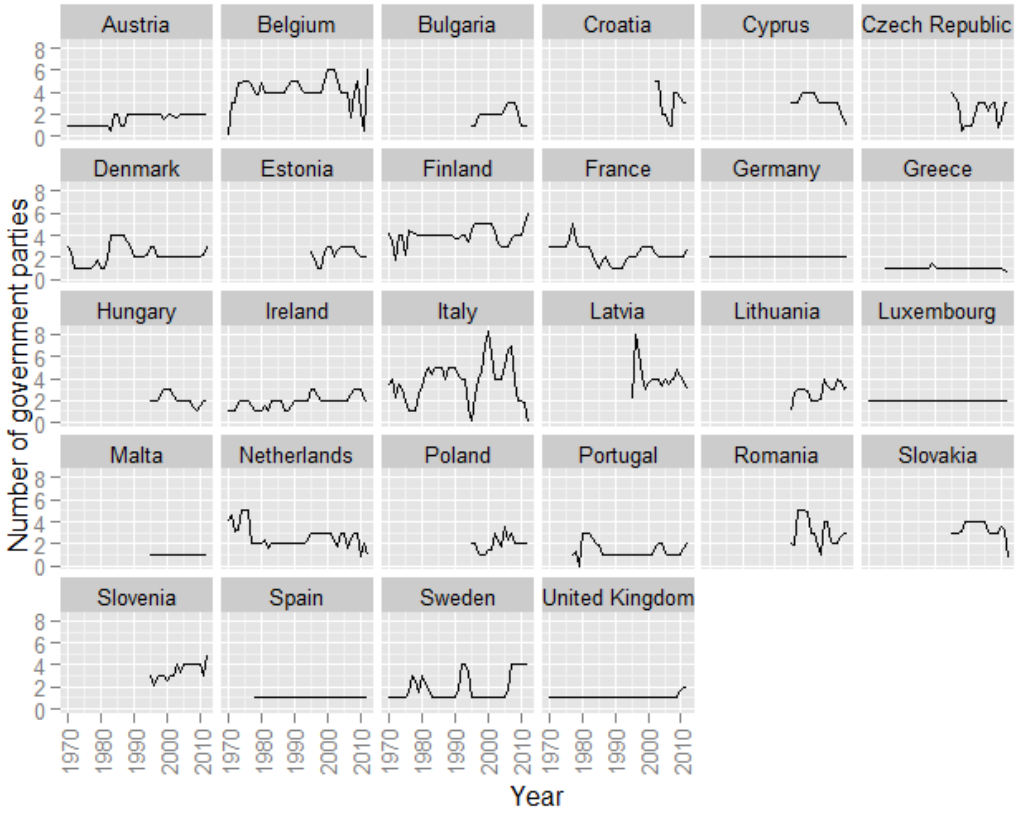

Figure 4.1. The number of government parties in the EU countries from 1970 to 2012.

Since right-left scores pertain to programmes instead of party families, the programmatic centre of masses may change even if parties conventionally considered centre-leftist, for example, remain in power, and conversely the centre of masses may remain relatively stable even if the composition of the cabinet changes. For example, the right-left position of the Swedish cabinet changed only slightly, from 22.43 to 23.79, in the mid-1990s when a coalition of bourgeois parties was replaced by a social democratic single party cabinet. This case also exemplifies the fact that the programmatic outlook of the cabinet can move to the right even if parties commonly classified as centre-right parties gave way to a centre-left party – the social democrats campaigned on a programme with a heavy emphasis on balancing the budget after a serious economic crisis, which counts as a 'rightist' emphasis.

The final variable reviewed here is the quality of government. Figure 4.3 points to rather clear level differences across countries but also to considerable over-time variation in some countries. The three Nordic countries included in the dataset alongside Luxembourg and the Netherlands consistently show very high quality of government scores. The scores have also been at high levels throughout the period in some other

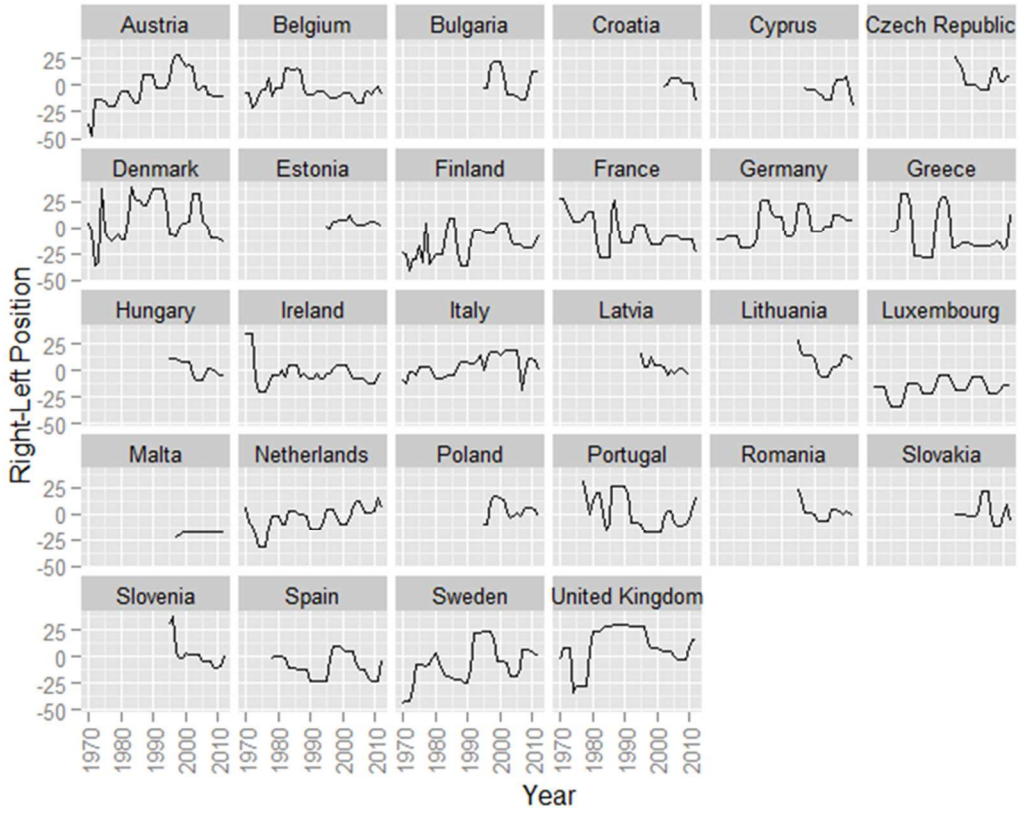

Figure 4.2. The programmatic centre of masses of the cabinet in the EU countries from 1970 to 2012.

Western European countries as well, such as Austria, Germany and the United Kingdom. Countries of Southern Europe and the post-communist area generally have lower quality of government scores. In the post-communist countries, the scores have in fact tended to decrease over time, although in most of them the scores have levelled after an initial drop. The scores have ended up at especially low levels in Bulgaria and Romania, which have also shown no improvement over time. Other 'bad performers' include Italy, where the scores have dropped considerably after the corruption and political crises of the 1990s. A notable deterioration also occurred in France, although the scores have improved more recently. Greece's scores rose considerably until the mid-1990s, but after that the scores have returned close to their initial low levels.

Hence, there is variation in both fiscal policy outcomes (see Chapter 1) and in variables pertaining to cabinets and the quality of the state machinery with which they operate. There is therefore at least a possibility that the latter can explain some of the variation in the former. The meanings of the fiscal policy variables reviewed in the previous chapter – government spending and debt – were quite self-evident. In the

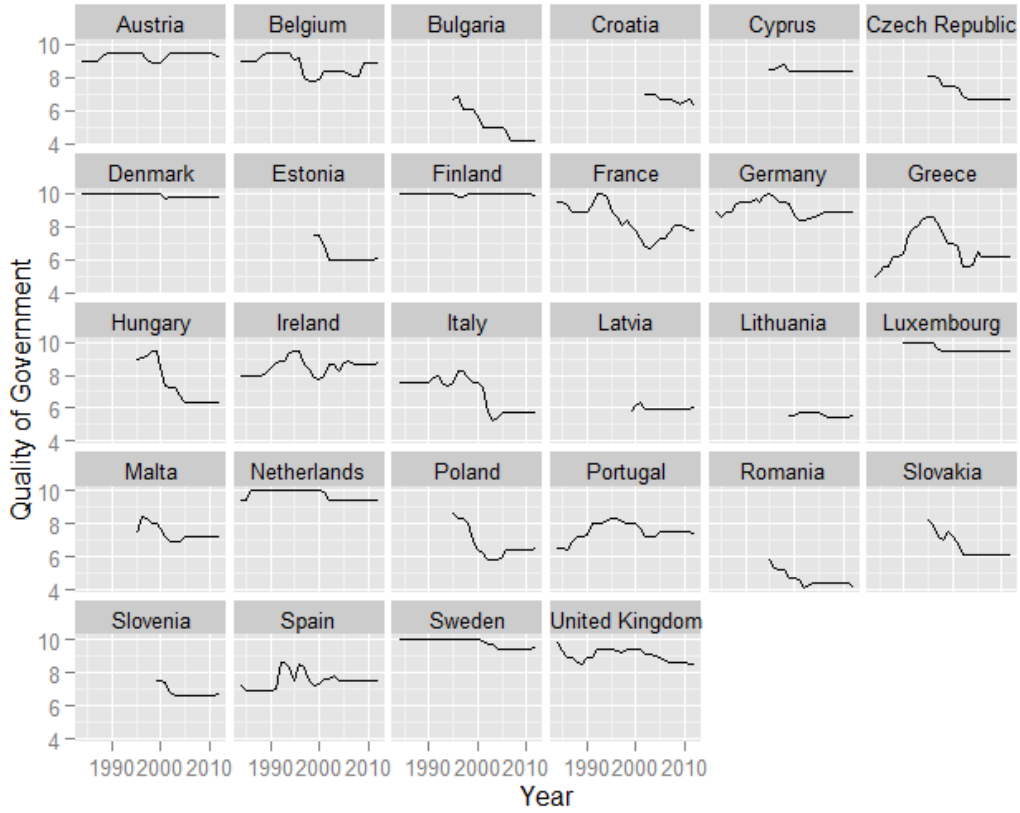

Figure 4.3. The quality of government in the EU countries from 1984 to 2012.

following section, the definitions and sources of those variables are discussed in greater detail.

Fiscal Policy Variables

In this work, the focus is on politics at the level of the national state, and as was seen above, the political variables pertain to national cabinets, parliaments and electorates. Providers of fiscal policy data, such as the OECD, Eurostat and the IMF, differentiate between different levels of government, of which the central government corresponds to the national level. Other levels are state governments (where applicable), local governments and social security funds. Together the four levels form the *general government* sector.

One could argue that as national-level political data is used, hypotheses are appropriately tested using data pertaining to the central government (e.g. Blais *et al.* 2010). However, the public sector is here equalled with the general government (unless oth-

erwise stated) because the central government is typically able to influence the use of resources on other levels due to its legislative and regulative powers. The central government may even deliberately impose obligations on other levels of government rather than spend and tax unilaterally, with the intention of making central government finances appear sounder, for example, or to avoid blame for unpopular policies. A more benevolent government, in turn, may perceive that certain programmes are most efficiently implemented on lower levels of government and therefore obligates them to do so. Neglecting the other levels might thus give a seriously distorted impression of the budgetary consequences of government action. Indeed, preliminary analyses of spending data suggested that where political variables affect expenditure, the effects tend to be stronger with general government data than with data pertaining to the central government.

Spending

The primary measure of spending is the ratio of total general government outlays to gross domestic product, expressed as a percentage. Total spending includes all spending categories, such as transfers and the provision of goods and services. Data is obtained from the OECD Economic Outlook database for those countries that are OECD members and from Eurostat for the rest, via Armingeon et al. (2015). The time series go back to the 1960s or early 1970s for most of the old EU member states and to 1995 for the new member states. Pre-1990 data for Luxembourg is unavailable in online sources. Old editions of the OECD Economic Outlook do provide data, but a three-year gap in the 1980s remains. Moreover, as the spending levels reported before the late 1980s are considerably higher than those in the early 1990s (see Figure 1.1 in Chapter 1), it cannot be ruled out that the difference is due to changes in accounting. Therefore, Luxembourg before 1990 is excluded from the analyses.

Total government spending is liable to some misunderstandings. In particular, it is a very imperfect measure of the 'size of government' as it must not be interpreted as the *share* of government spending of total economic activity. This is what the commonly used term 'GDP share of government spending' can easily lead to. GDP shares cannot be spoken of in the case of total spending as all spending components do not enter the definition of the gross domestic product, and in this work every effort is made to avoid this conceptual confusion by always referring to spending *relative to* GDP when total spending is at stake. Total spending figures that approach 50% of GDP or even exceed it are often encountered, but this does not mean that the public sector is as large as or larger than the private sector. Government consumption expenditure, in contrast, is part of the definition of the gross domestic product and is a more direct measure of the role of the government in the economy. Key findings with respect to total spending are also tested using data on consumption expenditure to assess what affects the size of the public sector in this more accurate sense. Data on consumption expenditure is obtained

from the Penn World Tables (Feenstra *et al.* 2015) and expressed as a percentage *of* gross domestic product.

Three sub-categories of spending will also be considered in Chapter 5 to assess which component of spending, if any, is responsible for the observed relationships between political variables and spending. Those components may also point to the specific mechanisms that produce those relationships. The spending categories are *transfers and subsidies*, the *compensation of employees* and *gross capital formation*. Each of them is measured relative to the gross domestic product and expressed as a percentage.

The spending variables enter the regressions as annual changes when they are used as dependent variables. That is, the dependent variable is $\Delta spending = spending_t - spending_{t-1}$. The lagged level variable $spending_{t-1}$ is then included in the set of regressors to control for the costs of spending increases, on the one hand, and the amount of already satisfied spending demands, on the other (see section Control Variables).

Revenue

Government revenue is defined as the ratio of total general government receipts to gross domestic product. It includes direct and indirect taxes, fees collected from users of government-provided services, and other receipts. Data is obtained from the same sources as spending data via Armingeon et al. (2015). Like spending, revenue as an outcome variable enters the regression equations as annual change, or the difference between the levels at t and $t - 1$. The lagged level variable $revenue_{t-1}$ is included as an explanatory variable for the same reasons as the lagged spending level is included when the outcome variable is the change of spending.

Debt and the Budget Balance

The budget balance and the related issue of sovereign debt is probably the politically most heated aspect of public finance in present-day European politics, and they are covered by the fiscal rules laid down in the basic treaties of the European Union. The budget balance can be defined in a number of ways.

Von Hagen and Wolff (2006) argue that countries are tempted to engage in statistical gimmickry with their official budget balance figures as these are closely monitored in the European Union. They point out that in a number of countries, cumulative deficit figures diverge notably from the development of government debt, which should not be the case. Therefore, the primary operationalisation of the budget balance is the *annual change in the level of debt* measured relative to the gross domestic product. Debt here refers to gross general government debt and is obtained from the OECD and Eurostat databases via Armingeon et al. (2015).

The change in the level of debt is a rather straightforward indicator of the development of the financial standing of the public sector, but the most common definition encountered in everyday media coverage is the *net lending or borrowing* of the government, measured as a ratio to GDP. Positive values of the indicator refer to net lending or surplus, i.e. the government lends more to other actors than it borrows from them, and negative values indicate net borrowing or deficit, whereby the government borrows from others more than it lends. Regression results obtained with government net lending or borrowing as the dependent variable are reported in the following chapters alongside those referring to the change of government debt. The sources of both variables are the same.

Two further operationalisations of the budget balance are also considered to check the robustness of the results pertaining to the aforementioned operationalisations. The *primary balance* excludes interest payments, which can be considered the cost of deficits inherited from previous years, and in that sense better captures the effects of the current government on the budget balance. The *cyclically adjusted balance* is obtained by excluding the effects of business cycle fluctuations, and again this may give a more accurate view of the consequences of government policies as exogenous changes in the macroeconomic environment are ruled out. The primary balance is again measured as a ratio to GDP, whereas the cyclically adjusted balance is measured as a ratio to *potential* GDP, i.e. the level of output that the economy could produce at a constant inflation rate. The sources of these variables are the OECD Economic Outlook databases and the European Commission's AMECO database.

Fiscal Governance

As was pointed out in the preceding chapters, a large literature investigating the consequences of various forms of fiscal governance has emerged. This literature is especially concerned with rules that set limits and targets for fiscal policy aggregates and govern the budgetary process. To control for the possible effects of fiscal rules, most regression models contain an index that captures multiple features of such rules. In Chapters 5 and 6, rules are treated as exogenous, but in Chapter 7 the potential endogeneity of fiscal rules, and especially their relationship with the quality of government, is addressed.

A fiscal rule can be defined as 'a long-lasting constraint on fiscal policy through numerical limits on budgetary aggregates' (Budina *et al.* 2012, 5). In other words, fiscal rules set limitations or restrictions on allowable budgetary outcomes, but beyond that, rules can vary considerably. Constraints can pertain to, for example, allowable deficits or spending increases, and the legal basis of the rules can range from constitutional provisions or international commitments to informal inter-party agreements. Their coverage can also range from the entire public sector to one administrative level, such as the central government.

Fiscal rules, as the term is used here, thus impose numerical limits on budgetary aggregates. They ought to be kept analytically distinct from procedural rules governing the budgetary process (e.g. Hallerberg *et al.* 2009). Such rules govern the way in which budgets are formulated, passed and implemented, and they determine how different actors can affect the budget in different phases of the process. The weakness of such rules gives a wide variety of actors several access points to public funds and is often labelled 'procedural fragmentation' (see Chapter 2). Procedural rules fall outside the scope of this work. Instead, a less conventional approach to the fragmentation of the decision-making process is taken in Chapter 6, where the dispersion of *a priori* voting power is brought into the analysis.

Fiscal governance has a prominent place on the agenda of the European Union and the Commission closely monitors fiscal policy in the member states. The Commission also provides annual data on the fiscal rules of the member states (European Commission 2016). The data is based on surveys sent to national administrations. It was collected for the first time in 2006, and since 2008 surveys have been conducted on an annual basis. The Commission has constructed what it calls the *Fiscal Rule Index* which is time-variant, goes back to 1990 for all current member states and measures the stringency of numerical fiscal rules in place. The Commission's index (*Fiscal Rule Index (EC)* in the subsequent chapters) is primarily based on the stringency and legal status of rules, but it draws on other features as well, such as the media visibility of the rules.

The IMF also provides data on fiscal rules in its member states. Based on IMF data, it is possible to construct indices that draw on formal rules, their enforcement mechanisms and legal statuses. To begin with, an index of fiscal rules (*Fiscal Rule Index (IMF)* in the subsequent chapters) was composed of six sub-indices that measure six kinds of fiscal rules: expenditure rules, revenue rules, national balanced budget rules, supranational balanced budget rules, national debt rules and supranational debt rules. The construction of the index largely follows Schaechter *et al.* (2012), with the exception that supranational rules are here treated as rule types of their own.

For the most part, the IMF data consists of binary variables indicating, first, whether a particular kind of rule was in force in a given year and, second, whether that rule had a particular feature – for example, whether there was an expenditure rule with a formal enforcement mechanism. Some variables have more than two possible values. When this is the case, the variable in question was re-scaled so that its theoretical minimum and maximum values became 0 and 1. Specifically, in the re-scaling, zero was assigned to 'non-applicable' but otherwise the re-scaled values are strictly positive. A sub-index, let us say an index pertaining to expenditure rules, was constructed as follows (numbers in brackets refer to the original range of variable values):

expenditure rule sub-index = formal enforcement procedure (0–1) + coverage (0–2) + legal basis (0–5) + multi-year expenditure ceilings (0–1) + independent body sets

budget assumptions (0–1) + independent body monitors implementation (0–1) + transparency and accountability legislation (0–1)

This results in a sub-index ranging from 0 to 7. The same calculation was repeated for all six types of rules, and the sub-indices were standardised so that their theoretical minimum and maximum values became 0 and 5. The *Fiscal Rule Index (IMF)* is simply the average of all six sub-indices. An *index of national fiscal rules* was created by excluding the sub-indices pertaining to supranational rules, and the index was standardised so that it can obtain values between zero and five. In both cases, larger values indicate more stringent and encompassing rules, i.e. rules that cover a larger share of the entire government sector, have their basis in higher-level legislation and are supported by multi-year ceilings, independent bodies responsible for budget assumptions and monitoring, and legislation that seeks to ensure the transparency of the budgetary process and improve the accountability of decision makers. Sub-indices that pertain to expenditure, revenue, budget balance or debt could be used as such, e.g. by using the expenditure rule sub-index when the dependent variable is spending. However, even rules that do not directly pertain to a certain aspect of public finance may nevertheless influence it. For example, a budget balance rule may even in the absence of an explicit expenditure rule put downward pressure on spending if spending is perceived to endanger the budget balance. Therefore, composite indices are used.

The IMF data goes back to 1985 and shows that of the current EU member states only (then West) Germany and Luxembourg had fiscal rules in or before 1990. Both the European Commission index and the IMF indices convey a general movement towards more stringent rules over time, variation among countries being considerable, however. As for the timing and magnitude of changes, the indices differ somewhat. They are therefore not equivalent and pose a trade-off: the IMF data covers a longer time period but the Commission index is based on a somewhat more comprehensive view of rules that goes beyond mere existence, legal basis and enforcement mechanisms. In the following chapters, the IMF index that includes supranational rules is used as the principal measure of rule stringency in order to cover as many country-years as possible, whereas the Commission's index is used in robustness checks. The index of national rules is used as a dependent variable in Chapter 7 when studying the dependency of rules on quality of government.

Despite drawing on somewhat different aspects of rules, the indices based on IMF data correlate quite strongly. Spearman's rank order correlation between Fiscal Rule Index (IMF) and Fiscal Rule Index (EC) is 0.685 ($p < 0.001$) and the correlation between the index of national fiscal rules and Fiscal Rule Index (EC) is 0.750 ($p < 0.001$). Correlations of this magnitude suggest that the indices measure the same phenomenon – the stringency of fiscal rules – and hence support their validity.

Most regressions also contain the dummy variable *Maastricht* whose value is one since 1992 or EU accession if that happened after 1992, the year in which the Treaty on European Union was signed. The Maastricht Treaty contained the basic fiscal tar-

gets that are still in force in a somewhat modified form, i.e. the requirement that consolidated government debt does not exceed 60% of GDP and that annual budget deficits are at most 3% of GDP.

Control Variables

The fiscal policy variables described above are not solely functions of political factors but are affected by a host of other developments and societal features, which requires controlling for a host of factors. Fluctuations in the macroeconomy or business cycles are likely to affect fiscal policy for two reasons. First, so-called automatic stabilisers make public spending grow and revenue decrease when the economic activity shrinks during recessions and vice versa when the economy is booming, even when no policy changes are made. That is, spending on unemployment benefits and other forms of social security increases when unemployment grows and incomes shrink (and decrease when employment figures improve and incomes grow), whereas tax revenue decreases, given that the budget is not deliberately balanced by cutting spending and increasing taxes. Second, governments may deliberately seek to stimulate the economy during recessions with spending increases and tax cuts. Therefore, the *annual change of real GDP* is controlled for.[10]

The *unemployment rate* is also likely to affect budgetary policies as higher levels put upward pressure on government spending on social security and labour market programmes. While unemployment is strongly connected to the business cycle, structural changes may lead to changes in unemployment that are not accounted for by the GDP growth rate, which makes it important to control for unemployment separately.

The existing *level of government debt* plausibly restricts the room for manoeuvre in fiscal policy, especially in a context where international commitments set its maximum allowable level. Indebtedness also implies that a share of tax revenue has to be spent on interest. High levels of debt may discourage governments from adopting new spending but put pressure on them to balance the budget.

Real GDP change measures the change of value added in the national economy that is not due to changes in prices. However, changes of the price level or *inflation* may have diverse fiscal policy consequences. It may act as an 'inflation tax' that decreases the real value of public debt and hence decreases debt servicing costs. Moreover, if nominal tax rates remain unchanged despite inflation, government revenue may rise

[10] This creates a potentially serious endogeneity problem as fiscal policy is also likely to affect the gross domestic product. To make sure that the substantive conclusions do not depend on the inclusion of this potentially endogenous variable, the robustness of key findings was checked by substituting the real GDP growth rate in the United States for the domestic growth rate. The assumption is that the American growth rate reflects general developments in the global economy but is only negligibly affected by any of the domestic growth rates, let alone budgetary choices, of individual European countries. It turned out that the key results remained qualitatively unchanged after this substitution.

without active policy changes. Although such kinds of mechanisms make it easier to balance the budget, they may also create room for manoeuvre in the public economy and make spending increases more feasible. However, inflation may also make it more difficult to maintain the level of government-financed programmes as nominal costs rise, making the government sector shrink relative to the entire economy insofar as this is the case. Therefore, inflation measured as the annual change of consumer prices is controlled for.

The *lagged level of spending* is controlled for when the dependent variable is the change of spending, and analogously the *lagged level of revenue* is controlled for when the change of revenue is the *explanandum*. As for the spending side, this is because a high level of existing spending implies that a large number of programmes are already financed and consequently pressures to adopt new spending are weaker. When it comes to revenue, a high level implies that the price tag associated with already existing programmes is large and further revenue increases attract stronger resistance. The *lagged budget balance* is included when the dependent variable is an operationalisation of the budget balance, the lagged variable being the same operationalisation. This is because the balancing of budgets seldom happens quickly but takes many years: hence past deficits are likely to partially explain current deficits although measures may have been taken to balance the budget. It is acknowledged that the inclusion of these theoretically important variables may create some estimation problems (see below), although the problems were not deemed too serious when weighed against the risks associated with omitting them.

How governments use money is affected by a myriad of factors. Therefore, some words are needed to explain what is left out of the regression models and why. The relationship between the *openness* of the economy and the size of the public sector has been extensively studied, although a settlement between two competing views has not been decisively reached. On the one hand, openness makes the society vulnerable to the fluctuations of the global economy, in which case there is demand for a strong public sector providing insurance against risks and pressure for the expansion of the government sector (Rodrik 1998). On the other hand, governments may face pressures to decrease taxation and consequently the size of the public sector in response to tax competition. A standard measure of openness is the sum of the value of exports and imports relative to GDP. Within-country short term fluctuations in trade openness are likely to be largely captured by the change of the gross domestic product, so that economic activity expands with international trade and contracts with the world economy. Therefore, to reduce risks of endogeneity and multicollinearity problems, as well as to save degrees of freedom, trade openness is not included in the regression equations reported in the subsequent chapters, as GDP growth is already included. Moreover, preliminary tests suggested that economic openness had some, albeit not robust, minus-signed effects on changes in spending levels, but as the effects of other, substantively interesting variables do not appear to depend on the inclusion or exclusion of openness it was considered best to exclude it.

The *dependency ratio* or the ratio of non-working-age population to working-age population may also conceivably influence fiscal policy variables. In fact, the growth of the dependency ratio is often considered one of the greatest individual threats to the public economy. However, changes in the dependency ratio tend to be very gradual and are unlikely to be visible in year-to-year changes of the public finance aggregates. Preliminary tests suggested that this is indeed the case. Again, to save degrees of freedom as the number of regressors is already quite large, the exclusion of the dependency ratio was not considered to imply too large risks with respect to the reliability of the results.

The sources and exact definitions of all variables, including the socio-economic, macroeconomic and fiscal controls, are listed in an Appendix to this chapter. Descriptive statistics are also reported in the Appendix.

Regression in Time and Space

The data used in most estimations is in so-called time-series cross-sectional (TSCS) format. That is, a fairly limited number of units, *N*, is observed repeatedly over a relatively long period of time, *T*. TSCS data is therefore a form of panel data. However, as panel data usually refers to data characterised by a large *N* and small *T*, e.g. large-scale surveys that are sent to the same respondents a few times, the term TSCS is useful to highlight the difference. Moreover, the units of TSCS data are usually fixed, not sampled, which is the case in archetypal panel data. In the present context, the units are the 28 countries that at the time of writing are members of the European Union.

As the dataset covers countries with very different histories, it is hardly surprising that the dataset is unbalanced, i.e. the length of unit-specific time-series varies. The cross-sectional character of the dataset becomes more prevalent over time as data on an increasing number of countries becomes available.

TSCS Analysis: Some Basic Issues

Differences between TSCS data and 'ordinary' panel data are reflected in the methods often used in the analyses of such datasets. For methods used for TSCS analysis, asymptotics are in *T* rather than *N*, whereas the reverse is true for panel data proper. There is no clear-cut minimum for the number of observations per unit for TSCS methods to be applicable, but it has to be large enough for averaging over time to make sense. Beck (2001) mentions $T \geq 10$ as a rule of thumb for the minimum number of observations per unit, which is a criterion satisfied by the country-specific time-series in the present work.

With respect to TSCS and panel data alike, the prototypical equation is of type

$$y_{i,t} = \beta \mathbf{x}_{i,t} + \epsilon_{i,t}$$

where y is the dependent variable, $\mathbf{x}$ is a vector of independent variables, ϵ is the error term and subscripts i and t denote unit and time, respectively. Typical complications of TSCS data are panel heteroscedasticity and the contemporaneous and serial correlation of errors (Kittel 1999). Panel heteroscedasticity means that the distribution of errors differs across units, whereas contemporaneous correlation implies that errors correlate across units within time periods. When errors are serially correlated, they correlate with the errors in the preceding and subsequent periods. Together these issues imply that ordinary least squares (OLS) estimates coupled with OLS standard errors may not be suitable for analysing TSCS data.

OLS estimates of the regression coefficients remain unbiased even in the face of contemporaneous correlation and panel heteroscedasticity (Beck and Katz 1995; 1996). However, OLS standard errors that assume that error terms are independent of each other increase the likelihood of a Type I error, i.e. erroneously identifying an effect where no effect in reality exists. Panel corrected standard errors introduced by Beck and Katz in their influential 1995 article address panel heteroscedasticity and contemporaneous correlation and hence decrease the risk of Type I error. Accordingly, Beck and Katz recommend using OLS to estimate the regression coefficients combined with panel corrected standard errors. Serial correlation, however, needs to be addressed separately, such as by including the lagged dependent variable in the regression model.

Most of the regression models estimated in the following chapters contain the lagged dependent variable as an explanatory variable, although in models with spending or revenue the lagged variable is in the level form while the dependent variable is a first difference. The lagged dependent variable serves two purposes, one of them pertaining to the substance of the political process being modelled, the other primarily to properties of the statistical model. First, the value of the dependent variable at $t - 1$ plausibly affects political choices at t for reasons explicated earlier in this chapter. Second, the lagged dependent variable serves as a correction to serial correlation. Preliminary Breusch-Godfrey/Wooldrgidge tests for serial correlation in panel models[11] suggested that serial correlation indeed cannot be ruled out in models without the lagged dependent variable, whereas serial correlation could be safely rejected when that variable was included. This pertained also to models where the dependent variable appears in the first difference form and the lagged variable in the level form.

In addition to serial correlation, the temporal dimension of TSCS data is associated with non-stationarity. In other words, the properties of time-series may change over time, which in turn creates a risk of spurious correlation if both dependent variable and at least one independent variable are non-stationary. Spurious correlation implies that variables are strongly related although there is no causal relationship between them,

[11] The tests were conducted using function *pbgtest* in package 'plm' in R, with lag order of one period. Wooldridge's tests for serial correlation in fixed effects panels produced substantively similar results. These tests were conducted with function *pwartest* in package 'plm' in R.

which may cause serious errors in the interpretation of empirical results. Non-stationarity, however, does not appear to be a problem in the present data. Cross-sectionally augmented Im-Pesaran-Shin tests for unit roots[12] suggest that spending, revenue and debt show non-stationarity when considered as level variables; in practical terms, they all tend to increase over time (see also Figures 1.1 and 1.2 in Chapter 1). However, when it comes to first differences, the assumption of non-stationarity can be rejected.

Most of the models also contain fixed effects as so-called within-unit transformation is used. In other words, variable values enter the analysis as differences from their unit mean in order to account for unobserved, unit-specific effects. This implies that estimations only draw on variation within units, not between them. The elimination of between-unit information increases the risk of a Type II error, or failing to identify an effect where one exists. In this sense, the within-unit transformation also contributes to more conservative testing as effects do not become as easily visible. Including the lagged dependent variable in models containing fixed unit effects (or some other constant term) is sometimes considered problematic because of so-called Hurwicz bias which means that the estimates of an autoregressive term are biased downward. However, as Hurwicz bias is of order $1/T$, it becomes smaller as time series become longer and therefore is not a serious problem in typical TSCS analysis (Beck 2001). Some models in Chapter 7 use so-called between-unit estimators instead of the within-unit transformation. That is, when the relationship between the quality of government and fiscal rules is analysed, regressions use within-country means of those variables.

Achen (2001) argues that the inclusion of a lagged dependent variable (e.g. $y_{i,t-1}$) in an equation with fixed unit effects can introduce another kind of bias. In particular, the lagged dependent variable can suppress the coefficient on the other independent variables and thus downplay the estimated effects relative to true effects. However, Keele and Kelly (2006) show, based on a series of Monte Carlo experiments, that OLS with a lagged dependent variable performs well relative to a number of alternative estimators (and OLS without a lagged dependent variable) as long as the dependent variable is stationary and the model residuals are not highly auto-correlated. This is so as long as the process being analysed is dynamic in the sense that prior variable values affect later values. In particular, according to Keele and Kelly's results, the biasedness of OLS estimates is relatively modest across a wide range of conditions that correspond to those often encountered in actual analysis of time-series data, when it comes to sample sizes and the degree of serial correlation in the residuals. Moreover, in the Monte Carlo simulations, the null hypothesis is erroneously rejected in a very small minority of cases. In contrast, Keele and Kelly do not recommend dropping the lagged dependent variable or using GLS estimators if the process is dynamic, as the biases in the results thus obtained were larger than in those obtained by OLS with lagged de-

[12] The tests were conducted using function *cipstest* in package 'plm' in R, with lag order of one period and type 'trend'.

pendent variable (see also Beck and Katz 2011). Even if the suppression of coefficients is an issue, as Achen (2001) argues, this creates a bias against the theoretical claims put forward in this work. Insofar as bias exists, the evidence of effects that regression results provide is in this sense strengthened.

Another strategy of accounting for serial correlation would be to use some feasible generalised least squares (FGLS) based method, such as the popular Prais-Winsten transformation. Beck (2001), however, does not recommend such methods since they treat serial dynamics as a nuisance that needs to be eliminated instead of treating it as a feature of the process that deserves to be modelled. For this reason, OLS based methods are preferred in this work.

Modelling Dynamics

The inclusion of lagged variables makes it possible to study dynamics whereby variable values at some point in time affect their values later on. Consider an archetypal dynamic panel model, the lagged dependent variable (LDV) model

$$y_{i,t} = \alpha_i + \gamma y_{i,t-1} + \sum_{j=1}^{k} \beta_j x_{j,i,t} + \epsilon_{i,t}$$

where $y_{i,t}$ is the value of the dependent variable in unit i at time t, α_i is the unit-specific intercept of unit i, γ is the autoregressive term or the coefficient on the lagged dependent variable, x_j is one of k independent variables and β_j its regression coefficient, and $\epsilon_{i,t}$ is the error term. In this kind of model, the past values of the independent variables affect the dependent variable throughout the process, their effect being transmitted through the lagged dependent variable and the autoregressive term. This can be seen by noting that at time $t + 1$,

$$y_{i,t+1} = \alpha + \gamma y_{i,t} + \sum_{j=1}^{k} \beta_j x_{j,i,t+1} + \epsilon_{i,t+1} \Leftrightarrow$$
$$y_{i,t+1} = \alpha + \gamma \left(\alpha + \gamma y_{i,t} + \sum_{j=1}^{k} \beta_j x_{j,i,t} + \epsilon_{i,t} \right) + \sum_{j=1}^{k} \beta_j x_{j,i,t+1} + \epsilon_{i,t+1}$$

and in the subsequent phases of the process

$$y_{i,t+2} = \alpha + \gamma y_{i,t+1} + \sum_{j=1}^{k} \beta_j x_{j,i,t+2} + \epsilon_{i,t+2} \Leftrightarrow$$
$$y_{i,t+2} = \alpha + \gamma \left(\alpha + \gamma y_{i,t} + \sum_{j=1}^{k} \beta_j x_{j,i,t+1} + \epsilon_{i,t+1} \right) + \sum_{j=1}^{k} \beta_j x_{j,i,t+2} + \epsilon_{i,t+2} \Leftrightarrow$$

$$y_{i,t+2} = \alpha + \gamma\left(\alpha + \gamma\left(\alpha + \gamma y_{i,t-1} + \sum_{j=1}^{k}\beta_j x_{j,i,t} + \epsilon_{i,t}\right) + \sum_{j=1}^{k}\beta_j x_{j,i,t+1} + \epsilon_{i,t+1}\right) + \sum_{j=1}^{k}\beta_j x_{j,i,t+2} + \epsilon_{i,t+2}$$

and so on for $t + 3$, $t + 4$ etc. In a three-period case, rearranging yields

$$y_{i,t+2} = \alpha + \gamma\alpha + \gamma^2\alpha + \sum_{j=1}^{k}\beta_j x_{j,i,t+2} + \gamma\sum_{j=1}^{k}\beta_j x_{j,i,t+1} + \gamma^2\sum_{j=1}^{k}\beta_j x_{j,i,t} + \gamma^3 y_{i,t-1} + \epsilon_{i,t+2} + \gamma\epsilon_{i,t+1} + \gamma\epsilon_{i,t}$$

or equivalently

$$y_{i,t} = a_i^* + \sum_{j=i}^{k}\beta_j x_{j,i,t} + \gamma\sum_{j=1}^{k}\beta_j x_{j,i,t-1} + \gamma^2\sum_{j=1}^{k}\beta_j x_{j,i,t-2} + \gamma^3 y_{i,t-2} + \epsilon_i^*$$

where a_i^* is the combined (unit specific) intercept and ϵ_i^* is the combined error term. Insofar as $\gamma \in (0, 1)$, the coefficients on the right-hand side decline as the number of lags increases. Thus, the lagged dependent variable model is a distributed lag model, where the current value of the dependent variable is a function of current and past values of the independent variables whose effect on the dependent variable is distributed over several periods, alongside the effect of the value of the dependent variable at the beginning of the process. Given that old decisions often impact today's budgets, although their legacy presumably becomes less noticeable as time passes, it seems important to have empirical models that account for them.

As pointed out above, the dependent variable in a number of models measures *changes in policy levels* or the difference between the policy level at *t* and *t* – 1. Nevertheless, the policy level at *t* – 1 is included as a control variable. For example, the existing level of spending is likely to affect new spending increases as a high level of spending means that many projects are already financed, on the one hand, and that the marginal cost of new projects is probably higher, on the other. If these assumptions are correct, a high existing level of spending should suppress spending increases or encourage budget cuts, in which case the expected sign of the lagged spending level is negative.

In a model of this type, the dependent variable $\Delta y_{i,t}$ which can also be written as $y_{i,t} - y_{i,t-1}$, is obtained from

$$\Delta y_{i,t} = \alpha_i + \lambda y_{i,t-1} + \sum_{j=1}^{k}\beta_j x_{i,j,t} + \epsilon_t$$

As in the previous case, the effect of the level variable on the dependent variable is distributed over time. In the case of three periods, the regression equation can be re-written as

$$\Delta y_{i,t} = (1 + 2\gamma + \gamma^2)\alpha + (\gamma + 2\gamma^2 + \gamma^3)y_{t-3} + \sum_{j=1}^{k} \beta_j x_{i,j,t} + \gamma \sum_{j=1}^{k} \beta_j x_{i,j,t-1} + (\gamma + \gamma^2) \sum_{j=1}^{k} \beta_j x_{i,j,t-2} + \epsilon_t + \gamma\epsilon_{t-1} + (\gamma + \gamma^2)\epsilon_{t-2}$$

This is messier than the corresponding elaboration of the equation where the dependent variable appeared in the level form. It can be seen, however, how the level variable influences the outcome variable over the entire dynamic process. As long as $2\gamma > \gamma^2$, the effects of the independent variables (x_j) dampen over time just as in the case of the common LDV model. The model also allows the policy level at the beginning of the process (in this example at $t - 3$) to affect the policy change at the end of the process (i.e. $\Delta y_{i,t}$). How much of this 'legacy' is transferred to the current period, of course, depends on the magnitude of γ. The model therefore captures a dynamic process, although γ now enters the regression equation in a more complicated fashion than in the case of the common LDV model.

Big Ifs: Analysing Conditional Effects

The preceding chapters repeatedly pointed to the importance of analysing the management of the budgetary commons in its context. In more practical terms, this means that a series of conditional hypotheses are tested. This is done by estimating multiplicative interaction models. Such models have become common especially in comparative politics, where hypotheses often take a conditional or context-bound form, and here it is in order to briefly review the estimation and interpretation of these kinds of models. The following discussion is, for the most part, based on Aiken and West (1991), Brambor *et al*. (2006), Braumoeller (2004) and Kam and Franzese (2007).

The interpretation of models containing interaction terms is not as straightforward as that of additive models. The coefficients of the constituent terms of interaction terms cannot be interpreted as 'main' effects as they tell the effect of that variable when the value of the other constituent term is zero. Assume that the model to be estimated is

$$y = \beta_0 + \beta_1 x + \beta_2 z + \beta_3 xz + \epsilon$$

where y is the outcome variable, β_0 is a constant term, x and z are independent or explanatory variables, the betas are regression coefficients and ϵ is the error term – for the ease of exposition, time and unit subscripts are omitted in this section. Now β_1 is the effect of a one-unit change in x on y when z equals zero. This effect may or may

not be relevant. For instance, z may be a dichotomous (dummy) variable that indicates the presence or absence of a condition. Then it may well be relevant to know the effect when the condition is absent. However, z may also be a continuous variable whose zero value does not occur in the data or is assigned only to a handful of cases. To anticipate the following chapter, assume that x denotes the number of cabinet parties and z is the quality of government. In that case, β_1 is as such relatively uninformative as the value of the quality of government score is strictly higher than zero in all cases in the dataset. To see how the effect of x behaves on empirically relevant levels of z, further analysis is required.

Assume that the main interest is on the effect of x that is hypothesised to vary at different levels of z, which for the present purposes can be interpreted as a conditioning variable. This distinction exists on the level of interpretation but lacks basis in the mathematics of estimation (Berry *et al.* 2012), which will be illustrated shortly. One is often concerned not only whether the magnitude and statistical significance of the effect of x when $z = 0$ but also with the effect on different levels of z, in other words with the marginal effect of x conditional on z. The marginal effect is obtained by differentiating the regression equation with respect to x, which yields

$$\frac{\partial y}{\partial x} = \beta_1 + \beta_3 z$$

In practice, in the case of a continuous conditioning variable, the marginal effect is calculated several times (e.g. 1,000 times) fixing z at different levels ranging from the lowest empirically relevant value to the highest; in the case of a dichotomous conditioning variable, it naturally suffices to calculate the marginal effect conditional on the two values that z can obtain. The most convenient way of reporting the results of this analysis is to construct a marginal effect plot, where the effect of x on y is plotted against z.[13]

When estimating the marginal effect, interest is not usually restricted to its magnitude but lies in its statistical significance as well, particularly on the values of the conditioning variable on which the marginal effect is statistically significant. The issue can be easily addressed by including the boundaries of the confidence interval in the marginal effect plot. The statistical significance of the effect then requires that both the lower and the upper boundaries of the confidence interval are located either above or below zero on the y-axis, the former case corresponding to a plus-signed effect and the latter to a minus-signed effect.

The choice of the confidence interval depends on the chosen level of statistical significance. In the following chapters, p values smaller than 0.05 are considered statistically significant. In published works on fragmented fiscal policymaking, it has been common to use the looser $p < 0.10$ criterion (e.g. Bäck *et al.* 2017; Bawn and Rosen-

[13] The marginal effect plots in this work were drawn with R using package 'compactr' and code modified from Rainey (2013).

bluth 2006; de Haan *et al.* 2013; Martin and Vanberg 2013; Persson *et al.* 2007). However, the more stringent criterion is applied here to keep statistical testing more conservative, that is, to decrease the likelihood of Type I errors whereby the null hypothesis is erroneously rejected.

Accordingly, the boundaries of the 95% confidence interval are included in the marginal effect plots. The boundaries of the confidence intervals are obtained from

$$\frac{\partial y}{\partial x} \pm 1.96 \cdot \sigma_{\frac{\partial y}{\partial x}}$$

where 1.96 approximates the critical value of the t distribution when the level of significance is 0.05 and the degrees of freedom approach infinity, and $\sigma_{\frac{\partial y}{\partial x}}$ is the standard error of the marginal effect. The standard error, in turn, is

$$\sigma_{\frac{\partial y}{\partial x}} = \sqrt{\mathrm{var}(\beta_1) + z^2\mathrm{var}(\beta_3) + 2z\mathrm{cov}(\beta_1\beta_3)}$$

where the variances and covariances are obtained from the Beck-Katz (1995) variance-covariance matrix because panel corrected standard errors are used.

What was said above about interactions and marginal effects was based on two-way interactions where only one variable interacts with another variable. In the subsequent chapters, more complex interactions are also analysed. In Chapter 5, interaction models of type

$$y = \beta_0 + \beta_1 x + \beta_2 z + \beta_3 w + \beta_4 xw + \beta_5 zw + \epsilon$$

are estimated. The substantive idea behind this kind of a model is such that the effects of both x and z depend on the value of w. Conversely, the effect of w depends on the values of both x and z. No additional complications arise as far as the marginal effects of x and z are concerned; differentiating the expression above with respect to x or z shows that their marginal effects are $\frac{\partial y}{\partial x} = \beta_1 + \beta_4 w$ and $\frac{\partial y}{\partial z} = \beta_2 + \beta_5 w$ respectively, just like in the case of one two-way interaction. One may also be interested in the marginal effect of w, whose estimation is however somewhat more complicated as it depends on both x and z. Differentiating the expression above with respect to w yields

$$\frac{\partial y}{\partial w} = \beta_1 + \beta_4 x + \beta_5 z$$

and the standard error is

$$\sigma_{\frac{\partial y}{\partial w}} = \sqrt{\text{var}(\beta_1) + x^2\text{var}(\beta_4) + z^2\text{var}(\beta_5) + 2x\text{cov}(\beta_1\beta_4) + 2z\text{cov}(\beta_1\beta_5) + xz\text{cov}(\beta_4\beta_5)}$$

Again, visualisation greatly improves the information value of the results. Kam and Franzese's (2007) advice is followed by plotting the marginal effect of w as a function of x (or z) on different levels of z (or x). In practice, this means drawing two or more marginal effect plots that are obtained by fixing the second conditioning variable at different pre-determined levels.

In Chapter 6, models containing three-way interactions are also estimated. That is, x, z and w all interact with each other:

$$y = \beta_0 + \beta_1 x + \beta_2 z + \beta_3 w + \beta_4 xz + \beta_5 xw + \beta_6 zw + \beta_7 xzw + \epsilon$$

The intuition is such that the effect of x is conditional on z but the interaction between the two also depends on the value of w. For example, the coefficient of the two-way interaction term may be expected to become smaller as the value of w increases. Now the marginal effect of any variable is conditional on the values of two other variables:

$$\frac{\partial y}{\partial x} = \beta_1 + \beta_4 z + \beta_5 w + \beta_7 zw$$

The standard error is obtained from

$$\sigma_{\frac{\partial y}{\partial x}} = \sqrt{\begin{array}{c}\text{var}(\beta_1) + z^2\text{var}(\beta_4) + w^2\text{var}(\beta_5) + z^2w^2\text{var}(\beta_7) + 2z\text{cov}(\beta_1\beta_4) + 2w\text{cov}(\beta_1\beta_5) \\ +2zw\text{cov}(\beta_1\beta_7) + 2zw\text{cov}(\beta_4\beta_5) + 2wz^2\text{cov}(\beta_4\beta_7) + 2w^2z\text{cov}(\beta_5\beta_7)\end{array}}$$

The effect of y on x conditional on z or w, as well as the corresponding standard error, is calculated analogously. The visualisation of marginal effects proceeds as in the case of one variable entering two two-way interactions: the marginal effect of x, for instance, is plotted as a function of z on different levels of w, which yields two or more marginal effect plots with their respective confidence intervals.

Conclusion

This chapter has presented the data and methods used in this work. How the theoretical concepts relevant to this work should be operationalised is often not straightforward; for example, the number of parties can be measured in several ways and political actors can be assigned scores representing their programmatic stances using a number of

methods. Therefore, the alternatives were discussed and the choices made were deliberated at quite considerable length.

A look on the patterns in the values of key variables was also taken. The number of government parties varies considerably across countries but also within countries, albeit in a few countries that number has remained stable. The programmatic 'centre of masses' of the cabinet moves has moved from left to right in each country, but it deserves to be noted that within-country variation in the old member states has tended to be larger. Finally, an examination of quality of government scores largely confirmed prevailing impressions of country differences: countries of North-Western Europe generally have higher scores, while the quality of government tends to be considerably lower in Mediterranean countries and in the post-communist area. Some countries also exhibit considerable over-time variation. Particularly in the post-communist area, there seems to be no general movement towards impartial state institutions, as some countries have experienced quite notable decreases in the quality of government.

The structure of the data, which can be described as time-series cross-sectional, poses challenges as well, since a host of complications that ultimately boil down to the violations of the classical assumptions of regression analysis – especially the assumption of independent error terms – need to be addressed. However, such data makes it possible to model dynamics in a way that cross-sectional data would not allow.

In the subsequent chapters, extensive attention is given to conditional effects, whose testing requires the estimation of interaction models. In particular, such models make it possible to assess in what kinds of political systems different variables, such as those related to the number of parties or programmatic orientations, affect fiscal outcomes.

Appendix

Table A4.1. Variable definitions and data sources.

	Definition and notes	Source
Political variables		
Number of government parties	The number of parties Döring and Manow (2015) identify as cabinet parties; weighted by the fraction of the year the government was in office	Own calculations based on Döring and Manow (2016)
Right-left	The weighted mean of government parties' right-left scores; weighted by the fraction of the year the government was in office	Own calculations based on Döring and Manow (2016) and the Comparative Manifesto Project dataset
Quality of government	A composite index of i) corruption, ii) law and order and iii) bureaucracy quality	International Country Risk Guide via Teorell *et al.* (2015)
Caretaker time	The fraction of a year a caretaker cabinet was in office	Own calculations based on Döring and Manow (2016)
Effective number of parliamentary parties	The Laakso-Taagepera index of party system fractionalisation in the parliament; weighted by the fraction of the year the parliament was in office	Own calculations based on Döring and Manow (2016)
Effective number of government parties	The Laakso-Taagepera index of party system fractionalisation within the government coalition; weighted by the fraction of the year the cabinet was in office	Own calculations based on Döring and Manow (2016)
Dispersion of power	The standard deviation of cabinet parties' Shapley-Shubik indices of voting power; weighted by the fraction of the year the cabinet was in office	Own calculations based on Döring and Manow (2016)
Fiscal governance		
Fiscal rule index (IMF)	Index of the strength of fiscal rules based on IMF data	Own calculations based on IMF (2016)
National fiscal rule index	Index of the strength of national fiscal rules based on IMF data	Own calculations based on IMF (2016)
Fiscal rule index (EC)	Index of the strength of numerical fiscal rules	European Commission (2016)
Maastricht	Dummy variable indicating that the Maastricht Treaty is in force (for the EU12) or that the country is an EU member (for the rest of the countries)	
Fiscal policy variables		
Spending	Total general government outlays, % of GDP	OECD and AMECO databases via Armingeon et al. (2015)
Revenue	Total general government receipts, % of GDP	OECD and AMECO databases via Armingeon et al. (2015)

Debt	Gross general government debt (financial liabilities), % of GDP	OECD Economic Outlook, IMF and Eurostat via Armingeon et al. (2015; variable *debt_hist*)
Net lending or borrowing	Government net lending (+) or borrowing (–), % of GDP	OECD Economic Outlook dataset and Eurostat via Armingeon et al. (2015)
Primary balance	Government net borrowing or net lending excluding interest payments on consolidated government liabilities, % of GDP.	OECD Economic Outlook database; AMECO
Cyclically adjusted balance	Cyclically adjusted government net lending (+) or borrowing (–), % of potential GDP	OECD Economic Outlook database, AMECO
Government consumption expenditure	Government consumption, % of GDP	Penn World Tables (Feenstra *et al.* 2015)
Compensation of employees	Compensation of employees, % of GDP	IMF Government Finance Database
Transfers and subsidies	Subsidies and other transfers in current local currency units divided by GDP in current local currency units, expressed as % of GDP.	Own calculations based on World Bank's World Development Indicators
Gross capital formation	Gross capital formation, % of GDP	Eurostat
Macroeconomic and socio-economic variables		
Real GDP change	Growth of real GDP, % change from previous year	OECD Economic Outlook database and AMECO via Armingeon et al. (2015)
Unemployment	Unemployment rate, % of civilian labour force	AMECO via Armingeon et al. (2015)
Inflation	Growth of harmonised consumer price index (CPI), all items, % change from previous year	OECD and AMECO via Armingeon et al. (2015)

Table A4.2. Descriptive statistics: All 28 countries

Variable	Mean	Std. dev.	Min.	Max.
Political variables				
Number of government parties	2.335	1.287	0.000	8.353
Right-left	-1.773	15.146	-47.958	38.574
Quality of government	7.987	1.574	4.120	10.000
Caretaker time	0.020	0.102	0.000	1.000
Effective number of parliamentary parties	3.838	1.445	1.724	9.051
Effective number of government parties	1.786	0.863	0.000	5.481
Dispersion of power	0.088	0.110	0.000	0.500
Median voter position	-3.712	10.675	-38.187	34.580
Fiscal governance				
Fiscal rule index (IMF)	0.562	0.719	0.000	3.845
National fiscal rule index	0.378	0.659	0.000	3.739
Fiscal rule index (EC)	0.046	0.958	-1.015	3.046
Fiscal policy variables				
Spending	45.506	7.168	27.534	70.207
Δ Spending	0.211	2.457	-19.927	18.474
Revenue	42.472	6.982	28.441	61.500
Δ Revenue	0.046	1.255	-4.272	6.384
Debt	55.590	31.829	4.300	166.007
Δ Debt	1.452	6.106	-45.319	54.903
Deficit	-3.238	3.967	-32.554	7.125
Primary balance	-0.570	3.480	-29.960	7.825
Cyclically adjusted balance	-3.180	3.486	-27.482	7.289
Government consumption expenditure	19.492	5.232	9.946	41.933
Δ Government consumption expenditure	0.060	1.088	-5.213	5.103
Compensation of employees	11.147	2.622	3.360	18.113
Δ Compensation of employees	0.008	0.763	-7.808	4.100
Transfers and subsidies	22.296	8.710	5.181	86.011
Δ Transfers and subsidies	0.005	2.663	-21.667	20.313
Gross capital formation	3.770	1.093	0.500	7.300
Δ Gross capital formation	0.003	0.582	-2.600	3.400
Macroeconomic and socio-economic variables				
Real GDP change	2.731	3.134	-14.814	11.736
Unemployment	7.680	4.287	0.000	11.736
Inflation	7.465	37.190	-4.482	1058.374

Table A4.3. Descriptive statistics: Old member states, Cyprus and Malta

Variable	Mean	Std. dev.	Min.	Max.
Political variables				
Number of government parties	2.212	1.307	0.000	8.353
Right-left	-3.322	16.159	-47.958	38.574
Quality of government	8.632	1.199	5.000	10.000
Caretaker time	0.023	0.108	0.000	1.000
Effective number of parliamentary parties	3.704	1.487	1.724	9.051
Effective number of government parties	1.729	0.868	0.000	5.481
Dispersion of power	0.073	0.100	0.000	0.500
Median voter position	-5.181	10.972	-38.187	34.580
Fiscal governance				
Fiscal rule index (IMF)	0.580	0.747	0.000	3.845
National fiscal rule index	0.381	0.676	0.000	3.739
Fiscal rule index (EC)	0.039	1.016	-1.015	3.046
Fiscal policy variables				
Spending	46.606	7.258	27.534	70.207
Δ Spending	0.334	2.244	-19.927	18.474
Revenue	44.204	7.209	28.441	61.500
Δ Revenue	0.103	1.112	-4.200	3.816
Debt	61.860	31.261	4.638	166.007
Δ Debt	1.691	5.956	-17.474	54.903
Deficit	-3.203	4.223	-32.554	7.125
Primary balance	0.081	3.689	-29.960	7.825
Cyclically adjusted balance	-3.112	3.668	-27.482	7.289
Government consumption expenditure	17.397	3.268	-9.946	27.074
Δ Government consumption expenditure	0.147	0.871	-2.742	4.285
Compensation of employees	11.642	2.425	7.076	18.113
Δ Compensation of employees	0.023	0.624	-3.329	3.034
Transfers and subsidies	22.423	6.116	5.181	38.247
Δ Transfers and subsidies	-0.124	2.710	-21.667	15.635
Gross capital formation	3.591	0.951	1.600	6.500
Δ Gross capital formation	-0.025	0.435	-2.200	1.200
Macroeconomic and socio-economic variables				
Real GDP change	2.515	2.629	-8.867	11.272
Unemployment	6.862	3.965	0.000	24.800
Inflation	5.352	5.081	-4.482	31.017

Table A4.4. Descriptive statistics: Post-communist member states

Variable	Mean	Std. dev.	Min.	Max.
Political variables				
Number of government parties	2.762	1.120	0.467	8.000
Right-left	3.610	9.074	-14.728	37.663
Quality of government	6.274	1.092	4.120	9.444
Caretaker time	0.012	0.078	0.000	0.731
Effective number of parliamentary parties	4.301	1.181	2.066	7.600
Effective number of government parties	1.983	0.819	0.398	4.509
Dispersion of power	0.144	0.124	0.000	0.500
Median voter position	1.270	7.772	-12.546	29.373
Fiscal governance				
Fiscal rule index (IMF)	0.499	0.612	0.000	3.040
National fiscal rule index	0.366	0.600	0.000	2.702
Fiscal rule index (EC)	0.058	0.832	-1.015	2.472
Fiscal policy variables				
Spending	41.723	5.347	30.500	55.416
Δ Spending	-0.222	3.061	-12.600	13.800
Revenue	38.256	3.993	29.400	46.764
Δ Revenue	-0.100	1.555	-4.272	6.384
Debt	34.547	23.691	4.300	142.619
Δ Debt	0.630	6.545	-45.319	37.345
Deficit	-3.353	2.948	-12.435	2.934
Primary balance	-1.705	2.744	-12.143	7.300
Cyclically adjusted balance	-3.396	2.835	-13.148	5.370
Government consumption expenditure	26.606	4.400	16.618	41.933
Δ Government consumption expenditure	-0.242	1.598	-5.213	5.103
Compensation of employees	9.961	2.701	3.360	4.100
Δ Compensation of employees	-0.028	1.028	-7.808	4.100
Transfers and subsidies	22.060	12.168	7.453	86.011
Δ Transfers and subsidies	0.244	2.568	-8.909	20.313
Gross capital formation	4.092	1.249	0.500	7.300
Δ Gross capital formation	0.053	0.781	-2.600	3.400
Macroeconomic and socio-economic variables				
Real GDP change	3.476	4.389	-14.814	11.736
Unemployment	10.510	4.163	4.100	20.600
Inflation	14.774	77.691	-1.100	1058.374

Chapter 5
Why (and How) the Quality of Government Matters in the Budgetary Commons

In the previous chapters, the role of state institutions and how they affect people's expectations, trust and incentives have repeatedly been alluded to. In Chapter 2, it was pointed out that the literature on fragmented fiscal policymaking has focussed on quantifiable features of party systems, on the one hand, and on formal rules and procedural norms, on the other. Although the emphasis in that literature is for the most part on policymaking in national states, the notion of the state has seldom been evoked. This is so despite the growing academic and practical interest in 'governance', rule of law, corruption and state capacity and their effects on development, well-being and the use of public resources. Throughout this work, the claim that a high quality of government – implying low levels of corruption and other forms of favouritism – plausibly affects the way in which political variables affect policy outcomes has been repeatedly raised. This chapter offers a more thorough discussion on this claim, including the identification of potential mechanisms that bring such conditional effects about. The credibility of the claim is also examined in the light of European data.

More specifically, the quality of government is expected to condition the effects that the number of parties in government, on the one hand, and the programmatic orientation of the cabinet, on the other, have on fiscal policy outcomes. While the effect of the former should weaken as the quality of government improves, the effect of the latter should become stronger. In different cases, this may be due to different mechanisms or different mixtures of mechanisms that range from the ability of political actors to commit to programmatic goals to the denseness of clientelist networks and the prevalence of vote buying. The argument about conditional effects does not, however, depend on any specific mechanism and the main empirical tests therefore use data on fiscal policy aggregates such as total spending and the budget deficit of the general government sector. Indeed, as will be shown, tests that more directly address specific mechanisms produce largely insignificant results, which is in line with the claim that the relevance of specific mechanisms varies across cases and therefore does not show up in cross-national analysis.

This chapter builds on Bawn and Rosenbluth's (2006) argument, according to which the bargains that parties make become more inefficient as the number of parties taking part in the bargain increases. An important qualification is made to the argument, however, as it is more likely to work in some settings than it is in others. This also calls into question the role of electoral accountability that Bawn and Rosenbluth emphasise: it is not accountability as such that drives the effect but rather specific kinds of accountability. Those accountability structures are, in empirical terms, most

likely to exist in countries where particularism in the use of government authority is widespread and where historical experiences favour distrust of the actors of the public sphere.

As was pointed out in the introductory chapter, one of the dividing lines among the European Union member states is the history of market economy. While the Union was until the early 2000s exclusively composed of traditionally capitalist countries, most of which also have long traditions of liberal democracy, from 2004 onward they have been joined by a number of countries that used to be under communist rule until the late 1980s or early 1990s. As the communist system and the privatisation of state property that followed the regime change arguably heavily affected civil societies and the operating principles of political-economic systems, the implications of the post-communist vs. non-post-communist divide are also discussed and tested in this chapter. Generally speaking, it is expected that common-pool-problem-like tendencies are at their strongest in those post-communist countries where the quality of government is especially low.

Post-Communist Countries vs. Others

The composition of today's European Union reflects the varying historical experiences of the continent, as almost half of its members were under communist rule until the turn of the 1990s. The post-communist countries that have become members of the EU differ from most other post-communist countries, especially those that after the breakdown of the Soviet Union formed the Commonwealth of Independent Nations, when it comes to basic constitutional structures. Whereas the latter group of countries has tended to opt for presidential systems of government, the post-communist EU members apply parliamentarianism whereby the cabinet, usually a coalition of multiple parties, must enjoy the confidence of the parliamentary majority to survive (Blondel *et al.* 2007). Importantly, democratic institutions have been on considerably firmer footing in Eastern Central Europe, the Baltic countries and, since the wars of the 1990s, in the Balkans than they have in the rest of the post-communist area. However, there are reasons to suspect that as parties are 'floating above the society'[14] more pronouncedly than they are in the established capitalist democracies of Western Europe, they are more prone to the kind of joint decision making that accounts of fragmented fiscal policy presuppose. Hence, the argument put forward here is at least partially at odds with Elgie and McMenamin's (2008) claim that party system fragmentation affects deficits in institutionalised democracies but not in less institutionalised ones. The next section will explicate in greater detail why.

When the European communist regimes crumbled, great expectations were put on the new institutions of liberal democracy and market economy. It was hoped that the

[14] I credit Rauli Mickelsson for this expression.

countries of Eastern Central Europe and the Balkans would soon transform into wealthy, stable democracies akin to their Western European counterparts, after whose models their new political and economic institutions were largely designed. However, almost all countries in the area faced severe economic problems with GDP falling and unemployment rates rising.

Mancur Olson (1993, 1995, 2000) points out how the experiences of the post-communist countries after democratisation differed from those of the formerly fascist regimes that were defeated in the Second World War. Whereas Italy and especially West Germany enjoyed strong economic growth and increases in living standards after the (re-)installation of liberal democracy, the transition economies of the former communist blocs stagnated and even regressed on some measures. Olson argues that this was due to the relatively peaceful transition, which is to be contrasted with the destruction faced by fascist regimes. Communist economies based on central planning and bureaucratic direction created ample possibilities for what Olson calls distributive coalitions to organise. In Olson's terminology, distributive coalitions are groups or networks that over time emerge in stable societies and seek to distribute resources to themselves instead of engaging in productive activity (Olson 1982). Over time, the increasing number of such coalitions leads to stagnation. As long as communist regimes were in power, distributive coalitions had to act covertly as open political activity was heavily discouraged. However, with the relatively peaceful transition to liberal democracy, coalitions not only survived but were able to start acting in public, seeking to extract rents instead of contributing to production. In Olson's view, much of the economic problems faced by transition societies were manifestations of the influence of special interest groups that were inherited from the communist era.

Olson paints a picture of communist and post-communist societies with a wide brush as he emphasises the role of special interests and their efforts to extract benefits at the cost of the rest of the society. Olson's view is, however, largely in line with other accounts on how communist societies worked. 'Corruption was endemic in communist countries, for the minority in the party's *nomenklatura* enjoyed great privileges,' writes Richard Rose (2001, 101, original emphasis) and goes on to argue that '[t]he peculiarities of a Marxist political economy made power, not money, the currency with which privileges were obtained.' According to Rose, the privatisation of state assets during the transition to market economy opened possibilities for insiders to obtain as their private property assets they formerly only exploited and to use their insider status to extract further benefits from the state. Wayne Sandholtz and Rein Taagepera (2005) in a similar vein argue that communism created a 'culture of corruption' as command economies effectively incentivised people to both demand and offer illicit private payments. As this enduring structure of incentives pervaded the society, it also affected people's values so that survival concerns were strengthened at the cost of values related to self-expression, which were stronger outside the post-communist area.

When it comes to formal political institutions, the post-communist EU countries appear to differ little from the traditionally capitalist Western Europe. However, the

relationships between political parties and the rest of the society differ between the post-communist area and the rest of the EU, a point which in Chapter 3 was argued to be relevant for the likelihood of common-pool problems. The differences are connected to the weakness of the civil society in post-communist countries and the speed with which institutions of competitive democracy were installed. Communist regimes were not conducive of citizen activity, and much of the civil society organisations that existed before the communist takeover were destroyed during the totalitarian Stalinist era. Rose and Munro (2003) call post-communist parties 'parties without civil society' to highlight the fact that they generally lacked basis in the civil society (see also Berglund *et al.* 2001, especially Ch. 6; Jungerstam-Mulders 2006, 17–18), in contrast to Western European parties that for a large part have their roots in late 19th and early 20th century popular movements and socio-economic groups. Moreover, whereas Western European party systems at least used to be remarkably stable for decades in terms of both parties taking part in elections and the vote shares those parties could expect, party systems in the post-communist area have been much more volatile, with the number and labels of parties changing sometimes radically from one election to the next. Against this background, Anna Grzymała-Busse (2007) argues that parties in the post-communist countries generally share an 'electoral-professional' nature as their activities are elite-driven and centred in the parliament. As for differences between post-communist and Western European party systems, one can however remark that the stability of Western party systems has tended to decline and the linkages between parties and social and especially socio-economic groups have tended to weaken (van Biezen *et al.* 2012; Chiaramonte and Emanuele 2017).

What above has been referred to as 'the post-communist area' is not, of course, a homogeneous group of countries. In some of them, most notably Poland, influential civil movements emerged well before the collapse of the communist regime. The experience with elections also varied somewhat at the moment of the Iron Curtain lifting, as Hungary had introduced quasi-competitive elections already in the 1980s; this can be contrasted with the highly personified dictatorial rule of Nicolae Ceauşescu in Romania. Moreover, even when communist regimes were still in place, a unitary 'communist camp' did not exist. Of the post-communist countries that are now members of the EU, the Baltic states were annexed to the Soviet Union until the early 1990s. Most of the other countries in the post-communist EU can best be described as Soviet satellites as they were nominally independent but strongly under Soviet influence. Slovenia and Croatia were parts of the Yugoslavian federation that had little contact with the Soviet Union and applied a somewhat more market-driven version of communism. In addition to the dissolution of the Soviet Union and Yugoslavia, borders also changed elsewhere as the Czech Republic and Slovakia became the successors of Czechoslovakia, and East Germany became part of the Federal Republic of Germany.

One can also add that even among the rest of the EU countries, experiences with democracy have not been uniform in the latter half of the 20th century. Most notably, Greece, Portugal and Spain were ruled by military regimes until the mid- to late-1970s.

However, what sets those autocracies apart from communist regimes is the fact that their economies were organised on a capitalist basis even under autocracy, while this was not true for communist regimes. Therefore, while there is no reason to suppose that the rule of law would have been respected in Southern European autocracies according to Western standards, the structural incentives stemming from command economy and its subsequent dismantling to engage in corruption and personified exchanges with state officials were lacking.

The different origins of political parties and radically different economic histories speak for analysing the effects of political variables separately in post-communist and non-post-communist countries. The next section explicates in greater detail why the number of government parties is expected to have stronger effects in the post-communist area, and what the role of the quality of government is in determining the strength of those effects, as well as the effects of programmatic outlooks. Already after reviewing some of the main differences between sets of countries, it can however be argued that political parties cannot in all cases be seen as agents of voter group groups in the sense that they seek to maximise their marginal contributions to the net benefit of specific segments of the electorate. This is, after all, at the core of the argument that guarding the interests of voter groups encourages parties to act like fishers depleting a fishery (Bawn and Rosenbluth 2006; Schwartz 1994).

Why Quality of Government Conditions Political Effects

Recall that 'quality of government' in this work is used in a thin, procedural sense, i.e. as impartiality of the officials exercising government authority (Rothstein 2011). It is correlated with and implies a host of other things, such as the meritocratic recruitment of public officials. However, it is a distinctly 'output-side' notion as it refers to the implementation of laws and policies – albeit the state administration in European parliamentary countries is for a large part responsible for the preparation of laws and budgets, and hence it potentially contributes strongly to the policies it is going to implement once they have been processed by representative, inherently partisan organs of state. The quality of government is hence not defined in the light of policy outcomes (cf. La Porta *et al.* 1999) although a high quality of government has been linked to numerous desirable societal outcomes (e.g. Holmberg *et al.* 2009; Norris 2012).

As explicated in Chapters 1 and 2, a high quality of government thus understood rules out a host of practices. These include bribery, nepotism or favouring one's relatives, patronage or handing out public jobs on partisan or other favouritist grounds, clientelism or the distribution of material favours in exchange for services or support, and so forth. In sum, a high quality of government implies that particularism in the use of government authority is rare, and where particularism is found, it is an exception to the rule rather than the operating principle of the entire society (Mungiu-Pippidi 2015). In the absence of a high quality of government, however, particularist practices may

pervade the entire public sector, take many different forms and exist in varying mixtures in different places and at different times. Therefore, it is unlikely that one could identify one single mechanism that conditions the effects of the number of parties and the programmatic orientation of the cabinet, and hence this work operates with the more general notion of the quality of government. Another justification for operating with fairly general concepts lies in the possible uses of the results from this work in concrete policy or institutional reforms. For example, if some form of particularism is found to have conditioning effects that contribute to the weakening of the public economy, tackling that form may only shift the problem elsewhere. If bribery and kickbacks in the public sector become subject to decisive legal action, for example, it is easy to imagine that officials opt for patronage and clientelism instead, in order to continue enjoying their benefits of office. Such an approach to rooting particularism would be based on 'getting the incentives right' in light of principal–agent theories and denying the structural dimension of particularism – an approach that has failed multiple times (Mungiu-Pippidi 2006; Persson *et al.* 2012).

It is, however, useful to consider some plausible mechanisms that may make the explanatory power of the number of parties vis-à-vis programmatic aspects of politics depend on the quality of government. The aim is to explicate why such a conditioning effect is to be expected and why it is especially likely in post-communist countries. The discussion below also serves to highlight the ways in which different mechanisms and forms of particularism are interlinked.

Clientelism and Patronage

In an influential article on democratic linkages, Herbert A. Kitschelt (2000) criticises spatial approaches to the modelling of politics by arguing that they presuppose specific kinds of linkages between citizens and representatives. Specifically, Kitschelt argues, spatial models assume that citizen–representative linkages are based on programmatic competition although such linkages do not exist or at least are not the prevalent form of linkages everywhere. Kitschelt notes that linkages can also be based on tradition or leaders' charisma. Perhaps the most enduring contribution of Kitschelt's article, however, is its emphasis on clientelist linkages. Kitschelt gives clientelism a broad definition as the exchange of favours controlled by politicians for political support, where support can take the form of money or votes depending on who the clientelist politician or party is dealing with. As Kitschelt's notion of clientelism is very broad, clientelism has also been more specifically seen as a contingent and iterated exchange of favours and support (Hicken 2011), where the mutual monitoring of performance and counterperformance is essential, creating a central role for brokers or people who act as intermediaries between political leaders and the grass-root level (Stokes *et al.* 2013). Clientelist exchanges can thus be seen as distinct from other forms of distributive policies,

such as pork-barrel spending (cf. Weingast *et al.* 1981) whose benefits are enjoyed by everyone in the recipient district, irrespective of their voting behaviour.

The favours distributed by clientelist politicians and parties can be very tangible basic goods that are especially valued by poor voters, such as food or even cash. However, clientelist relationships can also form, for example, between political parties and campaign donors (Gherghina and Volintiru 2017), the donors enjoying preferential treatment in public procurement and the political parties using the raised funds for vote buying. Clientelism in this form comes close to a conventional way of understanding corruption as the acquirement of favours from public officials in exchange for monetary contributions. Gherghina and Volintiru develop this model of clientelist exchanges in the context of Romania, whose public sector in light of the quality of government scores reviewed in the previous chapter belongs to the most particularist ones in the EU.

Clientelism is closely related to patronage, which is here understood as the use of public jobs and offices as a means of distributing goods to favoured groups and individuals. Jobs can be distributed on partisan grounds so that members or supporters of a party are rewarded with employment in the public sector, but they may also be distributed to followers of an individual strongman. The politicisation of the public sector can be considered one manifestation of widespread patronage as officials are recruited on partisan rather than meritocratic criteria (e.g. Čehovin and Haček 2015; Nakrošis 2015).

In Western Europe, Italy (especially its southern parts, see Graziano 1973), Greece (Mavrogordatos 1997; Pappas 2014) and Austria (Ennser-Jedenastik 2014) are often portrayed as traditionally clientelist political systems. While Grzymała-Busse (2007) argues that the parties that were quickly organised in the post-communist area during the transition to liberal democracy generally lacked resources necessary for establishing clientelist networks, Gherghina and Volintiru (2017) demonstrate how Romanian parties use clientelist practices to mobilise voters. Hence, existing research suggests that clientelist exchanges and patronage in the public sector are an issue in Europe.

Clientelism and patronage are diametrically opposed to programmatic politics. Hence, their prevalence increases the weight of distributive material objectives at the cost of programmatic aspects of politics, particularly those aspects that pertain to large-scale policies affecting large segments of the society. This is demonstrated, for example, by Rothstein's (2011, 137) finding that the experience with leftist governments explains the generosity of social security benefits unexpectedly little in Austria where, according to Rothstein, the post-war *Proporz* system of two-party rule developed into a full-blown clientelist division of the public sector. Moreover, as Kitschelt and Wilkinson (2006, 11) note, public goods cannot by definition be traded on a clientelist basis as any benefits they bring are enjoyed by everyone, and therefore clientelist parties target their efforts more narrowly and exclusively than programmatic parties.

As a consequence, clientelist party systems can be argued to more readily correspond to the assumptions underlying models of fragmented decision making (cf. Bawn

and Rosenbluth 2006; Weingast *et al.* 1981). In a study closely related to the themes of the present work, it was indeed found that a measure of the prevalence of vote buying indeed conditions the effects that the number of parties in government and the programmatic outlook of the cabinet have on total government spending (Ylisalo, forthcoming).

Distrust and the Substitution of Programmes by Distributive Pressures

The fact that a country has low-quality state institutions does not imply that people would only be concerned with targeted benefits and not consider large programmes worth implementing. There are likely to be large numbers of people who would, quite apart from distributive or special-interest considerations, like to see specific programmes provided by the state or some ideology-driven policies being implemented. To begin with, such policies may pertain to public goods, ranging from recreational areas to pollution controls and public health programmes. Preferences may also pertain to so-called merit goods (Musgrave 1957) or goods that, for ethical or paternalistic reasons, should be consumed by everyone irrespective of their income – many basic services like health care can be seen as merit goods. Some may consider large-scale programmes, such as an extensive system of income redistribution, desirable for ideological or philanthropic reasons. One might suppose that as far as voters have preferences on such issues, they get what they want as competition encourages parties to adopt programmes containing the best feasible mixture of policies. Such a simplistic view, however, fails to appreciate the fact that the implementation of such policies requires that considerable amounts of resources are first handed over to politicians and bureaucrats, something that people are not at all necessarily willing to do even in order to attain their desired policies.

From the perspective of voters, the problem is that there is always some uncertainty in the provision of public goods and other at-large programmes as politicians and officials may not use the resources in the intended way. Importantly, politicians and bureaucrats are not likely to be perceived trustworthy enough if the quality of government is low. Chapter 2 already alluded to some of the implications of this that have been identified in previous research. To recapitulate, people are less willing to support policies that otherwise would be in line with their opinions if they perceive decision makers as untrustworthy (Jacobs and Matthews 2017; Svallfors 2013) and political resources that should be conducive of certain kinds of policy outcomes do not actually have those consequences if the quality of government is low (Rothstein *et al.* 2012).

Provided that people do not expect their programmatic preferences to translate into actual policies when they perceive the public officials as partial and corrupt, one may ask what comes instead of those programmatic goals. Apathy and alienation from the political system are among the consequences identified in the literature (Stockemer *et al.* 2013). Another plausible consequence derives from the notion that favouritism sup-

presses generalised trust (Rothstein 2011), whereby what is left is particularised trust in people of one's own kind and small circles of family and friends (Uslaner 1999). This greater emphasis on the members of one's reference group may translate into greater emphasis on the benefits that group receives from the public sector. When generalised trust is weak, people are more likely to perceive those not belonging to their reference group as competitors or threats seeking to benefit at their cost, and given the way they perceive the situation they find the extraction of targeted benefits as the best feasible strategy. Such benefits may include group-specific programmes but also 'classical' pork-barrel projects provided in one's locality. Hence, favouritism in the public sector is not only likely to render the statements parties make about far-reaching programmatic goals non-credible, but also to skew people's political activity towards the extraction of targeted benefits. Together these processes create another route through which a low quality of government makes party politics correspond more closely to the environment assumed in models of fragmented decision making.

Non-Electoral Target Groups

Until now, the discussion of plausible mechanisms has centred on voters and political parties. However, the role of campaign donations in clientelist networks, which was alluded to above, highlights the fact that voters are not the only actors political decision makers are connected to. For example, parties may have connections to firms or businesspeople they favour in public procurement, in which case contractors are not chosen on the basis of price and quality. Moreover, corruption may entail that projects are badly managed and funds are misappropriated by various actors participating in the implementation of public works. In della Porta and Vannucci's (1997) view, corruption is responsible for a host of inefficiencies in the use of public funds, as it creates incentives to channel funds not into the most beneficial uses but to uses that benefit those with discretionary power, as well as to provide popular projects in cost-inefficient ways.

This means that insofar as problems of public finance follow from parties catering the interests of their target groups, one needs to bear in mind that those target groups are not necessarily electoral. In other words, parties may be said to be accountable to specific groups or actors, albeit that accountability is not always based on electoral support but rather on bribes, campaign donations or other rewards for policies favourable to those actors. Such actors are probably very small relative to the entire society, implying that they are virtually unaffected by the costs associated with the benefits they receive (see Olson 1982).

It is by no means unimaginable that a party pushes for a policy that brings patently negative net benefits to the society if it is connected to narrow-based special interests that benefit from that policy. Again, such projects may have various forms, ranging from pork-barrel projects benefitting local contractors to reforms in the provision of

public services benefitting specific firms. The political weight of non-electoral target groups can be expected to contribute to the applicability of the 'law of 1/*n*' (Weingast *et al.* 1981), as it brings to the political arena actors with clear-cut material interests and ample possibilities for cost externalisation thanks to their small size.

Epistemic Content and the Identification of 'Correct' Policies

Politics is about many things, like value judgements and income distribution, to which no self-evidently 'correct' solutions exist. Expert knowledge may highlight the benefits and costs that are associated with alternative ways forward, like the employment or economic growth implications of a scheme intended to decrease wealth disparities by strongly redistributing income. However, in that case the implications, even if they were for certain known to be negative – which often is highly contentious – they ought to be seen as a price tag of a given outcome that the society may knowingly accept or reject. The acceptable maximum price is an inherently political issue.

This is not, however, the end of the story as many decisions are about finding an alternative that is correct in an objective sense. In their book *Democracy for Realists*, which has caused much discussion about the possibilities of responsive government, Christopher H. Achen and Larry M. Bartels (2016) argue that not too much should be expected from electoral democracy in this respect. According to Achen and Bartels, inherent biases of human reasoning mean that voters base their voting decisions on short-term changes of the economy, on the one hand, and on group identities, on the other. In addition, voters' generally low levels of political knowledge and their lack of interest in politics make it less likely that they can effectively use the electoral weapon to encourage their representatives to make good decisions. Consequently, special interests that are considerably better informed are able to exert disproportional influence.

Theoretically, finding the correct solutions to political problems in a democratic manner could be possible in a deliberative process, where arguments are weighed on the basis of their merits by all affected parties – parties understood as individuals and collectives with a legitimate interest, not as organisations taking part in elections. Such arrangements are not, however, feasible save for a limited number of issues, or at least governments are often unwilling to cede their competences to such decision-making arenas. Rothstein (2012), however, argues that high-quality administrative institutions serve to improve the epistemic aspects of representative politics. Rothstein backs his argument by referring to the fact that countries with impartial and competent administrations are more likely to attain objectives related to human well-being and development, designing and implementing the appropriate policies requiring considerable amount of expertise. When it comes to objectives pertaining to people's basic needs, it is relatively straightforward to deem the objectives as legitimate in their own right and to argue that the principal problem is how to attain them.

Things are not as straightforward when it comes to fiscal policies, as underscored in Chapter 3. An objectively 'correct' spending-to-GDP ratio does not exist, and there is no objectively correct priority order between the budget balance and other policy objectives. However, it can be noted that part of the cost externalisation related to overspending and underspending problems may be related not only to deliberate neglect of costs but also to unconscious biases in the comparison of benefits and costs (e.g. Kunda 1990). Voters, elected politicians or appointed officials may downplay the costs because of ideological factors, socialisation or habitual ways of thinking, and exaggerate the benefits of certain policies, even if they considered their own reasoning objective and that of dissidents subjective and biased. For example, someone may downplay the incentive problems associated with increased unemployment benefits or exaggerate the production increases obtained by subsidising industries. An impartial bureaucracy composed of officials recruited on meritocratic grounds can correct at least some of these biases by providing more objective assessments of benefits and costs as well as about the effectiveness of policy alternatives in attaining specific objectives laid down by politicians.

A competent bureaucracy can thus not only act as a corrective counterforce to very human biases of reasoning to which politics is not immune. Such an administration may also help attain programmatic objectives laid down by elected representatives. Even in societies that otherwise are riddled with corruption and other forms of favouritism, political forces may have genuine programmatic objectives that however fail because of deficient policy preparation and implementation.

Insofar as administrative officials adopt longer time horizons than elected politicians or voters (Jacobs 2011), they can serve as an analogue of a stable community of appropriators. Raudla (2010) argues, drawing on Elinor Ostrom's work on the management of physical common-pool resources, that in this role the public bureaucracy can contribute to long-sighted governance even in the budgetary commons. Meritocratic administration requires that the public bureaucracy is sufficiently independent of political influences (e.g. Fukuyama 2014), and such independence is also required so that the society could have a 'stable community', even as elected decision makers come and go.

The flip side of autonomy from political influence is the risk of 'epistemocracy' or the rule of experts, whereby political decisions escape democratic influence – instead of their inherent political nature being acknowledged and respected, public affairs become treated as technical problem solving. However, as far as the impartiality in the exercise of government authority implies respect for the norm that policy guidelines are set by elected representatives and implementation is left to government officials, impartial bureaucracy should strengthen rather than weaken the policy consequences of publicised programmes. Whether the quality of government should be expected to have independent effects on fiscal policy outputs is less obvious. While the role of an autonomous bureaucracy as a metaphorical stable community of appropriators might speak for an association between the quality of government and a stronger balanced budget

norm (cf. Woo 2003), the doctrines and ideas prevalent in the public administration may also allow for a smaller role for balanced budgets and debt reductions as other objectives are given higher priority. Therefore, clear expectations about independent effects cannot be formed with respect to debt and deficits, and even less so when it comes to spending levels and revenue.

What to Expect from Empirical Analysis

The discussion above highlights a number of reasons why the quality of government is to be expected to condition the effects of political variables on fiscal policy outcomes. To reiterate, the mechanisms explicated above are not intended to provide an exhaustive list of possible mechanisms, and they are by no means mutually exclusive.

As argued above, political parties in post-communist countries can be assumed to be more detached from the rest of society, their activities more parliament-centred and their programmatic commitments weaker than those of their Western European counterparts. Consequently, parties in the post-communist countries are more likely to behave opportunistically and therefore have a stronger tendency to engage in the short-sighted distribution of resources. This should be visible in a generally stronger association between the number of cabinet parties and fiscal policy outcomes than what is the case outside the post-communist area. Given the expectedly stronger underlying tendencies for distributive, non-programmatic policymaking styles, the quality of government should condition those effects in a more pronounced manner in the post-communist area. As for the effects of cabinets' programmatic outlooks, the stronger institutionalisation of party systems in most of the countries outside the post-communist area support the expectation that programmes are more consequential in the non-post-communist countries. However, the quality of government should again condition the effects more strongly in the post-communist countries.

Fiscal outcomes here refer to government spending, revenue, debt and the budget balance. There is reason to expect that the spending side of the budget is most clearly connected to political variables: it is easier to channel spending to desired purposes than to attempt to attain the same objectives using taxation and other revenue-raising methods. Moreover, the revenue side of the budget is more strongly regulated by equity and other norms, so that it is not possible to allocate tax burdens and tax exemptions as freely as spending can be allocated. However, as spending has to be financed somehow, the effects that political variables have on spending should be reflected on the revenue side. Some of the spending can be financed by running deficits and incurring debt, which implies that the effects should be visible in deficits and debt, as well. The possibility to use different sources of funding can be expected to make the political effects on revenue, deficits and debt more muted than on the spending side.

To summarise, the following claims are evaluated on the basis of European data:

1. Government spending increases with the number of cabinet parties. This effect is more pronounced in the post-communist countries and it is also stronger the lower the quality of government becomes.

2. Government spending increases when the programmatic outlook of the cabinet is leftist, and conversely spending decreases when the programmatic outlook is rightist. The effect is stronger outside the post-communist area and it is stronger the higher the quality of government becomes.

3. The effects of the number of government parties and the programmatic outlook of the cabinet are analogous to their effects on spending but smaller.

4. Government debt increases with the number of government parties. This effect is stronger in the post-communist countries and weakens as the quality of government improves.

5. Rightist programmatic orientation of the cabinet decreases debt. The effect is stronger outside the post-communist area and becomes more pronounced as the quality of government improves.

6. What is said about debt is also visible in the budget balance, as debt increases imply deficits and debt reductions imply surpluses.

A Note on the Analyses

The rest of this chapter assesses the credibility of the theoretical arguments made above in light of data from the European Union. Dependent variables measure the annual change of government spending, revenue and debt as well as the budget balance. As for spending and revenue, two models are reported for three sets of data: one consisting of all 28 countries, one consisting of the 15 'old' member states with the addition of Cyprus and Malta, and one composed of the 11 post-communist countries.[15] The budget balance can be defined in several ways (see Chapter 4). Regression results the annual change of government debt and net lending or borrowing, i.e. the most common definition, are reported and discussed in the main text while those pertaining

[15] Kam and Franzese (2007) recommend that in cases like the one at hand, instead of dividing the dataset one estimates 'full dummy-interactive' models. That is, one interacts every explanatory variable with a dummy variable denoting the criterion by which the dataset would otherwise be divided, in the present case the dummy variable *postcommunist*, whereby the results tell the effects in the reference group (*postcommunist* = 0) and how the effects differ between the reference group and the 'treatment' group (*postcommunist* = 1). Preliminary estimations of full dummy-interactive models revealed that substantive results are essentially the same regardless of whether the dataset is divided or explanatory variables interacted with a dummy. The methods give essentially the same information in different forms, but using a dummy-interactive model would make it necessary to estimate a series of marginal effects in order to establish the effects in the 'treatment' group. Relying on divided datasets was therefore opted for mainly due to greater ease of reporting the effects and reading the result tables.

to the cyclically adjusted balance and the primary balance are presented in the Appendix of this chapter.[16]

Reporting the results begins with spending as that side of the budget is expected to react most strongly to political variables. Hence, giving emphasis on spending in the analysis perhaps reveals the most about the political processes leading to diverse fiscal outcomes.

Given that diverse mechanisms can make the effects of political variables conditional on the quality of government, the empirical analyses reported below for the most part rely on main fiscal aggregates, such as total spending. This is because different mechanisms could be expected to have somewhat different implications especially on the spending side of the budget: handing out jobs in the public sector would presumably be most visible in the amount of resources devoted to compensating employees, whereas reliance on more direct income transfers would most pronouncedly affect the spending category of transfers and subsidies. However, if redistribution through employment is the prevalent strategy in country A, whereas politicians of country B rely on cash transfers, an empirical analysis using either sub-category of spending as the dependent variable could easily return insignificant or contradictory results, even if political variables affected *total* spending in the same way in both countries.

As quality of government scores are only available from 1984 onwards, data from the 1970s and early 1980s cannot be used in regressions where quality of government is included. However, that older data is analysed in Chapter 7.

Results

Spending

Table 5.1 reports the results when the dependent variable is the annual change of total general government spending. A general impression from the table is such that while the effects of macroeconomic variables and the lagged spending level are very similar in each model, the effects of political variables depend on the country group. That is, the ratio of government spending to gross domestic product tends to be suppressed by economic growth and high inflation, as well as by high levels of existing spending, but the rest of the effects are specific to certain models.

[16] The regression results reported in the main text contain a fiscal rule index based on IMF data. As pointed out in Chapter 4, the European Commission also produces an annual index measuring the strength of numerical fiscal rules in the member states. The robustness of the main findings was checked by substituting the index based on IMF data for the European Commission's index. The results obtained using the latter index are reported in the Appendix.

Table 5.1. Regression results. Dependent variable: annual change in total general government spending, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.099 (0.121)	0.246 (0.548)	0.044 (0.141)	-0.148 (0.789)	0.297 (0.184)	1.778** (0.619)
Right-left	-0.019* (0.008)	-0.052 (0.041)	-0.007 (0.007)	0.030 (0.046)	-0.073*** (0.019)	0.255* (0.098)
Quality of government	0.167 (0.164)	0.235 (0.225)	0.145 (0.185)	0.058 (0.275)	1.056* (0.531)	1.817** (0.553)
Caretaker time	0.578 (1.273)	0.501 (1.272)	0.729 (1.526)	0.797 (1.531)	-0.443 (1.637)	-1.117 (1.617)
Effective no. of parliamentary parties	-0.281 (0.148)	-0.288 (0.149)	-0.271 (0.172)	-0.278 (0.172)	-0.508 (0.300)	-0.477 (0.263)
No. of gov't parties × QoG		-0.021 (0.070)		0.026 (0.092)		-0.226* (0.104)
Right-left × QoG		0.004 (0.005)		-0.004 (0.005)		-0.052** (0.016)
Lagged spending level	-0.295*** (0.032)	-0.299*** (0.032)	-0.246*** (0.042)	-0.244*** (0.042)	-0.555*** (0.049)	-0.554*** (0.046)
GDP change	-0.396*** (0.028)	-0.399*** (0.028)	-0.484*** (0.040)	-0.481*** (0.040)	-0.318*** (0.025)	-0.321*** (0.026)
Unemployment	-0.001 (0.043)	-0.001 (0.044)	0.017 (0.057)	0.023 (0.058)	0.029 (0.070)	-0.002 (0.064)
Debt	0.007 (0.008)	0.008 (0.008)	-0.007 (0.009)	-0.008 (0.009)	0.004 (0.022)	0.002 (0.020)
Inflation	-0.014*** (0.001)	-0.014*** (0.001)	-0.139** (0.046)	-0.145** (0.046)	-0.013*** (0.002)	-0.014*** (0.002)
Fiscal rule index (IMF)	-0.602** (0.205)	-0.583** (0.211)	-0.175 (0.242)	-0.189 (0.245)	-0.403 (0.304)	-0.280 (0.312)
Maastricht	-0.114 (0.235)	-0.139 (0.241)	-0.958** (0.304)	-0.938** (0.307)	0.606 (0.590)	0.353 (0.551)
N	607	607	444	444	163	163
Adjusted R^2	0.404	0.404	0.389	0.388	0.550	0.569

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Before proceeding to the effects of political variables, a brief comment on fiscal rules is in order as they have received much attention in practical policy debates. More

stringent fiscal rules tend to restrict spending increases when the entire set of 28 countries is considered, but when the dataset is divided, the effect disappears. Instead, the Maastricht dummy becomes statistically significant with a negative sign outside the post-communist area. This may have to do with the fact that rules are generally more stringent in the old member states, especially in more recent times, which becomes unaccounted for when the dataset is divided.

In the group of 28 countries (Columns I and II), the only political variable with a statistically significant effect is the right-left position of the cabinet. As expected, more rightist cabinets tend to spend less, which is visible in the negative sign of the coefficient; recall that the programmatic position of the cabinet is measured so that larger values indicate more rightist programmes, and hence it is in line with expectations that spending is suppressed when parties with rightist programmes are in government. There is, however, no evidence of interaction effects either between the right-left position of the cabinet and quality of government or between the number of cabinet parties and the quality of government.

In the 17-country group composed of the old member states, Cyprus and Malta, none of the political variables have statistically significant effects on spending (Columns III and IV). This is compatible with the expectation that outside the post-communist area, the number of government parties is only weakly associated with fiscal policy outcomes. What is against expectations, however, is the fact that the right-left position of the cabinet has no discernible effect, even though it was expected that the political environment of the old member states would make that variable especially relevant in this group of countries. Despite the generally long experience with democracy, the generally high quality of government and the generally highly institutionalised party systems, the programmes of government parties appear inconsequential with respect to spending.

The lack of effects of political variables in Western and Mediterranean Europe can be contrasted with the effects those variables have in the post-communist area (Columns V and VI). To begin with, when no interactions between variables are considered, the programmatic position of the cabinet is the sole political variable with a discernible effect. In terms of the size of the regression coefficient, the effect is stronger than in the 28-country group, and taking the lack of effect outside the post-communist area into account, one can infer that the association between the right-left position of the cabinet and spending observed in the full set of countries is driven by an even stronger association in the post-communist countries. This speaks against claims according to which the right-left dimension in the post-communist countries lacks the meaning it has in Western Europe (e.g. Tavits and Letki 2009). However, the number of government parties still lacks statistical significance, albeit the coefficient on the variable has the expected positive sign and is considerably larger than in the group of 28 countries. Moreover, as the quality of government is also a significant predictor with a positive sign, one might jump to the conclusion that spending increases in the

post-communist area are driven by improvements in the quality of government and programmatic aims of cabinets.

Such a benign interpretation turns out to be premature once interactions between political variables and quality of government are taken into account, as in Column VI of Table 5.1. As the interpretation of interaction models is sometimes complicated, a few words on the signs of the interaction terms and their constituent parts are in order. Recall that the coefficient on the number of government parties now tells the effect of that variable when the quality of government is zero, i.e. in an empirically irrelevant case. However, it can be noted that the coefficient is considerably larger than in the additive model, which suggests that on extremely low quality of government levels, the effect of the number of cabinet parties on spending is considerably stronger than the average effect. The negative coefficient on the interaction term composed of the number of government parties and quality of government, in turn, indicates that the effect becomes smaller as the quality of government improves – which is in line with expectations. The coefficient on the right-left position of the cabinet has switched signs in comparison to the additive model, which means that on extremely low quality of government levels, the effect of the programmatic outlook of the cabinet is actually reversed: more rightist programmes are associated with more spending and leftist programmes with less. As the coefficient on the interaction term composed of the right-left position and quality of government is negative, the effect again approaches zero as the quality of government improves. Hence, there may after all be settings where the number of cabinet parties affects spending, whereas their programmes do not – or the policy consequences of programmes are outright inverse to what they should be. A sufficiently high quality of government, however, appears to have potential to eliminate these effects.

Based on the preceding discussion, one would expect that the effect that the number of government parties has on spending becomes indiscernible from zero on the sufficiently high quality of government levels, while the right-left position of the cabinet assumes a statistically significant effect with the 'correct' negative sign. Whether this is so can be analysed by examining the marginal effects of the respective political variables across empirically relevant values of the quality of government variable.

The coefficients in Table 5.1 do not reveal what the effects of the two political variables on spending are across the range of empirically relevant values of the quality of government score. Figure 5.1 shows the marginal effect of the number of government parties on spending as a function of the quality of government in the post-communist countries. The x-axis ranges from the lowest empirically relevant value of the quality of government score in the post-communist area to the highest one in that area. On both sides of the marginal effect plot, the dotted curves show the upper and lower boundaries of the 95% confidence interval. The distribution of the conditioning variable in the post-communist area is shown by means of a histogram and a rug plot. The effect is statistically significant on the $p < 0.05$ level when both boundaries of the confidence interval are on the same side of the horizontal zero line. As expected, the effect

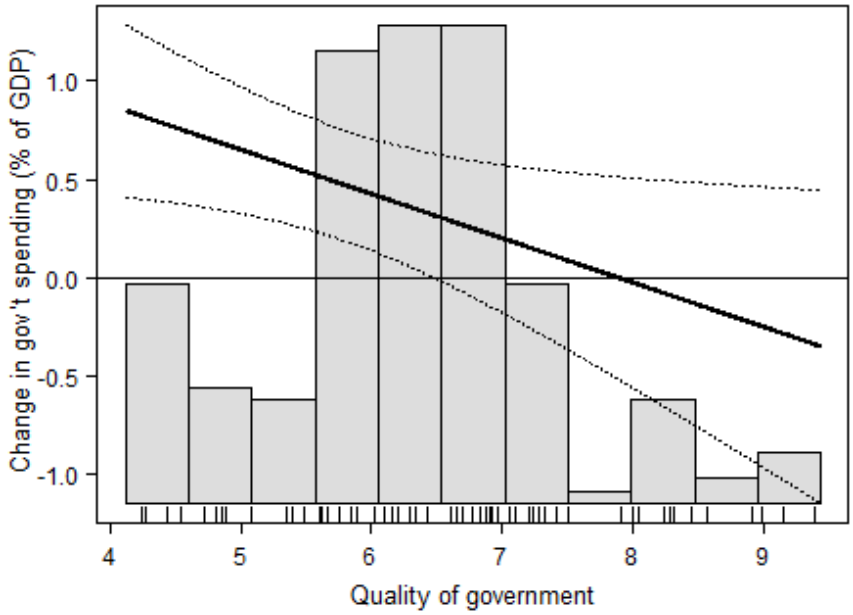

Figure 5.1. The marginal effect of the number of government parties on the annual change of government spending in the post-communist countries.

is statistically significant with a positive sign when the quality of government is relatively low, i.e. lower than approximately 6.5. That value is close to the mean quality of government score in the post-communist area (6.27), and about one half of the country-years are below the value. The country averages of Croatia, Poland, Slovakia and Slovenia are close to the point where the effect becomes statistically insignificant, while the country averages of the Baltic states and especially Romania and Bulgaria are below it. The Czech Republic and Hungary, in turn, are above that level on average. Hence, spending does not seem to be related to the number of cabinet parties in a uniform manner even within the post-communist area.

The effect of the right-left position of the cabinet also depends on the quality of government, which is shown in Figure 5.2. The regression coefficients in Table 5.2 show that when the quality of government is extremely low – i.e. zero – the estimated effect has a positive sign. However, on the lowest empirically relevant quality of government levels, the effect is statistically indiscernible from zero. As the quality of government improves, the point estimate of the marginal effect moves further from zero and gains statistical significance with the expected negative sign. The effect is statistically significant on quality of government levels of approximately 5.5 and higher, which roughly corresponds to the country averages of Latvia and Lithuania, whereas the average Romanian and Bulgarian scores are below that level.

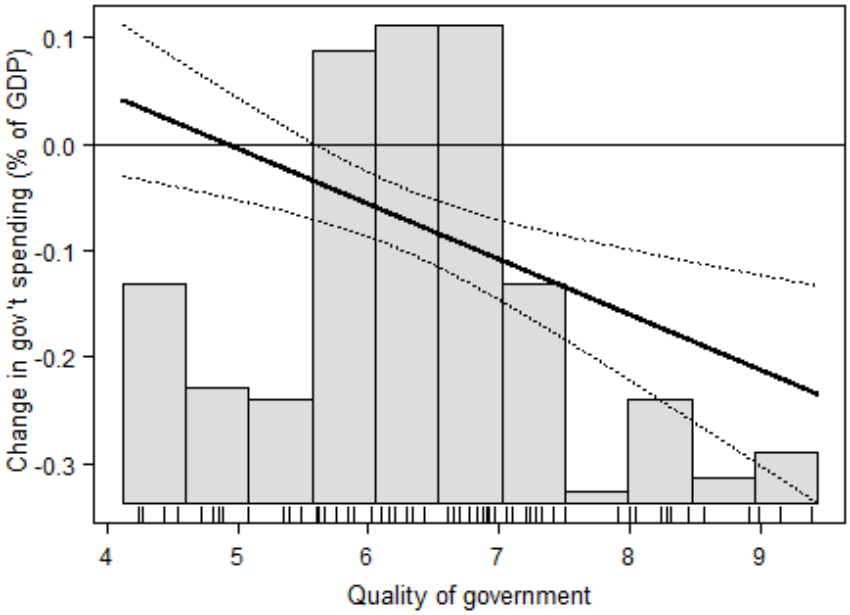

Figure 5.2. The marginal effect of the right-left position of the cabinet on the annual change of government spending in the post-communist countries.

Together, Figures 5.1 and 5.2 show that the effects of both coalition size and the right-left barycentre of the cabinet change with the quality of government in the post-communist area. Where the effect of one is strongest, the other tends to have little or no effect. There is a range of quality of government scores, from approximately 5.5 to 6.5, across which the effects of both variables are statistically significant. In terms of country averages, the three Baltic countries are located on this segment. However, changes in the quality of government make one effect stronger and the other weaker even in this set of cases. Hence, at least for the group of post-communist countries the results are in line with prior expectations when it comes to the dependency of the effects of political variables on the quality of government.

Finally, one may consider the effect of the quality of government on spending. The additive model V in Table 5.1 suggests that improvements in the quality of government are associated with spending increases in the post-communist countries. In model VI of Table 5.1, the quality of government interacts with both the number of government parties and the right-left position of the cabinet, and this has to be taken into account when analysing and plotting marginal effects. That is, while the quality of government would appear to give rise to spending increases when the number of cabinet parties is extremely small and the programmatic outlook of the cabinet exactly centrist, both increases in the number of cabinet parties and more rightist programmatic outlooks tend to suppress the effect.

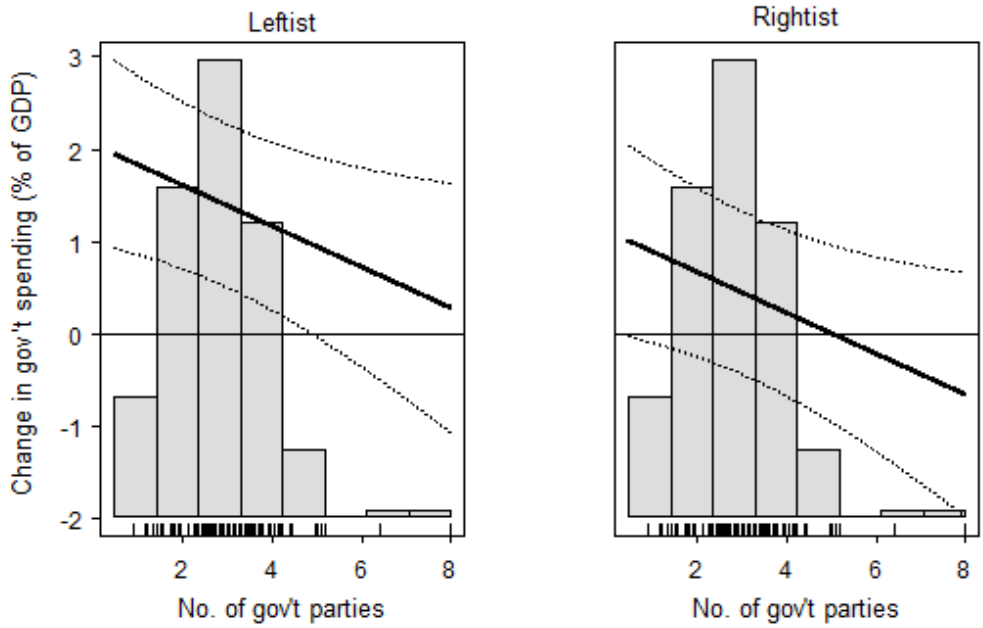

Figure 5.3. The marginal effect of the quality of government on the annual change of government spending in the post-communist countries.

This is demonstrated in Figure 5.3 that contains two marginal effect plots, labelled 'leftist' and 'rightist'. The 'leftist' plot pertains to cabinets with left-of-centre programmatic outlooks and is calculated by fixing the cabinet right-left score to -5.46, or the mean score in the post-communist countries (3.61) minus one standard deviation (9.07). The marginal effect is then shown as a function of the empirically relevant range of coalition sizes. Analogously, the 'rightist' plot on the right is drawn by fixing the cabinet right-left score to 12.63, or the mean score plus one standard deviation. The 'leftist' and 'rightist' values are chosen with illustrative purposes in mind, and therefore too much emphasis should not be placed on the exact values at which the marginal effect becomes statistically significant or insignificant or crosses the zero line. Rather, together the plots demonstrate that improvements in the quality of government tend to lead to spending increases, provided that a relatively leftist cabinet is in office, and this effect exists across a large range of coalition sizes; the effect does, however, become weaker as the number of cabinet parties increases. Conversely, changes in the quality of government scarcely affect spending if cabinets with rightist outlooks are in power, no matter how many parties are in cabinet. These observations can be summarised by saying that the quality of government has no uniform positive or negative effects on the level of public spending. Instead, its spending consequences depend on what kinds of cabinets hold power.

Total spending is not an appropriate measure of the 'size of government' that has concerned many of those who have evoked the notion of the budgetary common-pool problem. As was pointed out in Chapter 4, a more appropriate measure is the GDP share of government consumption expenditure. That share is generally much smaller than the ratio of total spending to GDP, and it also tends to change less from one year to the next. Political variables have no statistically significant effects on consumption expenditure, no matter which country group is considered. There is also no evidence of interaction effects, and one can conclude that the conditional effects found in the case of total spending do not go back to consumption expenditure. As the regression results obtained when consumption expenditure is used as the dependent variable contain very few statistically or substantively significant results, they are reported in the Appendix of this chapter.

More generally, it is difficult to single out the spending category or categories that cause the connection between the political variables and total spending in the post-communist countries. Conversely, as political variables do not seem to affect any individual spending category outside the post-communist area, it is hardly the case that lumping all spending together as in Table 5.1 would conceal systematic effects that exist in some sub-categories. Analyses of spending categories provide weak and mixed results, which is in line with the argument that multiple mechanisms may make spending dependent on the number of parties when the quality of government is low.

For example, if the empirical association were driven by increases in public employment, used as an instrument of distributive politics, the GDP ratio of funds used for the compensation of employees in the public sector should react to political variables in the same way as total spending does. However, this does not seem to be the case. When it comes to the compensation of employees, more rightist cabinets tend to spend somewhat less when all 28 countries are concerned; that effect is however not discernible in either sub-group of countries. In the post-communist countries, increases in quality of government tend to suppress the amount of resources used for compensating employees (see the Appendix for the results). These effects do not suffice to explain the results seen in Table 5.1, especially the interaction effects in the post-communist countries. If distributive politics was primarily based on more direct transfers to individuals and firms, this should be visible in a connection between coalition size and the GDP ratio of transfers and subsidies. Regression results are again reported in the Appendix as political variables have little effect on that spending category. The right-left position of the cabinet would seem to interact with the quality of government in the post-communist countries, but the analysis of marginal effects reveals that the cabinet's programmatic orientation scarcely has effects on transfers and subsidies on empirically relevant values of the right-left variable. Finally, 'classical' pork-barrel projects are investments in infrastructure, which should be visible in the amount of capital government forms, i.e. how much it spends on the acquisition of fixed assets. None of the political variables has statistically discernible effects, however. Detailed results are again presented in the Appendix.

Replacing the fiscal rule index based on IMF data with the European Commission's fiscal rule index leads to some changes in the effects of political variables, but they do not change the substantive conclusions one can draw from the results (see the Appendix of this chapter for detailed results). The Commission's index is more systematically associated with lower spending, as its effect is statistically significant in all six models. Including the Commission's index in the model also makes the effect of the number of government parties statistically significant, even in the additive model when it comes to the post-communist countries, but the interaction effects remain substantively the same: the effect of the number of government parties decreases as the quality of government improves, while the effect of the right-left position of the cabinet is strengthened. In the post-communist countries, the fragmentation of the parliamentary party system tends to suppress spending when the Commission's index is included – an effect that is only almost significant ($p < 0.10$) when the IMF index is used. Hence, the effect of fragmentation on the parliamentary level is, if anything, opposite to what should be expected based on standard arguments about the consequences of multi-party politics. Although the evidence in this respect is inconclusive, it is so systematic across different models with different dependent variables in this and the following chapter that it will be returned to at the end of Chapter 6.

Substantive conclusions are, moreover, practically unaffected if the number of government parties is measured using the effective number of parties rather than the raw number (see the Appendix for detailed results). That is, spending tends to increase with the effective number of government parties in the post-communist countries, but this effect disappears on sufficiently high levels of quality of government.

To summarise, the number of government parties and the right-left centre of masses of the cabinet affect spending in the expected way, but only if one focusses on total government spending in the post-communist countries. The fact that cabinets' programmatic outlooks have no statistically discernible effect outside the post-communist countries, while affecting spending in the post-communist area, however, runs counter to the expectations. At this point, no attempt to provide an explanation is made, and that discussion is deferred until Chapter 7. As will be seen, the lack of programmatic effects outside the post-communist area is encountered time after time, and a more extensive investigation at a later point is therefore in order.

Revenue

The effects of political variables on revenue should be generally be in line with those on the spending side although, as stated earlier, they are possibly weaker. The regression results are reported in Table 5.2 which again contains two models per three datasets: an additive and an interaction model estimated using data from either all EU member states, the so-called old member states, Cyprus and Malta, or 11 post-communist countries.

Table 5.2. Regression results. Dependent variable: annual change in total general government revenue, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.085 (0.064)	0.550* (0.263)	-0.131 (0.075)	0.244 (0.324)	0.138 (0.165)	1.202 (0.662)
Right-left	-0.007 (0.004)	-0.006 (0.023)	-0.003 (0.005)	0.017 (0.030)	-0.030* (0.013)	0.048 (0.067)
Quality of government	0.066 (0.079)	0.252* (0.105)	0.099 (0.094)	0.179 (0.122)	0.403 (0.260)	0.874* (0.378)
Caretaker time	0.484 (0.518)	0.399 (0.532)	0.495 (0.560)	0.564 (0.570)	0.231 (0.856)	-0.199 (0.992)
Effective no. of parliamentary parties	-0.033 (0.084)	-0.047 (0.084)	-0.051 (0.109)	-0.054 (0.109)	-0.105 (0.188)	-0.125 (0.195)
No. of gov't parties × QoG		-0.083* (0.034)		-0.044 (0.039)		-0.169 (0.104)
Right-left × QoG		0.000 (0.003)		-0.002 (0.003)		-0.012 (0.011)
Lagged revenue level	-0.248*** (0.024)	-0.255*** (0.023)	-0.201*** (0.027)	-0.203*** (0.027)	-0.423*** (0.050)	-0.428*** (0.048)
GDP change	-0.089*** (0.020)	-0.088*** (0.020)	-0.082*** (0.025)	-0.081** (0.025)	-0.078* (0.031)	-0.078* (0.031)
Unemployment	-0.039 (0.020)	-0.036 (0.021)	-0.044 (0.025)	-0.036 (0.027)	0.010 (0.045)	0.006 (0.046)
Debt	0.026*** (0.004)	0.026*** (0.004)	0.023*** (0.005)	0.022*** (0.005)	0.022 (0.011)	0.019 (0.011)
Inflation	-0.006*** (0.001)	-0.007*** (0.001)	-0.007 (0.030)	-0.009 (0.030)	-0.007*** (0.001)	-0.007*** (0.002)
Fiscal rule index (IMF)	-0.345** (0.132)	-0.290* (0.134)	-0.270 (0.169)	-0.249 (0.171)	-0.031 (0.162)	0.014 (0.162)
Maastricht	0.198 (0.168)	0.126 (0.172)	0.049 (0.242)	0.012 (0.243)	0.244 (0.351)	0.196 (0.340)
N	607	607	444	444	163	163
Adjusted R^2	0.204	0.211	0.144	0.147	0.333	0.341

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

As Table 5.2 shows, the effects of the political variables on revenue resemble the effects on the spending side, with some differences. Specifically, the right-left position

of the cabinet has no statistically discernible effect when the entire group of 28 countries is concerned. However, the effect of the number of cabinet parties interacts with the quality of government in a statistically significant way, unlike on the spending side of the budget. Based on the regression results alone, one might get the impression that government revenue tends to increase with the number of cabinet parties when the quality of government is low, while the effect approaches zero as the quality of government improves – much like in the case of spending in the post-communist countries. An analysis of marginal effects reveals that this interpretation is misplaced.

Figure 5.4 shows that no positive-signed effect exists on any empirically relevant level of the quality of government variable, although the marginal effect is downward sloping as expected. Rather, when the quality of government is fairly high, i.e. when the score is about 8 or higher, adding parties to the ruling coalition tends to suppress government revenue. Quality of government scores of this order are especially common in Western Europe, and as can be seen from Column III in Table 5.2, the point estimate of the effect is indeed negative-signed outside the post-communist area. However, the effect is not statistically significant according to the criterion applied in this work. No interaction effects, or any other political effects for that matter, are discernible in this set of countries.

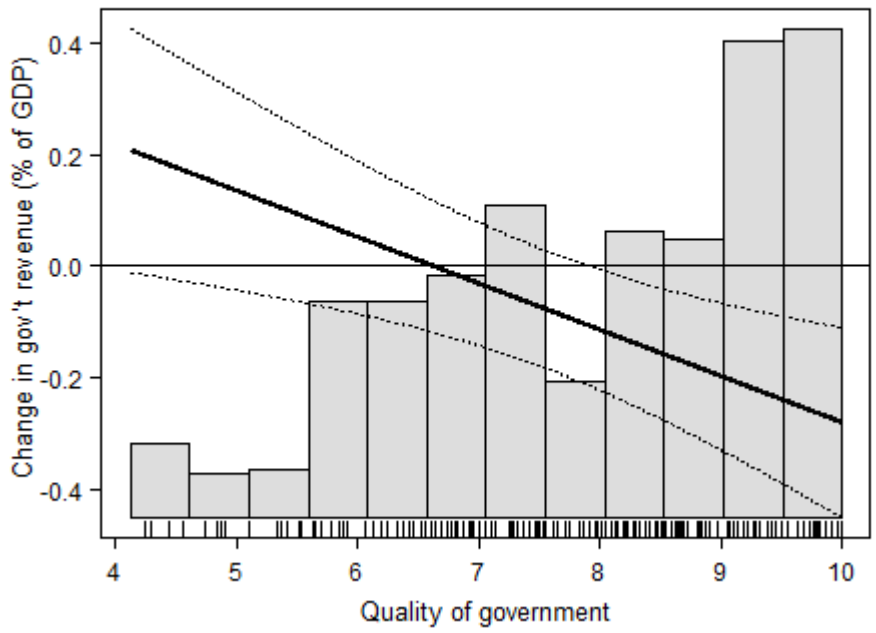

Figure 5.4. The marginal effect of the number of government parties on the annual change of government revenue in the EU member states.

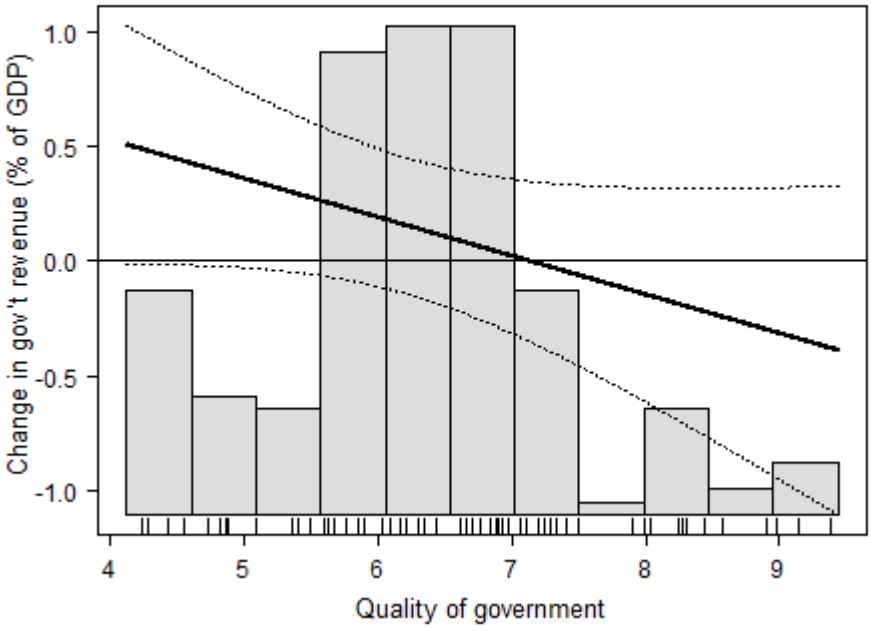

Figure 5.5. The marginal effect of the number of government parties on the annual change of government revenue in the post-communist countries.

In the post-communist countries, more rightist cabinets raise less revenue on average (Column V), which is in line with the fact that they also tend to spend less and, hence, with their posited preference for less state involvement in the economy in general. However, the number of government parties has no statistically significant effects even in this set of countries, and neither it nor the programmatic position of the cabinet can be said to interact with the quality of government.

Again, substituting the Commission's fiscal rule index for the IMF index or substituting the effective number of government parties for the raw number lead to some changes in the results whose substantive implications, however, are limited. Both render the coefficient on the number of government parties statistically significant in the post-communist countries (see the Appendix), but no statistically significant interaction effects become visible.

Hence, one can draw the conclusion that while the effects of political variables are analogous on both spending and revenue sides, they are weaker and accompanied by greater uncertainty on the revenue side. In other words, rightist programmes suppress revenue, but this is only visible in the post-communist countries, and in the same set of countries there are some, albeit very inconclusive, signs of revenue increasing with the number of cabinet parties when the quality of government is low. In fact, as Figure 5.5 shows, that effect is just on the limit of statistical significance on the lowest empirical-

ly relevant levels of the quality of government variable, whereas on any higher levels it is unquestionably statistically insignificant. In sum, the evidence speaks for the claim that while the same pressures to change spending and revenue levels may exist, they are more visible in spending which is more easily targeted to specific purposes and recipient groups as well as less bound by legal norms.

Debt and the Budget Balance

The spending and revenue sides of the public economy react somewhat differently to changes in the political environment. While increases in the number of government parties tend to give rise to spending increases, especially where post-communist past is coupled with low-quality state institutions, those increases are not directly matched by revenue increases. Moreover, while there is no evidence of spending reacting to the number of government parties in the rest of the countries, increases in the size of the governing coalition may sometimes lead to revenue decreases. This raises the possibility that the same conditions that foster spending increases or revenue decreases also give rise to budget imbalances. Recall that the budget balance can be defined in a number of ways, the annual change in the ratio of debt to GDP being a 'quick and dirty' approach. Moreover, this definition is arguably not as liable to manipulation as some other definitions.

The estimated effects of the political variables and the familiar set of controls on the annual change of debt are reported in Table 5.3. Note that as the change is defined as $\text{debt}_t - \text{debt}_{t-1}$, positive values indicate debt increases or deficits.

Across the member states, political variables have few discernible effects on debt. Specifically, the only statistically significant effects are that of the cabinet right-left position and its interaction with the quality of government in the post-communist countries. As in the case of spending, the sign of the programmatic centre of masses of the cabinet is 'wrong' as it indicates that more rightist cabinets tend to allow more debt to accumulate than leftist cabinets. However, the negative coefficient on the respective interaction term suggests that the estimated effect approaches the expected, negative-signed effect as the quality of government improves – that is, rightist programmes should be associated with tighter restrictions on debt, and that consequence of programmatic politics should be visible when the quality of state institutions is sufficiently high.

While the regression coefficients are in line with expectations, their practical relevance is not that clear. This is because the estimated marginal effect is statistically insignificant across most empirically relevant values of the quality of government score. The effect only just qualifies as statistically significant on the lower and upper limits of the empirically relevant values. One can, however, note that the effect has a positive sign at the lower end of the empirically relevant quality of government scores, whereas at the higher end it is negative. Hence, one can conclude that the evidence is

not against the claim that the effect of the programmatic 'colour' of the cabinet depends on the quality of government; the claim also does not receive solid support.

Table 5.3. Regression results. Dependent variable: annual change in government debt, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.026 (0.316)	-0.784 (1.140)	0.005 (0.410)	-1.359 (1.584)	0.174 (0.344)	1.260 (1.890)
Right-left	-0.012 (0.019)	-0.002 (0.088)	0.004 (0.021)	0.225 (0.115)	-0.009 (0.040)	0.485* (0.231)
Quality of government	-0.081 (0.355)	-0.320 (0.475)	0.319 (0.444)	-0.247 (0.641)	-0.454 (0.652)	0.483 (1.006)
Caretaker time	6.252 (3.531)	6.352 (3.533)	7.376 (4.089)	7.770 (4.101)	3.949 (4.346)	3.542 (4.026)
Effective no. of parliamentary parties	-0.279 (0.424)	-0.256 (0.424)	-0.567 (0.603)	-0.614 (0.606)	-0.694 (0.548)	-0.652 (0.494)
No. of gov't parties × QoG		0.106 (0.153)		0.180 (0.194)		-0.164 (0.293)
Right-left × QoG		-0.001 (0.010)		-0.026 (0.013)		-0.081* (0.038)
Lagged debt change	0.194*** (0.043)	0.193*** (0.043)	0.134* (0.056)	0.132* (0.056)	0.237*** (0.044)	0.221*** (0.042)
GDP change	-0.800*** (0.089)	-0.801*** (0.089)	-1.090*** (0.143)	-1.075*** (0.143)	-0.598*** (0.074)	-0.604*** (0.072)
Unemployment	0.480*** (0.113)	0.478*** (0.112)	0.725*** (0.144)	0.770*** (0.151)	0.004 (0.105)	-0.022 (0.105)
Debt	-0.087*** (0.022)	-0.087*** (0.021)	-0.090** (0.028)	-0.097** (0.151)	-0.122*** (0.028)	-0.131*** (0.028)
Inflation	-0.042*** (0.004)	-0.042*** (0.004)	-0.139 (0.151)	-0.172 (0.153)	-0.038*** (0.005)	-0.038*** (0.005)
Fiscal rule index (IMF)	0.383 (0.603)	0.301 (0.593)	0.876 (0.775)	0.762 (0.784)	0.175 (0.610)	0.345 (0.627)
Maastricht	-0.025 (0.724)	0.077 (0.734)	-1.408 (1.070)	-1.259 (1.081)	0.249 (0.767)	0.027 (0.714)
N	600	600	442	442	158	158
Adjusted R^2	0.400	0.399	0.384	0.386	0.617	0.619

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 5.4. Regression results. Dependent variable: net lending (+) or net borrowing (–), % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.237 (0.131)	0.379 (0.531)	-0.231 (0.157)	0.481 (0.761)	-0.239 (0.163)	-0.222 (0.665)
Right-left	0.013 (0.010)	0.030 (0.042)	0.006 (0.008)	-0.013 (0.050)	0.034 (0.019)	-0.230* (0.091)
Quality of government	-0.117 (0.154)	0.049 (0.221)	-0.171 (0.175)	0.035 (0.281)	-0.555 (0.349)	-0.708 (0.375)
Caretaker time	-0.329 (1.200)	-0.381 (1.202)	-0.684 (1.412)	-0.684 (1.419)	0.570 (0.829)	0.650 (1.142)
Effective no. of parliamentary parties	0.191 (0.157)	0.182 (0.157)	0.243 (0.189)	0.250 (0.190)	0.394 (0.265)	0.273 (0.237)
No. of gov't parties × QoG		-0.079 (0.070)		-0.087 (0.091)		-0.012 (0.104)
Right-left × QoG		-0.002 (0.005)		0.002 (0.006)		0.042** (0.014)
Lagged net lending	0.644*** (0.031)	0.639*** (0.031)	0.673*** (0.038)	0.671*** (0.038)	0.314*** (0.068)	0.306*** (0.069)
GDP change	0.317*** (0.037)	0.319*** (0.036)	0.420*** (0.045)	0.419*** (0.045)	0.244*** (0.031)	0.252*** (0.032)
Unemployment	-0.070 (0.043)	-0.068 (0.043)	-0.105 (0.057)	-0.107 (0.058)	-0.100 (0.056)	-0.069 (0.049)
Debt	0.022** (0.007)	0.021** (0.007)	0.025** (0.009)	0.026** (0.009)	0.043* (0.017)	0.044** (0.015)
Inflation	0.020* (0.010)	0.019 (0.010)	0.089 (0.045)	0.093* (0.045)	0.010 (0.008)	0.018 (0.011)
Fiscal rule index (IMF)	0.074 (0.205)	0.129 (0.210)	-0.307 (0.251)	-0.256 (0.257)	0.255 (0.287)	0.199 (0.280)
Maastricht	0.571* (0.243)	0.500* (0.250)	1.277*** (0.319)	1.204*** (0.335)	-0.421 (0.445)	-0.182 (0.373)
N	605	605	444	444	161	161
Adjusted R^2	0.581	0.580	0.635	0.633	0.443	0.463

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Perhaps somewhat ironically, fiscal rules have no discernible effects on debt, although the avoidance of excessive debt levels is often presented as a major justification for more stringent rules. This finding does not depend on the choice of the fiscal rule index (see the Appendix).

According to Woo (2003), higher institutional quality should be associated with a better ability to keep the budget in balance. Although the effects are not statistically significant, the coefficients on the quality of government variable in Table 5.4 suggest that higher-quality institutions may be associated with larger rather than smaller deficits, especially when the post-communist countries are concerned – although the quali-

ty of government, as noted, interacts with the programmatic orientation of the cabinet. These potentially conflicting findings deserve to be examined in some detail.

The results appear to change little in substantive terms when the budget balance is defined as government net lending or borrowing (Table 5.4). When comparing the results, one has to bear in mind that now negative values of the dependent variable indicate that the financial standing of the public sector weakens, whereas surpluses are marked by positive values.

Hence, taking into account the reversed signs of the coefficients on the programmatic centre of masses of the cabinet and its interaction with the quality of government in the post-communist countries, the results seem to tell largely the same story about the relationship between the programmes of cabinet parties and the budget balance. In particular, the effect of the cabinet's programmatic orientation is again 'distorted' on extremely low quality of government levels, whereby more rightist programmes, presumably favourable to economic orthodoxy and fiscal discipline, in reality lead to increases of deficits.

With respect to debt, the practical relevance of the similar effect turned out dubious. However, when net lending or borrowing is concerned, the relationship between the programmatic colour of the cabinet and the budget balance is clear even on empirically relevant quality of government levels (Figure 5.6). Like in the case of spending, the position of the cabinet on the right-left dimension has no discernible effect when the

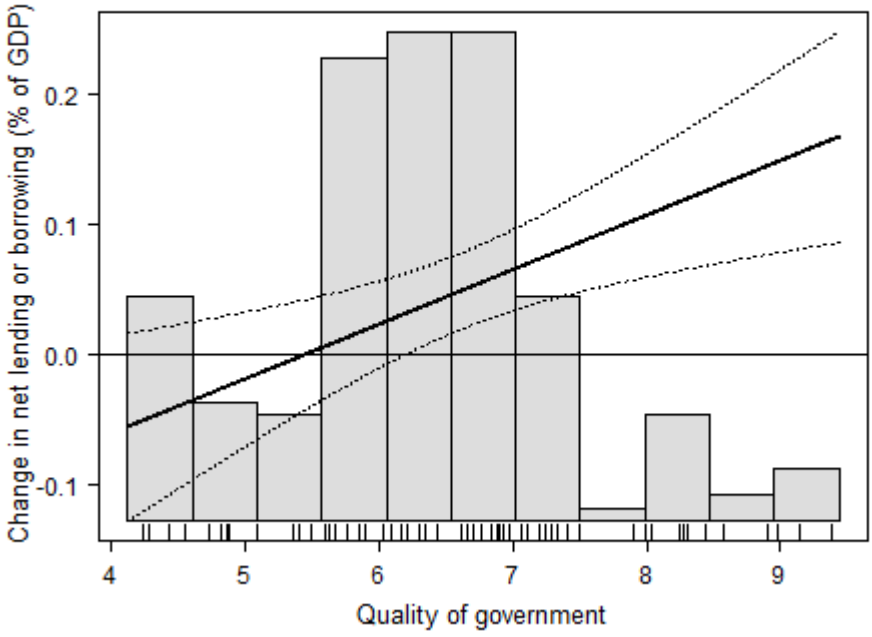

Figure 5.6. The marginal effect of the right-left position of the cabinet on net lending (+) or borrowing (–) in the post-communist countries.

quality of government is low. As the quality of government improves, the effect does become statistically significant with the 'correct' positive sign, i.e. more rightist programmes are associated with smaller deficits or larger surpluses, and the effect also becomes stronger the higher the quality of government becomes.

Figure 5.7 shows the estimated effect of the quality of government on the budget balance, defined as net lending or borrowing, in the post-communist countries. The figure is drawn by fixing the number of government parties at its mean (2.76) in the country group in question. As the quality of government does not interact with coalition size, only one marginal effect plot is presented instead of two or more corresponding to different coalition sizes. The figure shows that improvements in the quality of government tend to increase deficits or decrease surpluses when centrist or left-of-centre cabinets are in office. When the cabinet leans programmatically towards the right, however, quality of government has no discernible effect. Exact points at which the effect turns from significant to insignificant or where the marginal effect plot crosses the zero line should not be looked at, as the location of the plot is somewhat random as it is drawn by fixing the number of government parties at one specific value. Increases in coalition size would move the plot slightly downward and increases slightly upward, but such movements would not be large given the small coefficient on the interaction term consisting of coalition size and the quality of government. In sum, a conclusion analogous to that drawn with respect to spending emerges: the quality of

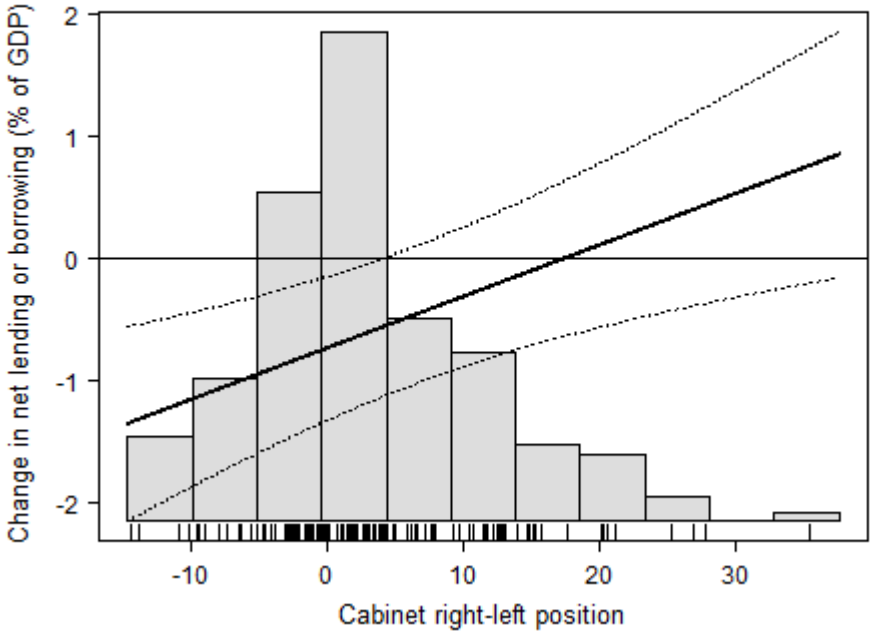

Figure 5.7. The marginal effect of quality of government on net lending (+) or borrowing (–) in the post-communist countries.

government has no uniform effect, but instead its budget balance consequences depend on what kind of a cabinet is in office.

Again, what was said about the effects of the programmatic orientation of the cabinet on deficits, defined either as the change of the debt level or net lending or borrowing, do not depend on the choice of the fiscal rule index or whether the effective or raw number of cabinet parties is used (see the Appendix).

As for the cyclically adjusted balance and the primary balance, the effects are qualitatively similar to those reported above in the post-communist countries (see the Appendix), albeit those pertaining to the cyclically adjusted balance are not statistically significant on conventional levels. The primary balance is associated with the programmatic position of the cabinet even outside the post-communist area. That is, more rightist cabinets tend to run surpluses when the budget balance measure excludes interests on existing debt. Moreover, the right-left position of the cabinet interacts with the quality of government. An analysis of marginal effects shows that the programmatic position of the cabinet has the aforementioned effect only on relatively high quality of government levels, which are common in this set of countries. Otherwise, the effect is statistically insignificant: when the quality of government score is about eight or below, the uncertainty of the estimate increases considerably. Scores that fall below this limit are mainly encountered in Southern Europe, especially Italy and Greece, while the countries of Northern and North-Western Europe generally have higher scores.

Hence, there is some evidence of the quality of government conditioning the effects of political variables outside the post-communist area, although that evidence is limited to one operationalisation of the budget balance. The general message from the available evidence, therefore, is that in order to affect the budget balance, party programmes require a sufficiently high quality of government.

Conclusion

Throughout the earlier chapters of this work, a claim was developed to show that the applicability of the standard argument concerning the fiscal effects of multiparty government depends on the quality of government. It was argued that this is because high-quality government institutions allow politics to have more programmatic content, and the lack of such content makes the conditions favourable for the development of over-exploitation problems in joint decision making by multiple parties. This chapter developed this claim by identifying potential mechanisms that bring such conditionality about. The chapter was not intended to be an exhaustive directory of all possible mechanisms but rather to highlight plausible possibilities that boil down to the lack of the credibility of programmatic statements and, conversely, the prevalence of distributive objectives when institutional quality is low. The mechanisms discussed in this chapter pertain to the clientelist exchanges that are not effectively ruled out by low-quality state institutions, the lack of credibility of programmatic statements that favouritism in

the use of government authority contributes to, non-electoral target groups and rent-seeking when corruption is rampant, and the epistemic content that high-quality government institutions may bring to policymaking. Different mechanisms are not mutually exclusive and can co-exist in different mixtures, and therefore empirical analyses intended to test a specific mechanism can return insignificant and contradictory results, which is indeed what the evidence cited in this chapter points to.

The chapter also highlighted the differences between post-communist and traditionally capitalist political systems. There are reasons to believe that the party systems in the former set of countries are more detached from the rest of the society, which creates more room for opportunistic behaviour. One of the main results, that government spending tends to increase with the number of government parties in post-communist societies where the quality of government is low, is in line with theoretical expectations. The number of cabinet parties turned out to have weaker effects on government revenue but no discernible effects on different indicators of the budget balance. Contrary to expectations, the programmatic outlook of the cabinet turned out to have stronger effects in the post-communist countries than in the rest of the member states. This runs counter to some arguments according to which the right-left dimension, with respect to which the programmatic outlook has been defined in this chapter, is not relevant in the post-communist area. The results reported in this chapter indicate that it is after all relevant, but also that relevance depends on the quality of government as partial administrative institutions tend to rule out the fiscal effects of cabinets' programmatic outlooks.

Outside the post-communist area, the effects of political variables were found to be generally weaker. However, even in those countries, the effect of cabinets' right-left positions on the budget balance depends to some extent on the quality of government, so that partial institutions thwart the programmatic effects that 'should' be visible. The general weakness of programmatic effects in the traditionally capitalist countries was not in line with expectations, given the fact that most of these countries are established democracies with highly institutionalised party systems. The reasons for this are tackled in greater detail in Chapter 7.

In the literature on the quality of government, a standpoint according to which high-quality institutions tend to increase the programmatic content of politics has been emerging in a more or less explicit form, and this chapter renders further support for that conclusion. In more practical terms, the preceding discussion helps understand why some multi-party countries, like Italy, have faced considerable difficulties in curbing public debt while others, like Denmark, have been much more successful. In light of the results, a Danish cabinet is better equipped to present a credible programme of consolidating its public finances thanks to its impartial and effective state institutions, whereas an Italian cabinet lacks that credibility. One might argue that this is because Italy has failed to introduce strict fiscal rules, whereas Denmark has done so. This argument, however, pushes the puzzle on another level instead of solving it. As will be argued in Chapter 7, the stringency of rules is not entirely independent of the quality of

government, as countries with a higher quality of government tend to adopt more stringent rules.

While the quality of government seems to have little direct, independent effect on fiscal policy outcomes, it thus appears to have indirect effects by enhancing the possibilities of programmatic policies that credibly aim at curbing budget imbalances, spending increases or other developments that political actors may consider problematic. It ought to be iterated that spending increases or deficits may or may not be problematic in an economic sense. The appropriate level of spending as well as the appropriate priority given to balancing the budget depend on democratically expressed preferences, something that is returned to in Chapter 7. However, where the level of spending or the deficit is perceived as a problem, solving the problem in a sustainable and legitimate way requires that power-holders provide a credible plan and acquire popular support for that plan. This may not be possible if popular perceptions of public officials are riddled with distrust and suspicions of favouritism. 'Solutions' may be imposed without popular consent, but as with physical common-pool resources, externally imposed solutions may turn out to make things even worse in the long run.

Appendix

Table A5.1. Regression results with the European Commission's Fiscal Rule Index. Dependent variable: Annual change in total general government spending, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.128 (0.133)	0.243 (0.559)	0.005 (0.148)	-0.371 (0.783)	0.428* (0.165)	1.964** (0.608)
Right-left	-0.029*** (0.008)	-0.080 (0.043)	-0.010 (0.008)	0.038 (0.059)	-0.071*** (0.018)	0.211* (0.095)
Quality of government	-0.020 (0.192)	0.044 (0.248)	0.010 (0.203)	-0.123 (0.284)	0.683 (0.473)	1.483** (0.501)
Caretaker time	0.982 (1.312)	0.861 (1.314)	0.710 (1.587)	0.818 (1.607)	0.561 (1.646)	-0.263 (1.599)
Effective no. of parliamentary parties	-0.191 (0.167)	-0.202 (0.167)	-0.150 (0.188)	-0.155 (0.189)	-0.545* (0.267)	-0.522* (0.241)
No. of gov't parties × QoG		-0.018 (0.071)		0.048 (0.091)		-0.241* (0.099)
Right-left × QoG		0.006 (0.005)		-0.005 (0.007)		-0.045** (0.015)
Lagged spending level	-0.338*** (0.036)	-0.343*** (0.036)	-0.261*** (0.047)	-0.260*** (0.047)	-0.573*** (0.045)	-0.567*** (0.042)
GDP change	-0.384*** (0.028)	-0.387*** (0.028)	-0.466*** (0.041)	-0.462*** (0.041)	-0.322*** (0.022)	-0.325*** (0.023)
Unemployment	0.008 (0.048)	0.009 (0.048)	0.003 (0.069)	0.008 (0.069)	0.027 (0.065)	0.000 (0.060)
Debt	0.001 (0.009)	0.002 (0.009)	-0.010 (0.011)	-0.011 (0.011)	-0.007 (0.019)	-0.011 (0.018)
Inflation	-0.014*** (0.001)	-0.014*** (0.001)	-0.185** (0.058)	-0.204*** (0.061)	-0.013*** (0.002)	-0.013*** (0.002)
Fiscal rule index (EC)	-0.699*** (0.166)	-0.686*** (0.164)	-0.394* (0.168)	-0.414* (0.169)	-1.044*** (0.249)	-0.913*** (0.243)
Maastricht	-0.486* (0.217)	-0.514* (0.217)	-1.424*** (0.281)	-1.412*** (0.280)	0.490 (0.493)	0.333 (0.458)
N	537	537	374	374	163	163
Adjusted R^2	0.431	0.431	0.412	0.411	0.575	0.589

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.2. Regression results with the European Commission's Fiscal Rule Index. Dependent variable: Annual change in total general government revenue, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.061 (0.069)	0.578* (0.278)	-0.149 (0.083)	0.139 (0.346)	0.182 (0.158)	1.271* (0.617)
Right-left	-0.010 (0.005)	-0.039 (0.027)	-0.004 (0.005)	-0.065 (0.041)	-0.029* (0.012)	0.023 (0.066)
Quality of government	0.014 (0.091)	0.221 (0.116)	0.036 (0.106)	0.151 (0.136)	0.219 (0.252)	0.690 (0.366)
Caretaker time	0.661 (0.552)	0.448 (0.555)	0.397 (0.629)	0.237 (0.631)	0.631 (0.872)	0.180 (0.995)
Effective no. of parliamentary parties	-0.049 (0.090)	-0.068 (0.089)	-0.082 (0.117)	-0.074 (0.117)	-0.125 (0.181)	-0.150 (0.186)
No. of gov't parties × QoG		-0.088* (0.036)		-0.038 (0.042)		-0.175 (0.096)
Right-left × QoG		0.004 (0.003)		0.007 (0.005)		-0.008 (0.011)
Lagged revenue level	-0.278*** (0.027)	-0.287*** (0.027)	-0.201*** (0.030)	-0.206*** (0.030)	-0.434*** (0.050)	-0.439*** (0.048)
GDP change	-0.076*** (0.021)	-0.078*** (0.020)	-0.058* (0.028)	-0.062* (0.027)	-0.081** (0.031)	-0.081** (0.031)
Unemployment	-0.021 (0.022)	-0.020 (0.023)	-0.009 (0.029)	-0.016 (0.030)	0.007 (0.045)	0.006 (0.045)
Debt	0.020*** (0.005)	0.020*** (0.005)	0.015** (0.005)	0.016*** (0.005)	0.017 (0.011)	0.014 (0.011)
Inflation	-0.006*** (0.001)	-0.006*** (0.001)	0.019 (0.037)	0.042 (0.039)	-0.007*** (0.001)	-0.007*** (0.001)
Fiscal rule index (EC)	-0.180 (0.093)	-0.168 (0.094)	-0.009 (0.094)	0.012 (0.095)	-0.453* (0.176)	-0.437* (0.174)
Maastricht	-0.012 (0.152)	-0.048 (0.154)	-0.261 (0.224)	-0.264 (0.226)	0.294 (0.306)	0.297 (0.303)
N	537	537	374	374	163	163
Adjusted R^2	0.220	0.229	0.156	0.162	0.351	0.357

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.3. Regression results with the European Commission's Fiscal Rule Index. Dependent variable: Annual change in government debt, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.078 (0.336)	-1.044 (1.243)	0.160 (0.471)	-1.105 (1.804)	0.182 (0.320)	1.206 (1.811)
Right-left	-0.027 (0.023)	-0.060 (0.109)	-0.005 (0.026)	0.259 (0.184)	-0.006 (0.039)	0.469* (0.235)
Quality of government	-0.304 (0.392)	-0.619 (0.527)	0.143 (0.494)	-0.364 (0.685)	-0.591 (0.656)	0.370 (0.987)
Caretaker time	7.654 (3.923)	7.810* (3.951)	9.621* (4.611)	10.323* (4.715)	4.165 (4.371)	3.566 (4.056)
Effective no. of parliamentary parties	-0.253 (0.456)	-0.228 (0.458)	-0.724 (0.665)	-0.754 (0.666)	-0.695 (0.532)	-0.648 (0.486)
No. of gov't parties × QoG		0.147 (0.171)		0.168 (0.218)		-0.160 (0.284)
Right-left × QoG		0.004 (0.013)		-0.030 (0.021)		-0.078* (0.039)
Lagged debt change	0.204*** (0.046)	0.201*** (0.046)	0.127 (0.066)	0.118 (0.065)	0.247*** (0.043)	0.233*** (0.041)
GDP change	-0.782*** (0.090)	-0.783*** (0.091)	-1.067*** (0.158)	-1.054*** (0.159)	-0.602*** (0.071)	-0.609*** (0.070)
Unemployment	0.518*** (0.125)	0.515*** (0.123)	0.870*** (0.161)	0.906*** (0.162)	-0.007 (0.104)	-0.032 (0.104)
Debt	-0.097*** (0.025)	-0.099*** (0.025)	-0.085** (0.031)	-0.089** (0.032)	-0.124*** (0.029)	-0.131*** (0.029)
Inflation	-0.041*** (0.004)	-0.041*** (0.004)	-0.046 (0.183)	-0.150 (0.192)	-0.039*** (0.005)	-0.039*** (0.005)
Fiscal rule index (EC)	0.169 (0.421)	0.166 (0.415)	0.456 (0.462)	0.341 (0.461)	-0.330 (0.578)	-0.131 (0.561)
Maastricht	-0.329 (0.607)	-0.296 (0.618)	-1.731 (1.031)	-1.698 (1.024)	0.416 (0.612)	0.287 (0.579)
N	530	530	372	372	158	158
Adjusted R^2	0.408	0.408	0.401	0.402	0.617	0.618

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.4. Regression results with the European Commission's Fiscal Rule Index. Dependent variable: net lending (+) or net borrowing (–), % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.231 (0.141)	0.418 (0.524)	-0.240 (0.172)	0.558 (0.724)	-0.307* (0.152)	-0.315 (0.661)
Right-left	0.019* (0.008)	0.013 (0.045)	0.008 (0.009)	-0.114 (0.063)	0.033 (0.019)	-0.210* (0.092)
Quality of government	0.014 (0.164)	0.209 (0.227)	-0.113 (0.179)	0.182 (0.283)	-0.363 (0.340)	-0.571 (0.360)
Caretaker time	-0.523 (1.312)	-0.679 (1.319)	-1.051 (1.601)	-1.355 (1.607)	0.074 (0.813)	0.289 (1.109)
Effective no. of parliamentary parties	0.076 (0.172)	0.061 (0.172)	0.122 (0.218)	0.137 (0.222)	0.422 (0.254)	0.306 (0.235)
No. of gov't parties × QoG		-0.087 (0.070)		-0.103 (0.088)		-0.005 (0.102)
Right-left × QoG		0.001 (0.005)		0.014 (0.007)		0.039** (0.014)
Lagged net lending	0.612*** (0.033)	0.608*** (0.033)	0.646*** (0.042)	0.644*** (0.042)	0.310*** (0.064)	0.303*** (0.064)
GDP change	0.322*** (0.037)	0.322*** (0.037)	0.435*** (0.048)	0.427*** (0.048)	0.244*** (0.029)	0.251*** (0.030)
Unemployment	-0.050 (0.046)	-0.051 (0.046)	-0.059 (0.064)	-0.075 (0.067)	-0.098 (0.054)	-0.070 (0.047)
Debt	0.020* (0.008)	0.021* (0.008)	0.017 (0.010)	0.019 (0.063)	0.048** (0.016)	0.048** (0.015)
Inflation	0.023* (0.010)	0.022* (0.011)	0.149** (0.057)	0.197** (0.063)	0.008 (0.009)	0.015 (0.011)
Fiscal rule index (EC)	0.425** (0.141)	0.437** (0.140)	0.301* (0.151)	0.354* (0.156)	0.505 (0.274)	0.375 (0.256)
Maastricht	0.641** (0.213)	0.609** (0.216)	1.349*** (0.281)	1.324*** (0.288)	-0.323 (0.369)	-0.119 (0.309)
N	535	535	374	374	161	161
Adjusted R^2	0.566	0.565	0.620	0.620	0.453	0.468

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.5. Regression results with the effective number of government parties. Dependent variable: Annual change in total general government spending, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Effective number of government parties	0.184 (0.211)	0.875 (0.801)	0.064 (0.260)	-0.511 (1.458)	0.659* (0.318)	3.517*** (0.914)
Right-left	-0.020* (0.008)	-0.059 (0.042)	-0.008 (0.007)	0.032 (0.047)	-0.077*** (0.020)	0.242* (0.101)
Quality of government	0.166 (0.166)	0.348 (0.241)	0.144 (0.186)	-0.002 (0.348)	1.036 (0.553)	2.121*** (0.588)
Caretaker time	0.757 (1.302)	0.566 (1.305)	0.757 (1.525)	0.739 (1.588)	-0.348 (1.553)	-1.561 (1.509)
Effective number of parliamentary parties	-0.310 (0.160)	-0.338* (0.161)	-0.278 (0.185)	-0.271 (0.192)	-0.679* (0.343)	-0.597* (0.301)
Eff. no. of gov't parties × QoG		-0.092 (0.103)		0.068 (0.165)		-0.482** (0.155)
Right-left × QoG		0.005 (0.005)		-0.005 (0.005)		-0.051** (0.016)
Lagged spending level	-0.296*** (0.032)	-0.303*** (0.033)	-0.246*** (0.042)	-0.244*** (0.042)	-0.555*** (0.050)	-0.561*** (0.046)
GDP change	-0.397*** (0.028)	-0.399*** (0.029)	-0.485*** (0.040)	-0.480*** (0.040)	-0.319*** (0.025)	-0.317*** (0.025)
Unemployment	-0.002 (0.043)	0.001 (0.044)	0.016 (0.058)	0.024 (0.059)	0.031 (0.068)	0.017 (0.063)
Debt	0.007 (0.008)	0.009 (0.008)	-0.007 (0.009)	-0.009 (0.010)	0.004 (0.022)	0.002 (0.020)
Inflation	-0.014*** (0.001)	-0.014*** (0.001)	-0.140** (0.047)	-0.146** (0.046)	-0.013*** (0.002)	-0.014*** (0.002)
Fiscal rule index (IMF)	-0.591** (0.204)	-0.561** (0.205	-0.163 (0.238)	-0.177 (0.245)	-0.471 (0.284)	-0.354 (0.283)
Maastricht	-0.126 (0.235)	-0.181 (0.237)	-0.973** (0.302)	-0.945** (0.311)	0.590 (0.574)	0.309 (0.503)
N	607	607	444	444	163	163
Adjusted R^2	0.404	0.405	0.389	0.388	0.554	0.575

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.6. Regression results with the effective number of government parties. Dependent variable: Annual change in total general government revenue, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Effective number of government parties	-0.096 (0.115)	0.913* (0.404)	-0.236 (0.155)	0.451 (0.752)	0.239 (0.244)	1.923* (0.961)
Right-left	-0.007 (0.004)	-0.007 (0.023)	-0.003 (0.005)	0.017 (0.030)	-0.032* (0.013)	0.043 (0.070)
Quality of government	0.069 (0.079)	0.288* (0.114)	0.100 (0.095)	0.210 (0.167)	0.395 (0.262)	0.970* (0.383)
Caretaker time	0.532 (0.578)	0.383 (0.586)	0.272 (0.675)	0.457 (0.693)	0.189 (0.757)	-0.428 (0.865)
Effective no. of parliamentary parties	-0.029 (0.094)	-0.063 (0.095)	-0.018 (0.121)	-0.042 (0.121)	-0.151 (0.212)	-0.144 (0.217)
Eff. no. of gov't parties × QoG		-0.130* (0.051)		-0.074 (0.083)		-0.286 (0.153)
Right-left × QoG		0.000 (0.003)		-0.002 (0.003)		-0.012 (0.012)
Lagged revenue level	-0.246*** (0.024)	-0.254*** (0.023)	-0.199*** (0.027)	-0.200*** (0.026)	-0.423*** (0.052)	-0.432*** (0.049)
GDP change	-0.088*** (0.020)	-0.087*** (0.020)	-0.081** (0.025)	-0.081** (0.025)	-0.078* (0.031)	-0.075* (0.032)
Unemployment	-0.039 (0.020)	-0.036 (0.021)	-0.041 (0.026)	-0.037 (0.027)	0.011 (0.045)	0.014 (0.048)
Debt	0.026*** (0.004)	0.027*** (0.004)	0.023*** (0.005)	0.023*** (0.005)	0.022* (0.011)	0.022* (0.011)
Inflation	-0.006*** (0.001)	-0.007*** (0.001)	-0.002 (0.031)	-0.005 (0.030)	-0.007*** (0.001)	-0.008*** (0.002)
Fiscal rule index (IMF)	-0.352** (0.133)	-0.318* (0.133)	-0.300 (0.169)	-0.277 (0.171)	-0.063 (0.165)	-0.023 (0.163)
Maastricht	0.205 (0.169)	0.142 (0.171)	0.085 (0.240)	0.042 (0.243)	0.250 (0.345)	0.172 (0.322)
N	607	607	444	444	163	163
Adjusted R^2	0.163	0.169	0.097	0.096	0.292	0.300

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.7. Regression results with the effective number of government parties. Dependent variable: annual change in government debt, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Effective number of government parties	-0.123 (0.545)	-1.753 (1.731)	-0.181 (0.742)	-8.871* (3.503)	-0.081 (0.628)	2.268 (2.651)
Right-left	-0.011 (0.019)	0.004 (0.089)	0.005 (0.021)	0.290* (0.121)	-0.008 (0.040)	0.48* (0.230)
Quality of government	-0.087 (0.354)	-0.443 (0.510)	0.315 (0.444)	-1.577 (0.891)	-0.446 (0.649)	0.790 (1.054)
Caretaker time	5.817 (3.544)	6.030 (3.546)	6.789 (4.321)	5.741 (4.395)	3.423 (4.385)	2.590 (3.983)
Effective no. of parliamentary parties	-0.226 (0.473)	-0.165 (0.476)	-0.511 (0.662)	-0.353 (0.677)	-0.559 (0.586)	-0.497 (0.512)
Eff. no. of gov't parties × QoG		0.210 (0.224)		0.991* (0.392)		-0.391 (0.438)
Right-left × Quality of government		-0.002 (0.010)		-0.033* (0.014)		-0.081* (0.038)
Lagged debt change	0.194*** (0.043)	0.194*** (0.043)	0.134* (0.056)	0.130* (0.057)	0.240*** (0.044)	0.226*** (0.042)
GDP change	-0.800*** (0.087)	-0.801*** (0.089)	-1.089*** (0.143)	-1.053*** (0.140)	-0.600*** (0.073)	-0.602*** (0.071)
Unemployment	0.480*** (0.113)	0.477*** (0.112)	0.727*** (0.144)	0.802*** (0.148)	0.000 (0.106)	-0.018 (0.107)
Debt	-0.087*** (0.022)	-0.089*** (0.021)	-0.090** (0.028)	-0.105*** (0.030)	-0.118*** (0.028)	-0.124*** (0.027)
Inflation	-0.043*** (0.004)	-0.042*** (0.004)	-0.137 (0.153)	-0.177 (0.149)	-0.039*** (0.005)	-0.039*** (0.005)
Fiscal rule index (IMF)	0.386 (0.607)	0.314 (0.598)	0.884 (0.795)	0.604 (0.818)	0.119 (0.577)	0.275 (0.602)
Maastricht	-0.030 (0.726)	0.088 (0.731)	-1.417 (1.079)	-0.929 (1.116)	0.333 (0.729)	0.079 (0.703)
N	600	600	442	442	158	158
Adjusted R^2	0.388	0.387	0.371	0.380	0.676	0.687

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.8. Regression results with the effective number of government parties. Dependent variable: net lending (+) or net borrowing (–), % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Effective number of government parties	-0.348 (0.223)	0.133 (0.802)	-0.365 (0.297)	1.116 (1.422)	-0.461 (0.247)	-0.811 (0.992)
Right-left	0.014 (0.008)	0.037 (0.043)	0.007 (0.008)	-0.014 (0.051)	0.037 (0.020)	-0.216* (0.095)
Quality of government	-0.112 (0.156)	-0.024 (0.238)	-0.165 (0.176)	0.131 (0.351)	-0.536 (0.367)	-0.814 (0.447)
Caretaker time	-0.424 (1.224)	-0.457 (1.237)	-0.916 (1.429)	-0.672 (1.467)	0.585 (0.748)	0.924 (1.052)
Effective no. of parliamentary parties	0.227 (0.168)	0.216 (0.168)	0.281 (0.205)	0.248 (0.213)	0.500 (0.275)	0.362 (0.249)
Eff. no. of gov't parties × QoG		-0.060 (0.106)		-0.166 (0.161)		0.059 (0.166)
Right-left × Quality of government		-0.003 (0.005)		0.003 (0.006)		0.040** (0.014)
Lagged net lending	0.645*** (0.031)	0.643*** (0.031)	0.677*** (0.038)	0.675*** (0.038)	0.318*** (0.067)	0.314*** (0.067)
GDP change	0.318*** (0.037)	0.320*** (0.037)	0.422*** (0.044)	0.417*** (0.044)	0.244*** (0.030)	0.252*** (0.031)
Unemployment	-0.067 (0.043)	-0.066 (0.043)	-0.098 (0.057)	-0.105 (0.059)	-0.100 (0.055)	-0.071 (0.049)
Debt	0.022** (0.007)	0.022** (0.007)	0.026** (0.009)	0.028** (0.009)	0.043* (0.017)	0.043** (0.016)
Inflation	0.020* (0.010)	0.019* (0.010)	0.097* (0.047)	0.100* (0.046)	0.010 (0.008)	0.018 (0.011)
Fiscal rule index (IMF)	0.048 (0.206)	0.065 (0.208)	-0.367 (0.249)	-0.318 (0.258)	0.314 (0.281)	0.275 (0.276)
Maastricht	0.599* (0.246)	0.565* (0.253)	1.345*** (0.322)	1.260*** (0.344)	-0.422 (0.435)	-0.208 (0.369
N	605	605	444	444	161	161
Adjusted R^2	0.595	0.594	0.658	0.657	0.443	0.468

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.9. Regression results. Dependent variable: annual change in government consumption expenditure, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.110 (0.073)	0.165 (0.286)	0.094 (0.071)	0.132 (0.342)	0.210 (0.158)	0.278 (0.867)
Right-left	-0.005 (0.005)	0.015 (0.022)	-0.006 (0.004)	-0.009 (0.029)	0.007 (0.015)	-0.039 (0.077)
Quality of government	-0.027 (0.069)	-0.026 (0.099)	-0.024 (0.081)	-0.012 (0.127)	-0.385 (0.230)	-0.381 (0.077)
Caretaker time	0.597 (0.461)	0.629 (0.456)	0.605 (0.477)	0.602 (0.477)	-0.014 (1.006)	-0.013 (0.977)
Effective no. of parliamentary parties	0.017 (0.082)	0.017 (0.082)	0.088 (0.095)	0.088 (0.095)	-0.254 (0.159)	-0.268 (0.168)
No. of gov't parties × QoG		-0.006 (0.034)		-0.005 (0.038)		-0.013 (0.134)
Right-left × QoG		-0.002 (0.003)		0.000 (0.003)		0.007 (0.013)
Lagged expenditure level	-0.190*** (0.025)	-0.190*** (0.025)	-0.148*** (0.024)	-0.148*** (0.024)	-0.338*** (0.053)	-0.348*** (0.055)
GDP change	-0.168*** (0.014)	-0.167*** (0.014)	-0.170*** (0.015)	-0.170*** (0.015)	-0.158*** (0.025)	-0.157*** (0.025)
Unemployment	-0.046* (0.019)	-0.044* (0.020)	-0.067*** (0.019)	-0.068** (0.020)	-0.028 (0.044)	-0.020 (0.048)
Debt	0.010** (0.004)	0.010** (0.004)	0.005 (0.003)	0.006 (0.003)	0.013 (0.009)	0.013 (0.010)
Inflation	-0.001* (0.001)	-0.001 (0.001)	-0.022 (0.020)	-0.022 (0.020)	-0.002* (0.001)	-0.002* (0.001)
Fiscal rule index (IMF)	-0.017 (0.107)	-0.016 (0.105)	0.117 (0.098)	0.120 (0.099)	-0.468** (0.174)	-0.477** (0.177)
Maastricht	-0.145 (0.157)	-0.148 (0.156)	-0.080 (0.143)	-0.084 (0.142)	-0.910 (0.468)	-0.888 (0.472)
N	607	607	444	444	163	163
Adjusted R^2	0.287	0.288	0.274	0.272	0.385	0.381

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.10. Regression results. Dependent variable: annual change in the compensation of employees, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.064 (0.046)	0.079 (0.193)	0.001 (0.044)	0.056 (0.174)	0.158 (0.113)	-0.934 (0.578)
Right-left	-0.006* (0.003)	-0.000 (0.015)	-0.003 (0.003)	0.010 (0.019)	-0.005 (0.011)	0.088 (0.066)
Quality of government	-0.108 (0.071)	-0.106 (0.090)	0.010 (0.061)	0.019 (0.087)	-0.530* (0.254)	-0.983* (0.350)
Caretaker time	0.361 (0.324)	0.375 (0.331)	0.231 (0.264)	0.288 (0.255)	-0.042 (0.977)	0.238 (0.957)
Effective no. of parliamentary parties	0.013 (0.057)	0.012 (0.057)	-0.022 (0.060)	-0.026 (0.061)	0.059 (0.159)	0.113 (0.164)
No. of gov't parties × QoG		-0.002 (0.025)		-0.006 (0.022)		0.183 (0.093)
Right-left × QoG		-0.000 (0.002)		-0.001 (0.002)		-0.015 (0.011)
Lagged compensation of employees	-0.214*** (0.034)	-0.214*** (0.034)	-0.212*** (0.036)	-0.210*** (0.036)	-0.168 (0.121)	-0.177 (0.106)
GDP change	-0.078*** (0.010)	-0.078*** (0.009)	-0.098*** (0.013)	-0.098*** (0.013)	-0.076*** (0.017)	-0.078*** (0.017)
Unemployment	-0.032* (0.013)	-0.032 (0.013)	-0.028* (0.014)	-0.026 (0.014)	-0.090** (0.028)	-0.105*** (0.029)
Debt	-0.000 (0.003)	-0.000 (0.003)	-0.003 (0.003)	-0.003 (0.003)	0.010 (0.008)	0.011 (0.009)
Inflation	-0.002** (0.000)	-0.002* (0.000)	-0.023 (0.025)	-0.026 (0.024)	-0.002* (0.001)	-0.002* (0.001)
Fiscal rule index (IMF)	-0.170* (0.071)	-0.170* (0.073)	0.031 (0.089)	0.031 (0.091)	-0.417** (0.131)	-0.398** (0.119)
Maastricht	0.067 (0.117)	0.067 (0.119)	-0.087 (0.149)	-0.093 (0.151)	-0.308 (0.239)	-0.403 (0.220)
N	540	540	390	390	150	150
Adjusted R^2	0.220	0.219	0.296	0.295	0.216	0.254

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

A5.11. Regression results. Dependent variable: annual change in transfers and subsidies, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.004 (0.206)	-0.323 (0.706)	0.125 (0.343)	-0.191 (0.923)	-0.121 (0.244)	-0.073 (1.326)
Right-left	0.007 (0.016)	-0.107 (0.083)	0.007 (0.018)	-0.171 (0.161)	-0.009 (0.034)	0.312 (0.158)
Quality of government	-0.373 (0.221)	-0.430 (0.296)	-0.348 (0.323)	-0.374 (0.418)	0.024 (0.374)	0.421 (0.435)
Caretaker time	-1.034 (1.529)	-1.226 (1.520)	0.413 (2.500)	-0.159 (2.403)	0.153 (1.678)	0.187 (1.753)
Effective no. of parliamentary parties	0.031 (0.308)	0.010 (0.312)	-0.339 (0.465)	-0.293 (0.447)	0.248 (0.612)	0.538 (0.588)
No of gov't parties × QoG		0.039 (0.097)		0.030 (0.120)		0.011 (0.203)
Right-left × QoG		0.014 (0.009)		0.020 (0.018)		-0.053* (0.027)
Lagged transfers and subsidies	-0.308*** (0.030)	-0.312*** (0.031)	-0.318*** (0.039)	-0.323*** (0.039)	-0.397*** (0.054)	-0.400 *** (0.054)
GDP change	-0.252*** (0.060)	-0.253*** (0.060)	-0.208* (0.089)	-0.207* (0.088)	-0.269** (0.090)	-0.282** (0.090)
Unemployment	0.005 (0.064)	0.011 (0.064)	-0.029 (0.089)	-0.044 (0.087)	0.057 (0.095)	0.017 (0.090)
Debt	0.012 (0.010)	0.013 (0.010)	0.030 (0.016)	0.030 (0.016)	-0.022 (0.018)	-0.023 (0.016)
Inflation	-0.008*** (0.001)	-0.008*** (0.001)	-0.478** (0.182)	-0.456* (0.182)	-0.005** (0.002)	-0.006*** (0.002)
Fiscal rule index (IMF)	-0.121 (0.324)	-0.107 (0.312)	-0.149 (0.480)	-0.145 (0.480)	0.126 (0.455)	0.202 (0.439)
Maastricht	-0.052 (0.483)	-0.048 (0.485)	-0.397 (0.906)	-0.419 (0.924)	0.260 (0.676)	-0.000 (0.641)
N	410	410	275	275	135	135
Adjusted R^2	0.242	0.246	0.220	0.225	0.372	0.382

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.12. Regression results. Dependent variable: annual change in government gross capital formation, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.064 (0.041)	0.190 (0.165)	-0.005 (0.044)	-0.081 (0.200)	0.142 (0.077)	0.224 (0.339)
Right-left	-0.001 (0.003)	0.001 (0.013)	0.000 (0.002)	-0.005 (0.020)	-0.003 (0.007)	0.020 (0.041)
Quality of government	0.066 (0.057)	0.105 (0.074)	0.059 (0.053)	0.038 (0.088)	0.152 (0.165)	0.197 (0.208)
Caretaker time	-0.013 (0.319)	-0.041 (0.325)	-0.052 (0.280)	-0.057 (0.278)	-0.920 (0.815)	-0.959 (0.826)
Effective no. of parliamentary parties	-0.046 (0.052)	-0.050 (0.053)	0.016 (0.051)	0.017 (0.052)	-0.109 (0.098)	-0.106 (0.102)
No. of gov't parties × QoG		-0.017 (0.021)		0.009 (0.023)		-0.012 (0.053)
Right-left × QoG		-0.000 (0.001)		0.000 (0.002)		-0.004 (0.007)
Lagged gross capital formation	-0.365*** (0.040)	-0.364*** (0.040)	-0.379*** (0.053)	-0.379*** (0.054)	-0.400*** (0.071)	-0.400*** (0.071)
GDP change	0.007 (0.008)	0.007 (0.008)	0.000 (0.010)	0.000 (0.010)	0.016 (0.011)	0.016 (0.011)
Unemployment	-0.053*** (0.012)	-0.052*** (0.012)	-0.051*** (0.014)	-0.052*** (0.014)	-0.057* (0.025)	-0.059* (0.025)
Debt	-0.004 (0.003)	-0.004 (0.003)	-0.008** (0.003)	-0.008** (0.003	0.001 (0.006)	0.001 (0.006)
Inflation	-0.001 (0.001)	-0.001 (0.001)	-0.046* (0.023)	-0.046* (0.023)	-0.001 (0.001)	-0.001 (0.001)
Fiscal rule index (IMF)	-0.038 (0.070)	-0.025 (0.070)	0.126 (0.075)	0.119 (0.076)	-0.054 (0.119)	-0.046 (0.120)
Maastricht	0.145 (0.117)	0.133 (0.118)	-0.220 (0.134)	-0.214 (0.136)	0.397 (0.276)	0.379 (0.276)
N	475	475	312	312	163	163
Adjusted R^2	0.241	0.241	0.267	0.266	0.269	0.266

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.13. Regression results. Dependent variable: cyclically adjusted budget balance (CAB), % of potential GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.171 (0.119)	0.423 (0.512)	-0.143 (0.154)	0.644 (0.814)	-0.011 (0.190)	0.130 (0.819)
Right-left	0.012 (0.007)	0.007 (0.044)	0.011 (0.008)	-0.010 (0.055)	-0.008 (0.019)	-0.247 (0.130)
Quality of government	0.035 (0.149)	0.214 (0.213)	0.057 (0.180)	0.289 (0.289)	-0.146 (0.347)	-0.210 (0.462)
Caretaker time	-0.066 (1.144)	-0.154 (1.159)	-0.387 (1.347)	-0.402 (1.378)	1.495 (1.234)	1.458 (1.279)
Effective no. of parliamentary parties	0.124 (0.146)	0.113 (0.146)	0.143 (0.187)	0.148 (0.187)	0.099 (0.263)	0.096 (0.249)
No. of gov't × QoG		-0.078 (0.068)		-0.096 (0.098)		-0.029 (0.130)
Right-left × QoG		0.001 (0.005)		0.003 (0.006)		0.042 (0.022)
Lagged CAB	0.708*** (0.033)	0.704*** (0.034)	0.708*** (0.041)	0.705*** (0.042)	0.564*** (0.080)	0.515*** (0.088)
GDP change	0.022 (0.033)	0.023 (0.034)	0.067 (0.044)	0.065 (0.044)	0.006 (0.037)	0.017 (0.038)
Unemployment	0.068 (0.037)	0.070 (0.037)	0.027 (0.053)	0.026 (0.055)	0.170*** (0.047)	0.200*** (0.051)
Debt	0.016* (0.007)	0.017* (0.007)	0.025** (0.009)	0.026** (0.010)	0.000 (0.014)	0.002 (0.014)
Inflation	0.006*** (0.001)	0.006*** (0.001)	0.152* (0.064)	0.160* (0.063)	0.006*** (0.002)	0.006*** (0.002)
Fiscal rule index (IMF)	0.179 (0.188)	0.239 (0.194)	-0.225 (0.241)	-0.165 (0.246)	0.736* (0.268)	0.661* (0.279)
Maastricht	0.259 (0.245)	0.184 (0.257)	1.103*** (0.327)	1.020** (0.343)	-0.627 (0.434)	-0.435 (0.432)
N	582	582	426	426	156	156
Adjusted R^2	0.462	0.462	0.514	0.514	0.305	0.325

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A5.14. Regression results. Dependent variable: primary balance, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.143 (0.155)	0.458 (0.546)	-0.149 (0.191)	0.356 (0.800)	-0.131 (0.168)	0.268 (0.667)
Right-left	0.037*** (0.011)	-0.036 (0.053)	0.034** (0.012)	-0.129 (0.081)	0.028 (0.020)	-0.233* (0.097)
Quality of government	0.310 (0.182)	0.532* (0.246)	0.327 (0.213)	0.550 (0.295)	-0.139 (0.342)	-0.138 (0.358)
Caretaker time	-0.510 (1.394)	-0.860 (1.420)	-1.656 (1.596)	-2.210 (1.616)	1.088 (0.928)	1.032 (1.283)
Effective no. of parliamentary parties	0.022 (0.227)	-0.009 (0.224)	0.021 (0.314)	0.058 (0.308)	0.314 (0.268)	0.183 (0.245)
No. of gov't parties × QoG		-0.085 (0.075)		-0.072 (0.099)		-0.074 (0.105)
Right-left × QoG		0.009 (0.006)		0.018* (0.009)		0.042** (0.015)
Lagged primary balance	0.559*** (0.038)	0.560*** (0.038)	0.577*** (0.049)	0.576*** (0.048)	0.326*** (0.064)	0.304*** (0.067)
GDP change	0.322*** (0.041)	0.322*** (0.040)	0.440*** (0.059)	0.440*** (0.059)	0.222*** (0.032)	0.231*** (0.033)
Unemployment	-0.008 (0.054)	0.002 (0.054)	0.018 (0.082)	0.011 (0.083)	-0.037 (0.056)	-0.009 (0.050)
Debt	0.030** (0.011)	0.030** (0.011)	0.031* (0.013)	0.031* (0.013)	0.055** (0.017)	0.057*** (0.016)
Inflation	0.043*** (0.010)	0.045*** (0.010)	0.548*** (0.109)	0.569*** (0.107)	0.033*** (0.008)	0.041*** (0.011)
Fiscal rule index (IMF)	0.325 (0.288)	0.417 (0.288)	-0.302 (0.384)	-0.216 (0.385)	0.293 (0.280)	0.227 (0.278)
Maastricht	0.643 (0.356)	0.582 (0.359)	1.912** (0.635)	1.785** (0.658)	-0.355 (0.460)	-0.116 (0.394)
N	446	446	285	285	161	161
Adjusted R^2	0.551	0.553	0.649	0.652	0.447	0.474

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Chapter 6
The Dispersion of Power: A Neglected Aspect of Fragmentation

The preceding chapter implicitly assumed that all parties in cabinet are equally relevant so that 'counting heads' is sufficient to measure the degree of fragmentation. The relationship between this notion and the conclusion laid down in Chapter 3, according to which the management of the budgetary commons is not only representative but also necessarily collective, was effectively by-passed as emphasis was more on the representation aspect. In this chapter, the focus is turned to the requirement of collective management. As in the previous chapter, data from the entire set of 28 member states is used and the two subsets of countries are also considered separately.

In concrete terms, this chapter asks whether and how the distribution of power conditions the effects that the number of cabinet parties has on fiscal policy outcomes, given the notion that not all parties are necessarily equally relevant when it comes to having bills passed in the parliament. Conversely, the consent of some parties may be considerably more important than that of others. These differences are plausibly reflected in parties' ability to channel funds to their 'projects', on the one hand, and to prevent the channelling of resources to the projects of other parties, on the other. As was concluded in the previous chapter, the quality of government affects the extent to which parties are motivated to channel funds to distributive purposes, and therefore the argument deals with quite a complicated set of conditional effects.

The empirical analyses reported in this chapter make use of an index of *a priori* voting power interpreted as a measure of bargaining power. In this view, the power of a party depends on its ability to turn losing coalitions into winning ones and vice versa. The main argument to be developed can be summarised as follows. The effect of the *number of government parties* becomes stronger as the *distribution of voting power* becomes more equal. When parties are equal in terms of voting power, each of them is equally capable of making or breaking winning coalitions and therefore equally capable of withdrawing resources from the pool of tax funds. Conversely, equally powerful parties are not capable of preventing each other from withdrawing funds, even though they presumably would like to do so. Hence, the chapter takes a somewhat different approach to the fragmentation of decision-making power than the procedural fragmentation literature (e.g. Hallerberg *et al.* 2009). Whereas the latter asks what kinds of procedural rules governing budget-making give various interests access to public funds, the approach adopted here focusses on the initial inter-party bargaining situation where policies are laid down. The approaches should be considered complementary rather than rivalrous.

This chapter not only contributes to the literature on fragmented decision making but also to the literature on voting power. In the latter literature, much emphasis has

been put on normative issues, such as whether the division of power in the light of power indices is fair – it has been considerably less common to ask what power indices explain in empirical analysis.

Given that the quality of state institutions was argued to be connected to the prevalence of distributive issues in politics, the interaction between the number of government parties and the distribution of voting power is expected to depend on the quality of government, so that it is strongest when the quality of government is very low but weakens as the quality of government improves. As in the previous chapter, the primary emphasis is on spending as it is likely to react in the most direct way to changes in the composition of governments and parliaments, while government revenue, debt and the budget balance react in a weaker and less systematic manner.

The chapter begins with an overview of the measurement of voting power and briefly reviews the literature on power indices. Thereafter, it is explicated why the distribution of voting power matters in the management of the budgetary commons. Such an explication is especially important as the indices of voting power discussed pertain to binary choices in voting situations while inter-party bargaining is about more-or-less questions that must effectively be settled unanimously. The chapter then goes on to test the claim that the effect of the number of cabinet parties is the stronger the more evenly power is distributed among the parties in government. According to the results reported later on, such a conditional effect is indeed discernible in European data, but only in specific settings and with some exceptions – in line with the overarching argument put forward in this work that universally applicable effects are unlikely.

What Is Voting Power?

Most member states of the European Union use some proportional electoral rule to elect their parliaments. Proportionality refers to the relationship between parties' vote and seat shares: the closer they are to each other, the more proportional the allocation of seats becomes. In practice, proportional electoral rules produce outcomes that deviate from exact proportionality to some extent (Taagepera and Shugart 1989). Perfect proportionality would in most cases require that parties are allocated fractions of seats, which is not possible. Moreover, the formulae used in transforming vote shares into seat shares may introduce further disproportionality, as do small district magnitudes and electoral thresholds. However, even a perfectly proportional allocation of seats would not generally guarantee that legislative influence is exactly proportional to electoral support (Nurmi 2014).

Voting power here simply means the extent to which a party is able to control the outcome of a parliamentary vote (Felsenthal and Machover 1998, 2). Other kinds of players can also come into question in different contexts, such as when one asks how much member states can influence decisions in the Council of Ministers – to keep the discussion on a relatively concrete level, the terminology used here refers to the players

of a parliamentary setting. Indices of *a priori* voting are based on the notion that the amount of power at the disposal of a party depends on its ability to make or break winning coalitions, that is, coalitions that have at least as many votes as the decision rule specifies and can thus determine the outcome of a vote. In other words, the *a priori* voting power of a party is related to its critical membership in coalitions, critical in the sense that the absence of the party would turn a winning coalition into a losing one.

Power indices are solutions to *n*-player cooperative games. The focus here is on power indices that are defined for simple games, where any coalition is either winning or non-winning and choices are binary, so that a proposal is either accepted or rejected. Denote by N the set of all players whose number is n, and denote by S a coalition with s members. The characteristic function $v(S)$ indicates the value of coalition S, so that $v(S) = 1$ when S is winning and $v(S) = 0$ when S is not winning. A coalition is winning if it has at least as many votes as the decision rule k specifies. That is, denoting the set of winning coalitions by W, $S \in W$ if and only if $w(S) \geq k$, where $w(S)$ is the number of votes of the coalition.

The Shapley-Shubik index, alongside the non-normalised and normalised Banzhaf indices,[17] are the best-known, 'classical' power indices. They measure power in somewhat different ways. The Shapley-Shubik index of party i, denoted by ϕ_i, is

$$\phi_i = \sum_{S \subseteq N} \frac{(s-1)!\,(n-s)!}{n!}[v(S) - v(S - \{i\})]$$

where $i = 1, 2, \ldots, n$. In other words, the index is the sum of the probabilities of party i being pivotal in coalition S times the number of positions in which it can turn a winning coalition into a losing one. The Shapley-Shubik index can hence be interpreted as i's weight times its contributions to all possible coalitions (Nurmi 1998, 171). The Shapley-Shubik index is a special case of the Shapley value or the expected value that a player can obtain by entering a cooperative game of transferable utility, i.e. a game where the winning coalition distributes a prize among its members.

Felsenthal and Machover (1998, 2004) interpret the Shapley-Shubik as a measure of what they call 'P-power', or power as a share of an expected prize. In Felsenthal and Machover's view, this is to be distinguished from 'I-power', or power as an actor's potential to influence the voting outcome, which is measured by the Banzhaf index. The Banzhaf index has two versions, an absolute or unstandardised index and a standardised one. The standardised Banzhaf index β_i of party i is

$$\beta_i = \frac{\sum_{S \subseteq N}[v(S) - v(S - \{i\})]}{\sum_i \sum_{S \subseteq N}[v(S) - v(S - \{i\})]}$$

[17] The Banzhaf index is also known as the Penrose-Banzhaf index. It was invented by L.S. Penrose (1946) and re-invented, independently of Penrose, by John F. Banzhaf (1965). The Shapley-Shubik index was introduced by L.S. Shapley and Martin Shubik (1954).

The Banzhaf index thus measures the relative number of critical presences or 'swings', i.e. situations where coalition S is winning but the exclusion of i makes it non-winning. Standardisation yields the ratio of the swings of player i (the numerator) to the total number of swings (the denominator). The unstandardised Banzhaf index differs from the standardised one in that the denominator is 2^{n-1} or the number of coalitions in which i is present. The Shapley-Shubik and standardised Banzhaf indices of all parties always sum to unity, but this is generally not the case for the unstandardised Banzhaf index. The comparability of unstandardised Banzhaf indices across voting situations is therefore limited.

The Banzhaf index considers all winning coalitions. The Holler index or the Public Goods Index (Holler 1982), in turn, is based solely on minimal winning coalitions where each member has a swing. The Holler index PGI_i of player i is

$$PGI_i = \frac{\sum_{S^* \subseteq \mathcal{M}} [v(S^*) - v(S^* \backslash \{i\})]}{\sum_{j \in N} \sum_{S^* \subseteq \mathcal{M}} [v(S^*) - v(S^* \backslash \{j\})]}$$

where $\mathcal{M}$ is the set of minimal winning coalitions S^*. Holler (2007) also provides an interpretation of the index as a measure of actors' responsibility for collective decisions.

Felsenthal and Machover's interpretation of the Shapley-Shubik index as a measure of 'P-power' would appear to defend using the Shapley-Shubik index in the present context where the distribution of resources is at stake. The distinction between the Shapley-Shubik and Banzhaf indices as measures of P- and I-power has been questioned, however (Turnovec 2004). In practice, the Banzhaf and Shapley-Shubik indices tend to strongly correlate, although they are generally not identical. They do, however, generally place players in the same order in unicameral voting bodies.[18] The correlation between the two is also strong in the data used here, so the choice between them is unlikely to have consequences for empirical results.

Prior Uses of *A Priori* Indices

The main fields of application of power indices have been in the characterisation and normative evaluation of institutions. For example, it has been asked how power is distributed in EU decision-making bodies (Herne and Nurmi 1993; Pajala and Widgrén 2004), whether those distributions can be considered fair (Laruelle and Widgrén 1998), and what would constitute a fair voting procedure (Le Breton *et al.* 2012). Given that voting weights in the EU institutions are allocated to the member states in proportion to population and the size of the economy, power indices help assess whether actual influence is proportional to those criteria. Generally, it is not.

[18] I thank Hannu Nurmi for pointing this out to me.

Despite the long traditions of the voting power literature and extensive uses of power indices in normative research, they have less frequently been used as explanatory variables in empirical research. The small number of uses to which power indices have been put may in part reflect the assumptions underlying the best-known indices that can appear exceedingly unrealistic and restrictive. Moreover, the conceptualisation of power in terms of the ability to affect voting outcomes can be considered overly simplistic, as it neglects other dimensions of power that are known to be many, such as power as the ability to define the concepts people use in perceiving and describing the surrounding reality.

There is, however, some evidence that the distribution of *a priori* voting power has consequences for the way resources are distributed in political processes. The existing evidence gives at least preliminary support for the expectation that voting power can also affect the effect that the number of parties has on the management of public funds.

The consequences of voting power for negotiation outcomes in the Council of Ministers have received attention in the empirical literature. Bailer (2004) argues that voting power is of limited importance in determining the bargaining success of the member states. However, contrary views about the relevance of voting power also exist. Kauppi *et al.* (2004) and Kauppi and Widgrén (2007) study whether member states' Shapley-Shubik indices rather than socio-economic variables and other indicators of 'deservingness' are more plausible predictors of the budget allocations member states receive. Their results suggest that the distribution of voting power is a significant predictor of how much of EU funds member states receive, even after controlling for a host of other explanatory variables.

In a study more closely related to the theme of the present work, Huber *et al.* (2003) examine how the voting power of government parties, measured using the Banzhaf index, affects changes in debt levels in a sample of 22 OECD countries. According to the results of Huber *et al.*, the dispersion of voting power, i.e. a large standard deviation of government parties' Banzhaf indices, is associated with smaller increases (or larger decreases) in debt levels. This means that governments consisting of equally powerful parties, indicated by a small standard deviation of Banzhaf indices, tend to run higher deficits. The theoretical basis of Huber *et al.*'s analysis differs somewhat from that of the present study. It draws on the weak government hypothesis (Roubini and Sachs 1989a, 1989b) and the war of attrition model (Alesina and Drazen 1991). These theoretical constructions state that budget stabilisations are delayed since internally divided governments cannot impose the costs of budget consolidation either on the opposition or the constituencies of government parties. Huber *et al.* also test another aspect of government strength, the strength of the government vis-à-vis the opposition. This is operationalised as the sum of government parties' power indices but has no discernible effects. Huber *et al.* do not consider the number of parties in their analysis.

A Priori Power and Bargaining in the Fiscal Commons

The power measured by the indices reviewed above is '*a priori*' because it takes nothing into account except the decision rule and voting weights. They also pertain to very simple settings where choices are binary yes-or-no questions and coalitions are either winning or losing. The relevance of all this might at first sight appear questionable when it comes to the making of budgets in real-world parliamentary democracies. The assumptions underlying the power indices seem to make sense in the final approval stage in the parliament, where budget items must either be accepted or rejected. However, much has happened before the proposals reach this final stage. In addition, political issues in general and budgetary choices in particular are seldom either/or questions considered in isolation from one another. Instead, how tax funds are used is a complex web of interlinked more-or-less questions resolved by negotiating rather than voting. However, the voting weights of parties and their ensuing abilities to make or break coalitions at the decisive stage can be argued to affect parties' bargaining strengths in the earlier phases of the process.

Annick Laruelle and Federico Valenciano (2007; 2008a; 2008b; 2009a; 2009b) differentiate between what they call 'take-it-or-leave-it' committees and 'bargaining' committees. The former make decisions by voting for or against proposals submitted by an external actor and cannot make changes to the proposal – that is, they can only 'take it or leave it'. Bargaining committees, in contrast, are characterised by a number of features. They deal with different issues over time and different preference configurations may emerge for feasible agreements on each issue. The aim of the committee is to find a consensus on each issue and they can adjust proposals during the process. Moreover, any agreement can be enforced by any winning coalition. As Laruelle and Valenciano put it, bargaining in such settings takes place in the shadow of a voting rule. Laruelle and Valenciano, moreover, see the essence of decisiveness not in being critical in coalitions but in the ability to affect outcomes by bargaining: '[*d*]*ecisiveness can be a form or, more precisely, a source of power only in a situation in which there is room for negotiation and the possibility of using it with this purpose*' (Laruelle and Valenciano 2009b, 459, original emphasis). They go on to argue that a 'take-it-or-leave-it' environment precludes that possibility.

Laruelle and Valenciano ask what kinds of agreements can generally be expected when bargaining outcomes are subject to approval by majority voting. They argue that a reasonable outcome is given by the weighted Nash bargaining solution where weights are a function of the decision rule, the weights representing bargaining power. In a bargaining game with two players, *i* and *j*, the Nash bargaining solution is the utility allocation (u_i, u_b) that maximises the product $(u_i - \underline{u}_i)(u_j - \underline{u}_j)$ where $\underline{u}_i, \underline{u}_j$ are the players' conflict payoffs they receive in case of no unanimous agreement. Harsanyi (1977, 197) shows that in an *n*-player simple bargaining game, the solution is the payoff vector that maximises the *n*-person Nash product $\prod_{i \in N}(u_i - \underline{u}_i)$.

Laruelle and Valenciano provide an interpretation of players' Shapley-Shubik indices as weights in a weighted or non-symmetric Nash bargaining solution. They develop this interpretation in a cooperative framework (Laruelle and Valenciano 2007; see also Harsanyi 1977) but also provide a non-cooperative justification. That is, the toolkit of cooperative game theory is better suited for characterising the outcomes that can reasonably be expected, whereas a non-cooperative framework allows for introducing more institutional detail and therefore providing additional plausibility to the interpretation. Laruelle and Valenciano show that in a non-cooperative setting, the Shapley-Shubik index and other power indices emerge as limit cases.

In the present context, an intuition to the interpretation of *a priori* power indices as measures of bargaining power 'in the shadow of a voting rule,' to quote Laruelle and Valenciano, can be given as follows. When bargaining over the composition of the policy package the government is going to adopt, parties cannot only make demands but also issue threats, for example about striking down the demands of another party in the legislative phase. The credibility of such threats depends on the position of the party in potential coalitions. If there are few alternative coalitions in which the party is crucial, its potential to pose credible threats, on the one hand, and to use its coalition-breaking potential as a means of trade, on the other, is low. It is therefore unlikely to strike very profitable deals on distributive matters. However, a party that is pivotal in a number of potential coalitions has much more bargaining leverage. If its demands go unheeded, it may credibly threaten to leave the coalition and make another coalition the winning one.

In the previous chapter, potential asymmetries in parties' bargaining power were neglected as it was assumed that each party that becomes part of the ruling coalition is able to extract resources from the tax base. Parties' possibilities for unilateral action may be limited, however. For example, as Martin and Vanberg (2011) argue, coalition partners may seek to control each other's actions by procedural and institutional means during the government term. Moreover, their ability to affect the outcomes of parliamentary votes is likely to condition the bargaining outcomes they reach. The specific ways in which parties interact, how they affect each other's choices and how they bargain is not central to the argument presented here. Rather, parties' seat shares in the parliament provide resources that can be used in different ways when policies are made.

As before, the argument starts from the spending side of the budget. The previous chapter shared with much of the previous literature the assumption that parties are primarily interested in channelling funds to policies they consider important on programmatic or ideological grounds (when the quality of government is high) or bring material benefits to their clientele (when the quality of government is low).

Consider the case where the quality of government is low and, according to the preceding chapter, distributive motives are on the fore. In the previous chapter, the cost side hardly entered the picture, but parties are not likely to neglect them altogether. As far as budgetary decisions take the form of a prisoner's dilemma, the best outcome for

any party would be such that the party in question is able to finance the programmes it considers important, while policies it opposes receive no funds. When distributive policies are concerned, from the perspective of a party associated with specific recipient groups, the ideal outcome would be such that the policies prioritised by its target population are provided, whereas those of other parties' target populations are not. The latter would impose costs either on the target populations of the party in question or on the general public, which could weaken the electoral prospects of the party. Moreover, a smaller amount of resources going to other parties' projects implies more room for manoeuvre in public finance, which may be especially relevant if public finances are closely monitored, as they are in the European Union, including the requirement to meet the so-called converge criteria before EU accession.

Parties therefore not only have incentives to withdraw funds from the tax base but also to prevent others from doing so, and the attainment of these goals depends on parties' bargaining strengths. In Chapter 2, the maximand of a party was expressed as

$$NB_P = \sum_{i=1}^{m} NB(x_i) = \sum_{i=1}^{m} B(x_i) - \frac{m}{k}\sum_{i=1}^{m} C(x_i) - \frac{m}{k}\sum_{j \neq i} C(x_j)$$

(cf. Bawn and Rosenbluth 2006). Parties are typically assumed to seek the maximisation of NB_P by providing goods, x_i, to their target populations. Maximisation can, however, also be partially based on minimising the costs of goods going to the target groups of other parties or on imposing a larger share of the costs associated with x_i onto others, thereby minimising the last two terms of the expression.

A party whose bargaining position is strong compared to other parties is not only able to extract funds to its preferred purposes (the first term on the right-hand side of the above expression) but, in order to contain costs (the last term of the expression), is also able to prevent others from extracting resources. This can be contrasted with a scenario in which all parties have equal bargaining power. The setting conforms more readily to the assumptions of basic models of fragmented decision making. Assuming that the concentration of benefits and diffusion of costs encourages parties to prioritise the former, all parties are able to extract funding as they face little resistance on cost limitation grounds.

As a consequence, government spending increases with the number of parties when bargaining power is equally distributed, whereas the effect is weak or indiscernible when power is concentrated. The effects on spending are also reflected in government revenue, although the revenue side can again be expected to react more mutedly as some of the spending increases can be financed by incurring debt. Hence, government revenue and debt are also expected to increase with the number of cabinet parties when power is equally distributed, but these effects should also be weak when power is unequally distributed.

To recapitulate, what was said above pertains to settings where the number of cabinet parties is expected to have fiscal consequences in the first place due to more gen-

eral societal circumstances, i.e. in post-communist societies where the quality of government is relatively low. Otherwise, the distribution of power should have no discernible effects.

Empirical Strategy

Power is here measured using the Shapley-Shubik index (see Harsanyi 1977; Laruelle and Valenciano 2007). As mentioned above, different power indices tend to correlate and therefore the choice between, say, Shapley-Shubik and Banzhaf is likely to have little effect on substantive conclusions. To be sure, some of the regressions reported below were re-run by substituting the normalised Banzhaf index for the Shapley-Shubik index. As the differences in the regression results were negligible and did not have qualitative implications, the results from those replications are not reported (they are available from the author on request). The power indices were calculated using the PowerSlave Power Index Calculator (Pajala *et al.* 2002) and based on data on election results (i.e. the distribution of parliamentary seats among parties) obtained from Döring and Manow (2016). When calculating the indices, it has been assumed that any coalition whose size is $\frac{N}{2}+1$ or larger, where N is the number of seats in the (lower chamber of the) parliament, is winning.

As in Huber *et al.* (2003), the distribution of power is here measured with a familiar statistical measure of dispersion, the standard deviation. When calculating the standard deviation, the set of cabinet parties is considered the relevant population. That is, as data on every member of the population is available, the standard deviation of Shapley-Shubik indices is obtained from

$$\sigma_\phi = \sqrt{\frac{1}{n}\sum_{i=1}^{n}(\phi_i - \bar{\phi})^2}$$

where n is the number of government parties, ϕ_i is the Shapley-Shubik index of party i and $\bar{\phi}$ is the mean of the Shapley-Shubik indices of all government parties. When the power indices become more equal, the sum of the $(\phi_i - \bar{\phi})$ terms approach zero and therefore σ_ϕ approaches zero. Conversely, when indices become more unequal, the squared differences become larger and therefore the standard deviation also becomes larger. When the number of government parties is one, σ_ϕ naturally equals zero. The dispersion of bargaining/voting power among government parties is thus calculated on the basis of their parliamentary seat shares. This may appear contradictory, but notice that calculating the indices based only on the number of seats the government parties control would be misleading because, in that case, one would have to assume that the majority of votes within the government coalition suffices to pass a bill.

In Figure 6.1, σ_ϕ is plotted against the number of cabinet parties in each year in all 28 countries over the entire time period. There is a tendency for the standard deviation

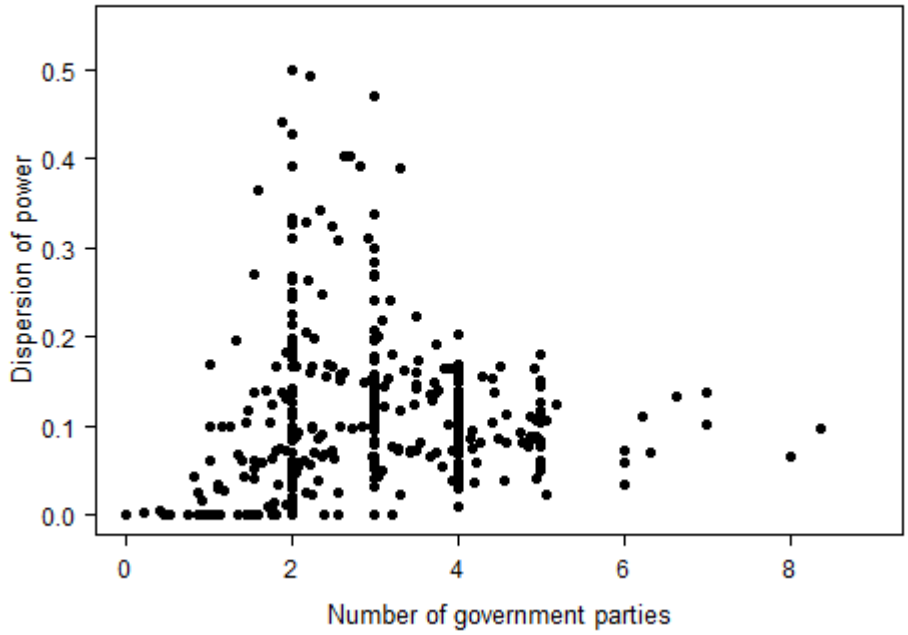

Figure 6.1. The relationship between the dispersion of voting power and the number of government parties.

to rise with the number of parties in government, although there is variation across all coalition sizes. Especially when the number of cabinet parties is from approximately two to three, the standard deviation of power can vary between zero and 0.5, which is the largest number in the data. When the number of parties in government is very large, the standard deviation of power in contrast tends to be fairly low, most likely because in those cases all parties tend to be quite small, vested with little power and therefore relatively equal in terms of voting or bargaining power.

As in the previous chapter, the number of government parties is expected to affect fiscal policy outcomes more strongly in the post-communist member states than in the rest of the countries. Furthermore, the effect is expected to be conditional on the quality of government. The effect is also expected to be conditional on the distribution of bargaining power so that the effect is the stronger the more evenly power is distributed. Combined, this means that the interaction effect between the number of government parties and the distribution of power should be conditioned by the quality of government, so that the interaction effect becomes stronger as the quality of government decreases.

The principal interest is on the marginal effect of the number of government parties conditional on the dispersion of power. Given the three-way interaction model, it is calculated from

$$\frac{\partial y_{i,t}}{\partial (dispersion\ of\ power)_{i,t-1}} = \beta_1 + \beta_4 (quality\ of\ government)_{i,t-1} + \beta_5 (dispersion\ of\ power)_{i,t-1} + \beta_7 (quality\ of\ government \times dispersion\ of\ power)_{i,t-1}$$

(Aiken and West 1991). Applying Kam and Franzese's (2007) recommendation, the marginal effect is calculated on two fixed values of the quality of government variable and plotted against empirically relevant values of the power dispersion variable. This yields two plots with different slopes that show the marginal effect on relatively high and relatively low levels of quality of government. If the hypotheses receive support, the marginal effect plot that corresponds to a low quality of government has a steeper negative slope than the plot pertaining to a high quality of government.

Results

Spending

Total government spending is again considered first as it should be the primary fiscal policy aggregate reacting to political pressures to serve societal groups and interests, but also to programmatic objectives. Only total spending is considered because in the previous chapter it was concluded that this operationalisation best captures the common-pool-problem-like tendencies of budgeting.

Columns I and II in Table 6.1 show the results for the entire set of 28 countries, Column I containing a model where the number of government parties is interacted with the dispersion of power, this interaction in turn being interacted with quality of government in Column II. In Column I, the coefficient on the number of government parties has a positive sign, whereas the interaction term has a negative sign. Together they indicate that when power is distributed exactly equally, i.e. when the standard deviation of cabinet parties' voting powers is zero, the addition of parties to the coalition tends to drive spending upwards, that effect becoming smaller as parties become more unequal in terms of power. Moreover, the positively signed coefficient on the three-way interaction term in Column II indicates that the dependency of the effect of coalition size on the dispersion of power becomes smaller as the quality of government improves. While none of the interactions or their constituent terms is statistically significant in the group of 28 countries, the signs of the coefficients are in line with expectations and serve to illustrate what one should look at in the results.

Table 6.1. Regression results. Dependent variable: annual change in total general government spending, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of gov't parties	0.170 (0.202)	1.021 (0.877)	-0.075 (0.247)	-1.180 (1.614)	0.426 (0.380)	4.951*** (1.284)
Right-left	-0.019* (0.008)	-0.018* (0.008)	-0.007 (0.007)	-0.007 (0.007)	-0.071*** (0.020)	-0.068*** (0.019)
Quality of govern-ment	0.173 (0.166)	0.292 (0.264)	0.162 (0.185)	0.010 (0.354)	1.061* (0.536)	2.405** (0.773)
Dispersion of power	0.674 (3.568)	13.075 (17.909)	-0.987 (4.219)	-11.459 (27.217	0.256 (7.276)	66.636* (32.070)
Caretaker time	0.662 (1.276)	0.651 (1.286)	0.568 (1.579)	0.433 (1.633)	-0.597 (1.675)	-1.290 (1.655)
Effective no. of parliamen-tary par-ties	-0.318 (0.162)	-0.355* (0.165)	-0.224 (0.180)	-0.212 (0.184)	-0.643 (0.346)	-0.788* (0.310)
No. of gov't parties × Dispersion of power	-0.646 (1.669)	-8.656 (7.912)	1.143 (2.181)	9.243 (13.737)	-0.847 (3.302)	-34.426* (14.816)
No. of gov't parties × QoG		-0.112 (0.112)		0.123 (0.184)		-0.735*** (0.218)
Dispersion of power × QoG		-1.698 (2.340)		1.119 (3.240)		-10.889* (5.182)
No. of gov't parties × Dispersion of power × QoG		1.097 (1.062)		-0.902 (1.608)		5.494* (2.458)
Lagged spending level	-0.295*** (0.033)	-0.299*** (0.034)	-0.251*** (0.042)	-0.253*** (0.042)	-0.548*** (0.048)	-0.570*** (0.046)
GDP change	-0.397*** (0.028)	-0.395*** (0.028)	-0.483*** (0.040)	-0.481*** (0.040)	-0.318*** (0.024)	-0.308*** (0.024)
Unem-ployment	-0.003 (0.043)	0.006 (0.044)	0.029 (0.058)	0.032 (0.058)	0.027 (0.068)	0.068 (0.067)
Debt	0.007 (0.008)	0.008 (0.008)	-0.006 (0.009)	-0.007 (0.010)	0.005 (0.027)	0.003 (0.025)
Inflation	-0.014*** (0.001)	-0.014*** (0.001)	-0.139** (0.046)	-0.137** (0.046)	-0.014*** (0.003)	-0.014*** (0.003)

Fiscal rule index (IMF)	-0.583** (0.206)	-0.591** (0.218)	-0.241 (0.250)	-0.267 (0.257)	-0.459 (0.313)	-0.384 (0.295)
Maastricht	-0.133 (0.237)	-0.163 (0.239)	-0.941** (0.304)	-0.877** (0.313)	0.552 (0.582)	0.556 (0.542)
N	607	607	444	444	163	163
Adjusted R^2	0.403	0.403	0.389	0.387	0.544	0.550

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

When all countries are considered, the programmatic orientation of cabinets has the expected effect as more rightist orientations are associated with lower spending. This effect is, again, not visible in the group of countries consisting of the non-post-communist Western and Southern European member states, and no interactions between the number of cabinet parties, the dispersion of power and quality of government are discernible outside the post-communist area.

As was the case in the previous chapter, the effects of political variables are much clearer in the post-communist countries (Columns V and VI of Table 6.1). In particular, the interactions have the expected signs and are statistically significant, as are the constituent terms. In substantive terms, the effect of the number of cabinet parties indeed seems to depend on both the dispersion of voting or bargaining power within the ruling coalition and institutional quality. As it may be difficult to keep track of this chain of conditional effects, a graphical examination is in order.

Figure 6.2 shows the marginal effect of the number of government parties as a function of the dispersion of power in two cases (based on Column VI of Table 6.1). The figure contains two plots, each surrounded by the boundaries of the 95% confidence interval. The 'Low QoG' plot is drawn by estimating the marginal effect across the empirically relevant values of the power dispersion variable when the value of the quality of government score is fixed to 4.67. This is the lowest, Romanian country average in the area. The 'High QoG' plot, in turn, is obtained by fixing the value of the quality of government score to the highest country average in the area, which is 7.45 and pertains to Hungary. Other country averages, and indeed most of all country-years in the data, would be represented by plots located between those actually drawn, but as they would make the figure messier rather than informative, they are better imagined than shown.

The 'Low QoG' plot is downward sloping, and the marginal effect is positive and statistically significant when the dispersion of power is relatively small, i.e. when parties are not very unequal in terms of power. The effect does, however, approach zero when inequality within the coalition increases and eventually loses statistical significance. In contrast, as the quality of government improves, the slope of the marginal effect plot becomes smaller and on sufficiently high quality of government levels, like the Hungarian country average, it even turns positive. However, as the quality of government improves, the amount of power inequality needed to make the effect lose sta-

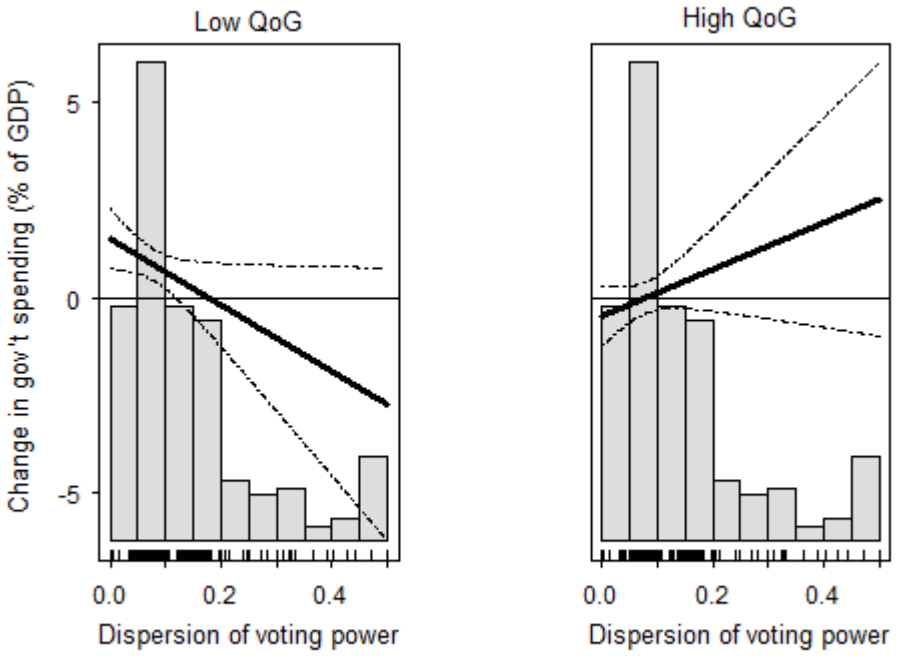

Figure 6.2. The marginal effect of the number of cabinet parties on government spending in the post-communist countries, conditional on the dispersion of power and quality of government.

tistical significance becomes smaller, and in the case depicted by the 'High QoG' plot, it is statistically insignificant on all values of the power dispersion variable.

In the preceding chapter, the effect of coalition size was plotted against the quality of government, and it was possible to see how the effect became smaller and ultimately statistically indiscernible from zero as the quality of government improved (see Figure 5.1). The model reported in Column VI of Table 6.1 also allows for illustrating how this marginal effect changes with the dispersion of power. This is done in Figure 6.3, which contains the same information as Figure 6.2 in a different form. Now the marginal effect is presented as a function of the quality of government in two cases.

The 'Small dispersion' and 'Large dispersion' plots refer to the mean of the power dispersion variable minus or plus one standard deviation. When the dispersion of power is small and parties are almost equally powerful, the familiar downward sloping marginal effect plot is obtained. In contrast, when inequality in terms of power increases, the marginal effect plot turns horizontal and eventually it slopes upward. At the same time, the range of quality of government scores on which the effect is statistically significant becomes smaller and ultimately, as in the case depicted by the 'Large dispersion' plot, it is statistically insignificant on all quality of government levels.

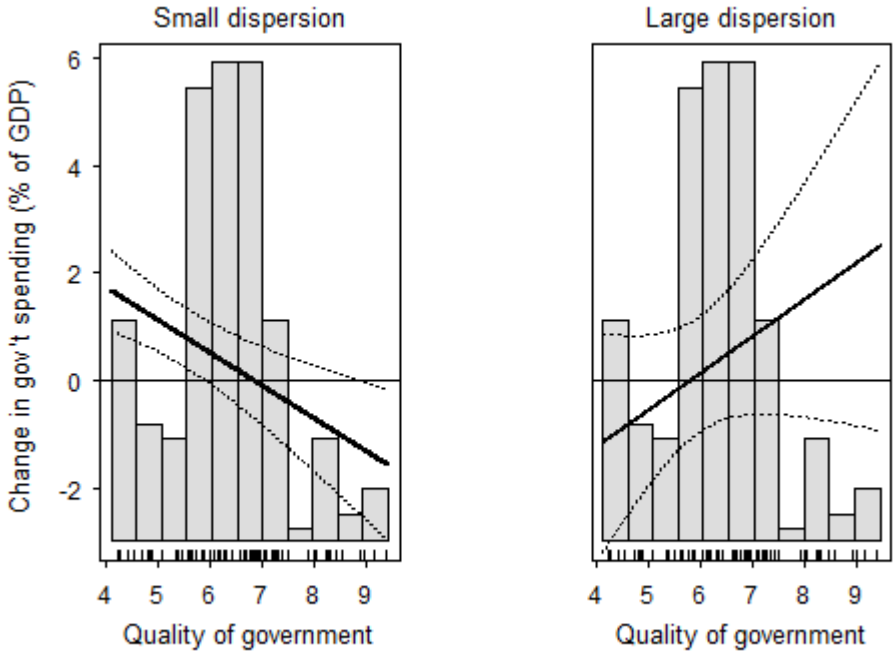

Figure 6.3. The marginal effect of the number of government parties on government spending in the post-communist parties, conditional on quality of government and the dispersion of power.

A noteworthy feature of Figure 6.3 is the fact that the marginal effect is negative and statistically significant when power is equally distributed and the quality of government is very high. While such combinations seldom occur in the data from the post-communist countries, the effect is intriguing as it runs counter to the common expectations about the consequences of multiparty rule. It can also be compared to the minus-signed effect of the effective number of parliamentary parties, which indicates that increased party system fragmentation at the parliamentary level tends to suppress spending. What these seemingly anomalous findings mean and what could explain them will be discussed later at greater length.

Government Revenue

The regression results obtained when the dependent variable is government revenue are reported in Table 6.2. As in the previous chapter, the general impression is that the various explanatory variables have similar effects on spending and revenue, although the effects are somewhat weaker on the revenue side.

Table 6.2. Regression results. Dependent variable: annual change in total general government revenue, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.044 (0.101)	1.175** (0.433)	-0.082 (0.129)	-0.208 (0.027)	0.433 (0.278)	3.434** (1.131)
Right-left	-0.008 (0.004)	-0.006 (0.004)	-0.004 (0.005)	-0.003 (0.005)	-0.038** (0.011)	-0.035** (0.011)
Quality of government	0.080 (0.079)	0.349** (0.124)	0.118 (0.094)	0.276 (0.179)	0.418 (0.254)	1.425** (0.440)
Dispersion of power	3.131 (1.878)	11.254 (8.825)	2.333 (2.400)	3.288 (14.358)	8.156 (4.697)	55.975** (19.858)
Caretaker time	0.626 (0.515)	0.584 (0.525)	0.539 (0.563)	0.673 (0.573)	0.625 (0.837)	0.173 (0.915)
Effective no. of parliamentary parties	-0.054 (0.089)	0.584 (0.525)	-0.029 (0.112)	-0.045 (0.111)	-0.179 (0.217)	-0.267 (0.220)
No. of gov't parties × Dispersion of power	-1.493 (0.856)	-5.964 (3.969)	-0.772 (1.155)	-3.777 (6.824)	-3.070 (1.960)	-25.612** (9.690)
Number of government parties × QoG		-0.141** (0.054)		-0.102 (0.094)		-0.486** (0.169)
Dispersion of power × QoG		-0.944 (1.189)		0.101 (1.723)		-7.710* (3.110)
No. of gov't parties × Dispersion of power × QoG		0.533 (0.541)		0.257 (0.797)		3.659* (1.538)
Lagged revenue level	-0.247*** (0.024)	-0.253*** (0.023)	-0.202*** (0.027)	-0.208*** (0.027)	-0.442*** (0.055)	-0.474*** (0.051)
GDP change	-0.089*** (0.020)	-0.087*** (0.020)	-0.081** (0.025)	-0.083*** (0.025)	-0.078* (0.030)	-0.070* (0.030)
Unemployment	-0.040* (0.020)	-0.034 (0.021)	-0.042 (0.026)	-0.041 (0.026)	0.014 (0.045)	0.040 (0.045)
Debt	0.026*** (0.004)	0.026*** (0.004)	0.023*** (0.005)	0.024*** (0.005)	0.012 (0.014)	0.008 (0.014)
Inflation	-0.006*** (0.001)	-0.006*** (0.001)	-0.010 (0.030)	-0.012 (0.030)	-0.006** (0.002)	-0.006** (0.002)
Fiscal rule index (IMF)	-0.346** (0.131)	-0.286* (0.134)	-0.306 (0.176)	-0.275 (0.175)	0.030 (0.158)	0.084 (0.157)
Maastricht	0.181 (0.169)	0.083 (0.172)	0.038 (0.241)	-0.038 (0.243)	0.153 (0.348)	0.215 (0.343)
N	607	607	444	444	163	163
Adjusted R^2	0.206	0.217	0.147	0.151	0.341	0.359

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

This time, the analysis of data from all 28 countries shows some signs of interaction effects (Column II). However, a comparison of the results obtained by analysing the old member states, Cyprus and Malta (Columns III and IV) with those pertaining to the post-communist countries (Columns V and VI) again suggests that most of the effects that political variables have in EU-wide data follow from the relatively strong effects in the post-communist countries, while no effects are discernible in the rest of the countries.

In the post-communist area, government revenue is related to political variables in almost the same way as spending, except for the fact that empirical associations are generally weaker. The ratio of government ratio to GDP tends to increase with the number of cabinet parties, especially when those parties are equally powerful and institutional quality is low. As the quality of government improves, however, the interaction between the number of government parties and the dispersion of power weakens. Conversely, when parties become more unequal in terms of power, the interaction between the number of government parties and the quality of government is weakened. After examining marginal effects pertaining to the spending side, these conditional effects are easy to conceive. However, to highlight a potentially relevant connection between coalition size and the state of the public economy, a pair of marginal effect plots drawn on the basis of Column VI of Table 6.2 is briefly discussed.

In Figure 6.4, 'Low QoG' and 'High QoG' refer, as before, to the Romanian and Hungarian country averages. On relatively high quality of government levels, the interaction between coalition size and the dispersion of power is virtually zero, as indicated by the almost horizontal marginal effect plot. When the quality of government is low, revenue tends to increase with the number of government parties when coalition members are roughly equal in terms of power, which is fully analogous to the effects on the spending side. However, when the quality of government is low and power is unequally distributed among cabinet parties, the effect of the number of cabinet parties on revenue is statistically significant but with a negative sign, as both boundaries of the confidence interval are below the zero line in the panel on the left. This kind of effect is not discernible on the spending side. A figure where the marginal effect is plotted against the quality of government on different values of the power dispersion variable is not included here as it would be very similar to Figure 6.3. However, the figure would again show that when the dispersion of voting power is large, the effect of coalition size on revenue has a negative sign on low quality of government levels.

There is hence evidence according to which the number of cabinet parties in some cases tends to suppress government revenue rather than make it increase. A possible explanation for this unexpected result, which however is probably relevant in a handful of cases, is that as parties are encouraged to engage in distributive special interest politics when quality of government is low, they may also do so by raising less revenue if they are powerful enough. Recall that it was earlier argued that using the revenue side of the budget for distributive purposes is more difficult than using the spending side, because norms and rules on equal treatment are stronger when it comes to taxes and

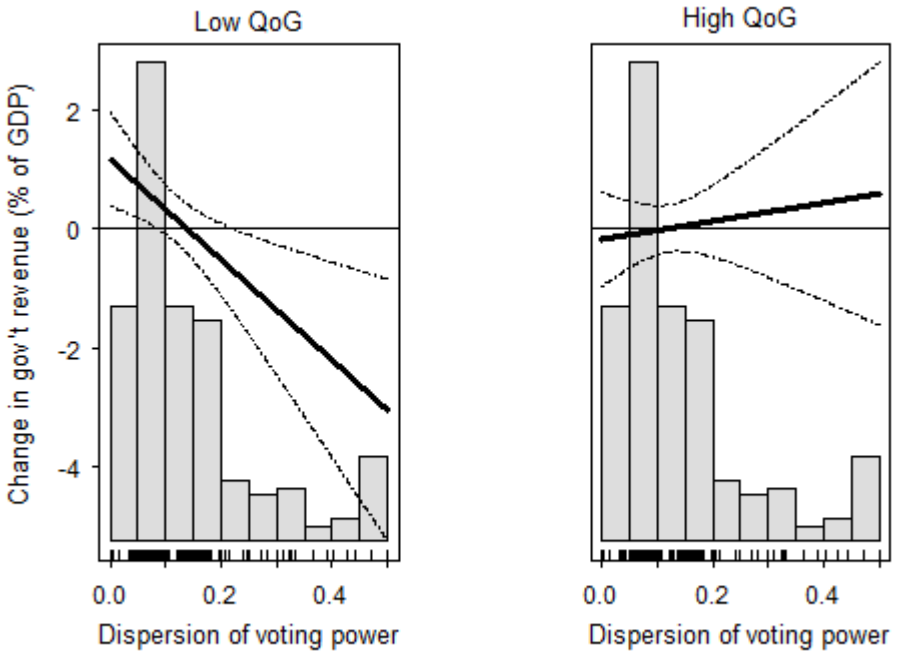

Figure 6.4. The marginal effect of the number of government parties on government revenue in the post-communist countries.

fees than when it comes to spending. A low quality of government by definition means that rules and norms are not applied impartially, and this may make it easier for parties to use government revenue as an instrument of distributive politics. A sufficiently powerful party could then opt to use this instrument at the cost of other less powerful parties, as indicated by the association of this phenomenon with a highly unequal distribution of power.

Debt and Deficits

Discrepancies between the spending and revenue sides could be expected to give rise to budget imbalances that manifest themselves in debt and deficit figures: if political factors lead to spending increases but not to equally large revenue increases – or if they even lead to revenue decreases, as discussed above – the funds for government-financed programmes have to come from somewhere. As was seen in the previous chapter, however, the relationships between political variables and changes in government debt are not that straightforward.

Table 6.3. Regression results. Dependent variable: annual change of government debt, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.190 (0.521)	-0.313 (2.062)	-0.606 (0.676)	-7.984* (3.901)	0.491 (0.726)	4.600 (2.831)
Right-left	-0.011 (0.019)	-0.012 (0.019)	0.009 (0.021)	0.004 (0.020)	-0.013 (0.040)	-0.002 (0.039)
Quality of government	-0.102 (0.352)	-0.182 (0.609)	0.414 (0.423)	-0.580 (0.815)	-0.477 (0.639)	1.463 (1.232)
Dispersion of power	-5.598 (9.394)	22.013 (44.157)	-4.209 (13.441)	-72.279 (64.613)	8.437 (13.174)	116.645* (49.729)
Caretaker time	6.024 (3.517)	6.022 (3.511)	6.517 (3.927)	5.621 (3.992)	4.321 (4.330)	4.064 (4.425)
Effective number of parliamentary parties	-0.251 (0.466)	-0.206 (0.475)	-0.277 (0.603)	-0.178 (0.611)	-0.785 (0.629)	-0.754 (0.595)
No of gov't parties × Dispersion of power	2.560 (4.339)	-9.168 (18.251)	5.794 (6.669)	60.087 (32.539)	-3.237 (5.613)	-45.633* (22.025)
No of gov't parties × QoG		0.008 (0.263)		0.825 (0.450)		-0.672 (0.443)
Dispersion of power × QoG		-3.900 (5.760)		7.264 (7.806)		-17.043* (7.927)
No. of gov't parties × Dispersion of power × QoG		1.688 (2.482)		-6.601 (3.858)		6.814 (3.587)
Lagged debt change	0.193*** (0.043)	0.194*** (0.043)	0.125* (0.057)	0.123* (0.059)	0.025*** (0.048)	0.236*** (0.041)
GDP change	-0.801*** (0.088)	-0.802*** (0.089)	-1.081*** (0.141)	-1.069*** (0.140)	-0.597*** (0.074)	-0.587*** (0.074)
Unemployment	0.480*** (0.113)	0.478*** (0.113)	0.775*** (0.143)	0.791*** (0.134)	0.007 (0.104)	0.055 (0.108)
Debt	-0.087*** (0.021)	-0.088*** (0.021)	-0.090** (0.027)	-0.098*** (0.027)	-0.135*** (0.037)	-0.154*** (0.036)
Inflation	-0.043*** (0.004)	-0.042*** (0.004)	-0.140 (0.148)	-0.127 (0.137)	-0.037*** (0.001)	-0.035*** (0.006)
Fiscal rule index (IMF)	0.396 (0.611)	0.310 (0.606)	0.550 (0.801)	0.403 (0.791)	0.211 (0.601)	0.368 (0.651)
Maastricht	-0.007 (0.734)	0.110 (0.749)	-1.341 (1.055)	-0.921 (1.074)	0.155 (0.787)	0.625 (0.809)
N	600	600	442	442	158	158
Adjusted R^2	0.399	0.398	0.388	0.390	0.608	0.603

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

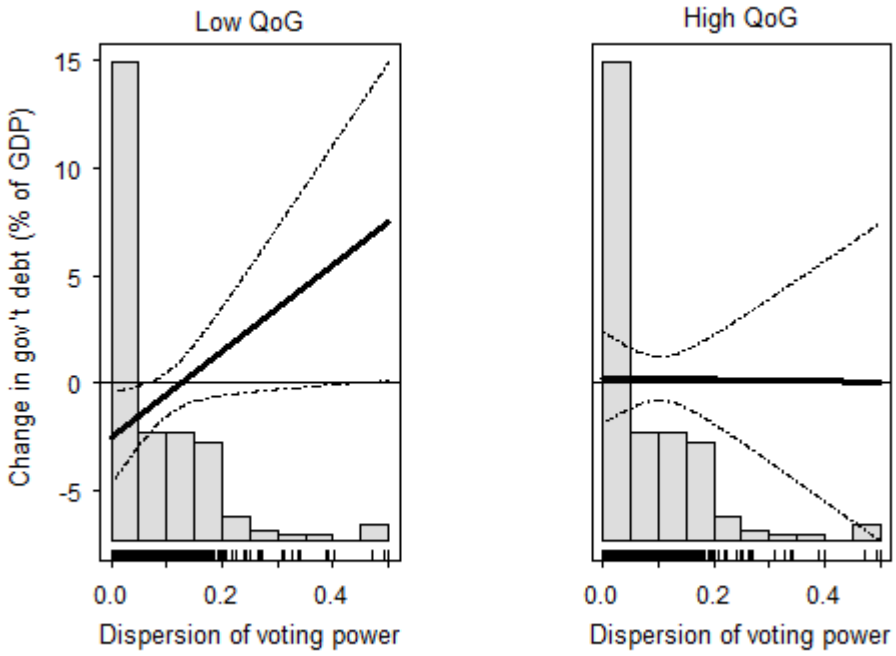

Figure 6.5. The marginal effect of the number of government parties on the annual change of government debt in the old member states, Cyprus and Malta.

The results reported in Table 6.3 show that this is also the case when the dispersion of power is taken into account. To begin with, political effects have no discernible effects at all when all 28 countries are taken into account. In the group of countries consisting of the old member states, Cyprus and Malta, in turn, the number of government parties has a statistically significant, negative-signed effect, indicating that larger coalitions are associated with reductions of debt. Note that this effect may pertain to a special case, as the variable is also part of a three-way interaction term and hence its coefficient pertains to a case where the quality of government is extremely low and parties are exactly equal in terms of power.

None of the interaction terms in Column IV of Table 6.3 is statistically significant. However, the large negatively-signed coefficient on the number of government parties is clearly against expectations, so that it is useful to assess when this effect is statistically significant (see Braumoeller 2004). Figure 6.5 shows the marginal effect of the coalition size of government debt as a function of the dispersion of power outside the post-communist area. The figure again contains two plots. The 'Low QoG' plot is drawn by fixing the quality of government score to the second-lowest country average

in the area, which is Italy's 6.87.[19] The 'High QoG' plot is obtained by fixing the quality of government score to the highest country average, Finland's 9.98. The 'High QoG' plot is almost identical with the horizontal zero line, which is in line with the expectation that neither the number of parties nor the dispersion of power matters when the quality of government is high. However, when the quality of government is relatively low, increases in the number of cabinet parties are associated with debt reductions when parties are equally powerful.

It can be noted that in the post-communist countries, the political variables have 'correct' signs. In particular, the effect of the number of government parties interacts with the dispersion of power and the quality of government in the expected way, albeit the three-way interaction term is statistically insignificant. When marginal effects are analysed, it turns out that coalition size has no statistically significant effect on debt in the post-communist countries on either low or high quality of government levels, no matter how equally or unequally power is distributed. No marginal effect plot is shown as no statistically significant effects are visible.

Table 6.4 reports the results when the budget balance is operationalised as net lending or borrowing. The results are largely similar to those obtained using the annual change of government debt, the signs being reversed as expected. However, none of the coefficients on the political variables is statistically significant on acceptable levels.

Quality of government appears to have a peculiar conditioning effect when it comes to the primary balance (see Figure 6.6. and Table A6.5 in the Appendix). When the quality of government is relatively low, like the Romanian country average of 4.67, the number of government parties has no statistically significant effect on the primary balance on any level of the power dispersion variable. In contrast, when the quality of government is high, for example the Finnish average of 9.98, the effect is practically zero when parties are equally powerful but is negative and statistically significant when parties are relatively unequal. This kind of conditionality, however, is not discernible in either sub-group of countries; as in the previous chapter, the programmatic orientation of the cabinet affects the primary balance in non-post-communist countries, but this is the only statistically significant effect that political variables have when the country groups are considered separately. The finding is still intriguing as it suggests that coalition size has the kind of effect on the budget balance that could be expected based on the 'established view', but exactly in the conditions that should make the likelihood of such an effect especially small. A plausible explanation is that a balance of power between government parties prevents primary deficits, i.e. deficits when debt servicing costs are accounted for, when the norm of avoiding deficits is supported by a strong public bureaucracy. Unequally distributed power, in contrast, creates more opportunities for powerful parties to circumvent that norm as resistance from other parties is weaker.

[19] The Greek country average is slightly lower, 6.60. Italy's country average is used here with illustrative purposes in mind, as it allows a direct comparison in one figure between two countries with a tradition of large cabinets but quite different quality of government levels.

Table 6.4. Regression results. Dependent variable: net lending (+) or borrowing (–), % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.191 (0.215)	0.035 (0.883)	0.001 (0.285)	2.774 (1.497)	-0.308 (0.325)	-1.247 (1.188)
Right-left	0.013 (0.008)	0.013 (0.008)	0.005 (0.008)	0.006 (0.007)	0.033 (0.020)	0.034 (0.020)
Quality of government	-0.112 (0.155)	0.026 (0.264)	-0.175 (0.176)	0.280 (0.357)	-0.581 (0.353)	-0.691 (0.604)
Dispersion of power	1.582 (3.751)	-8.134 (17.446)	4.448 (4.998)	26.828 (28.037)	0.821 (6.450)	-19.012 (24.878)
Caretaker time	-0.291 (1.214)	-0.334 (1.217)	-0.414 (1.464)	-0.059 (1.482)	0.738 (0.882)	0.730 (0.924)
Effective no. of parliamentary parties	0.198 (0.170)	0.198 (0.171)	0.205 (0.195)	0.185 (0.199)	0.507 (0.307)	0.570 (0.296)
No. of gov't parties × Dispersion of power	-0.612 (1.733)	5.171 (7.969)	-2.648 (2.551)	-18.955 (13.738)	0.306 (2.700)	11.561 (10.595)
No. of gov't parties × QoG		-0.022 (0.119)		-0.307 (0.177)		0.148 (0.194)
Dispersion of power × QoG		1.517 (2.356)		-2.227 (3.424)		3.224 (3.793)
No. of gov't parties × Dispersion of power × QoG		-0.882 (1.101)		1.726 (1.646)		-1.810 (1.727)
Lagged deficit	0.642*** (0.032)	0.632*** (0.032)	0.663*** (0.040)	0.652*** (0.041)	0.309*** (0.066)	0.300*** (0.067)
GDP change	0.317*** (0.037)	0.318*** (0.036)	0.419*** (0.045)	0.416*** (0.045)	0.244*** (0.030)	0.239*** (0.031)
Unemployment	-0.071 (0.043)	-0.076 (0.043)	-0.121* (0.058)	-0.130* (0.058)	-0.100 (0.054)	-0.112 (0.057)
Debt	0.021** (0.007)	0.021** (0.007)	0.025** (0.009)	0.027** (0.008)	0.039 (0.022)	0.038 (0.022)
Inflation	0.019 (0.010)	0.019 (0.010)	0.082 (0.045)	0.075 (0.042)	0.008 (0.009)	0.006 (0.009)
Fiscal rule index (IMF)	0.063 (0.210)	0.138 (0.217)	-0.272 (0.261)	-0.190 (0.264)	0.289 (0.290)	0.276 (0.286)
Maastricht	0.570* (0.246)	0.494* (0.251)	1.253*** (0.315)	1.072** (0.335)	-0.392 (0.458)	-0.329 (0.466)
N	605	605	444	444	161	161
Adjusted R^2	0.579	0.578	0.633	0.631	0.439	0.433

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

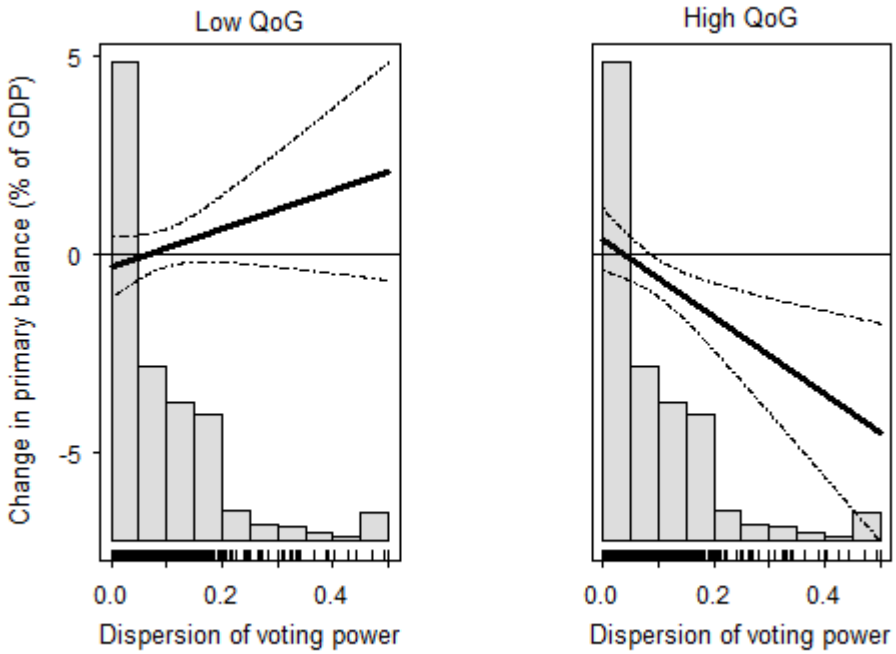

Figure 6.6. The marginal effect of the number of government parties on the primary balance in the EU countries.

The cyclically adjusted balance is affected by political variables in a way analogous to the change of the debt level: in the non-post-communist countries, increases in coalition size tend to be associated with reductions in the cyclically adjusted deficits when the quality of government is low. There is hence some evidence that outside the post-communist area, the number of government parties, the dispersion of power and the quality of government jointly affect debt and deficits, although marginal effects are statistically discernible from zero only under restrictive conditions and three-way interactions are statistically insignificant on acceptable levels. While the practical importance of this relatively uncertain result should not be overstated, it also should not be ignored as it runs counter to theoretical expectations. In explaining the unexpected effect, some guidance can be found from the fact that in similar circumstances, the effect of the number of cabinet parties is negative on spending but positive on revenue, although both estimated effects are accompanied by notable uncertainty and lack statistical significance (see Tables 6.1 and 6.2). Hence, in this group of countries, the cost containment element in parties' maximisation problem appears stronger than the resource extraction element, that is, equally powerful parties prevent each other from spending rather than spend on their own projects. Thereby, the balance of power facilitates raising more revenue as distributive tax exemptions are less feasible.

The Role of Competitiveness and Monitoring

The effective number of parliamentary parties was included as a control variable in all regressions that were reported in this and the preceding chapter. Its role as a control implied that it was not given much attention when reporting and interpreting the results. However, when looking at all regression tables in the said chapters and in their appendices, a consistent but somewhat peculiar picture emerges.

The effective number of parliamentary parties never has the effect it 'ought to' have given the standard arguments about the fiscal consequences of party system fragmentation. The fragmentation of the party system at the parliamentary level never turned out to give rise to increases in spending, revenue, debt or deficits. The regression coefficients were for the most part statistically insignificant, but in those cases where statistically effects showed up, they were opposite to what could have been expected. If it has any effect, the fractionalisation of the parliamentary party system seems to curb spending increases and deficits.

A plausible reason for this follows from the fact that although the central role of political parties in both cabinets and parliaments may blur constitutional distinctions between the organs of state, they are still distinct from each other and the parliament must approve government proposals before they become law. That is, if the government seeks to push through a policy package that contains a large amount of distributive spending devoted to government parties' target groups, a fractionalised parliament may contain a large number of actors who question the legitimacy of such a policy package. Consequently, the overall level of spending is lower compared to a policy package a similar government could adopt if the parliament were less fractionalised. The same applies to deficits and debt: more resistance may arise in a parliament whose members are connected to a larger variety of actors, groups and segments of the society.

Insofar as this is the case, the parliament may bring to the political process a dose of 'desirable' competition, i.e. competition that encourages the adoption of efficient policies, in contrast to competition that rather resembles a rush to exploit a scarce resource (see Mukherjee 2013). As the parliament is accountable to various segments of the society and therefore seeks to guard a variety of interests and ideas, it may be more willing and better able to monitor the actions of the government. More effective monitoring is also what Pettersson-Lidbom (2012) refers to when finding that the sizes of Finnish and Swedish municipal councils tend to be inversely related to the volume of spending, which runs counter to what the 'law of 1/*n*' (Weingast *et al.* 1981) would lead one to expect.

The differences between the effects of the number of *government* parties and the effective number of *parliamentary* parties at the very least point to the potential misleadingness of speaking about the consequences of multiparty politics if one does not take into account the different tasks and operating principles of different organs of state. Coalition cabinets make package deals where the bargaining process leading to a

deal may be more or less regulated and coalition members may give their consent to each other's actions more or less explicitly. However, all members of the coalition must be at least marginally more satisfied with the outcome than they would be outside the coalition. Similar needs to attain outcomes that are sufficiently good for all members do not exist, at least as strongly, in parliaments. Therefore, while the 'law of 1/*n*' helps understand the workings of coalition cabinets in certain settings, it need not apply to parliaments even in the same circumstances.

Conclusion

This chapter started with the claim that the number of parties does not capture all relevant aspects of the process in which decisions on the utilisation (or exploitation) of the tax base are made, because parties may be incapable of extracting the funds they would prefer to extract. The claim is hardly new as the large number of works on procedural fragmentation and on the means to decrease procedural fragmentation testifies. However, the approach to the decision-making process taken here differs from the procedural fragmentation literature. In this chapter, parties' bargaining strengths, instead of formal procedural norms, were in the spotlight.

The existing literature on procedural fragmentation is concerned with the role of the finance minister in the preparation of the budget, the ability of other ministers to affect spending independently of the minister of finance, the authority of the parliament to amend budgetary proposals, and so forth. This approach neglects the fact that much inter-party bargaining takes place before the application of formal procedural rules becomes topical. Before any budget proposals are made, parties have most likely negotiated the policy guidelines that will be followed when concrete policy proposals are prepared. Even in the absence of explicit bargains, those responsible for the preparation of budget proposals need to take the likely reactions of other parties into account, including the threats that those parties can credibly make. Hence, this chapter focussed on power resources that are derived from the voting rule and the distribution of parliament seats.

Those resources were measured using an index of *a priori* voting power, the Shapley-Shubik index, that draws on parties' critical presence in coalitions, that is, their ability to make or break winning coalitions. The preceding chapter suggested that the number of cabinet parties tends to have fiscal consequences in specific circumstances, when a communist past is coupled with a low quality of government. This chapter delimited the conditions even further by pointing out that the relevance of the number of cabinet parties presupposes that those parties are sufficiently equal in terms of power – otherwise a powerful party could effectively deny other parties the amounts of spending they want.

The main empirical finding is that both public spending and revenue tend to increase with the number of parties in government when power is evenly distributed

among the parties, the quality of government is fairly low and the society is post-communist. This is compatible with the claim that while widespread particularism and partiality in the public sector strengthens distributive aspects of politics, the even distribution of bargaining strength makes it possible for parties to channel funds to their favoured projects and recipient groups. In contrast, the centralisation of bargaining power or improvements in the quality of government make such empirical associations effectively disappear. In the post-communist countries, only effects pertaining to spending and revenue are empirically relevant.

Outside the post-communist area, the effects of political variables again tended to be weaker, and whenever they were discernible, they pertained to the budget balance. The available evidence suggested that equally powerful parties may be more likely to keep budgets in balance when the quality of government is relatively low. A plausible explanation for this unexpected finding lies in the possibility that balance of power restricts the use of both spending and revenue sides of the budget as instruments of distributive politics, and hence enhances revenue-raising.

The way in which bargaining power, which has its roots in the ability to affect voting outcomes, thus conditions the fiscal consequences of multiparty government, alongside the factors that were identified in the previous chapter. Decisiveness in voting situations brings power resources, and how parties use those resources is connected to the societal and institutional context – in line with the notion that as the management of the budgetary commons is both representative and collective, 'counting heads' is not enough.

Appendix

Table A6.1. Regression results with the European Commission's fiscal rule index. Dependent variable: annual change in total general government spending, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.197 (0.222)	1.011 (0.896)	-0.159 (0.285)	-1.819 (1.915)	0.634 (0.367)	4.585*** (1.162)
Right-left	-0.029*** (0.008)	-0.028** (0.009)	-0.009 (0.008)	-0.008 (0.008)	-0.069*** (0.018)	-0.067*** (0.017)
Quality of government	-0.015 (0.193)	0.042 (0.289)	0.034 (0.207)	-0.323 (0.413)	0.679 (0.475)	1.709* (0.698)
Dispersion of power	0.839 (3.909)	6.825 (18.064)	-1.271 (4.783)	-27.236 (31.393)	0.939 (7.285)	47.706 (31.773)
Caretaker time	1.073 (1.327)	1.035 (1.337)	0.440 (1.672)	0.130 (1.771)	0.444 (1.637)	-0.298 (1.625)
Effective no. of parliamentary parties	-0.226 (0.185)	-0.282 (0.185)	-0.082 (0.200)	-0.082 (0.202)	-0.733* (0.325)	-0.883** (0.301)
No. of gov't parties × Dispersion of power	-0.654 (1.802)	-7.434 (8.006)	1.508 (2.438)	13.423 (15.520)	-1.363 (3.197)	-27.646 (14.275)
No of gov't × QoG		-0.110 (0.117)		0.184 (0.214)		-0.643** (0.199)
Dispersion of power × QoG		-0.900 (2.381)		2.907 (3.656)		-7.826 (5.059)
No of gov't × Dispersion of power × QoG		0.964 (1.087)		-1.318 (1.775)		4.335 (2.357)
Lagged spending level	-0.336*** (0.037)	-0.346*** (0.037)	-0.270*** (0.048)	-0.276*** (0.048)	-0.566*** (0.044)	-0.584*** (0.041)
GDP change	-0.384*** (0.028)	-0.381*** (0.028)	-0.462*** (0.041)	-0.458*** (0.041)	-0.322*** (0.021)	-0.313*** (0.021)
Unemployment	0.006 (0.048)	0.022 (0.049)	0.021 (0.071)	0.028 (0.081)	0.025 (0.062)	0.057 (0.051)
Debt	0.002 (0.010)	0.003 (0.010)	-0.011 (0.011)	-0.012 (0.011)	-0.007 (0.024)	-0.006 (0.023)

Inflation	-0.014*** (0.001)	-0.014*** (0.001)	-0.187** (0.057)	-0.182** (0.057)	-0.013*** (0.002)	-0.014*** (0.002)
Fiscal rule index (EC)	-0.692*** (0.165)	-0.730*** (0.172)	-0.427* (0.172)	-0.433* (0.173)	-1.097*** (0.264)	-1.071*** (0.027)
Maastricht	-0.506* (0.218)	-0.543* (0.213)	-1.434*** (0.279)	-1.365*** (0.282)	0.367 (0.484)	0.310 (0.462)
N	537	537	374	374	163	163
Adjusted R^2	0.430	0.430	0.411	0.409	0.571	0.573

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A6.2. Regression results with the European Commission's fiscal rule index. Dependent variable: annual change in total general government revenue, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	0.107 (0.112)	1.153* (0.460)	-0.083 (0.152)	0.136 (0.933)	0.506 (0.275)	3.208** (1.110)
Right-left	-0.012* (0.005)	-0.010* (0.005)	-0.005 (0.005)	-0.004 (0.005)	-0.036** (0.012)	-0.034** (0.012)
Quality of government	0.033 (0.091)	0.278* (0.134)	0.054 (0.107)	0.067 (0.202)	0.225 (0.244)	1.096* (0.447)
Dispersion of power	4.289* (2.106)	8.516 (9.492)	2.293 (2.739)	-11.427 (16.702)	8.358 (4.577)	47.368* (21.041)
Caretaker time	0.873 (0.558)	0.775 (0.562)	0.488 (0.634)	0.517 (0.641)	0.995 (0.859)	0.493 (0.923)
Effective no. of parliamentary parties	-0.070 (0.098)	-0.111 (0.099)	-0.069 (0.122)	-0.084 (0.120)	-0.227 (0.216)	-0.311 (0.222)
No. of gov't parties × Dispersion of power	-1.921* (0.943)	-4.967 (4.206)	-0.876 (1.315)	2.632 (7.740)	-3.313 (1.917)	-22.518* (9.859)
No. of gov't parties × QoG		-0.133* (0.058)		-0.023 (0.103)		-0.440** (0.167)
Dispersion of power × QoG		-0.437 (1.291)		1.853 (2.003)		-6.349 (3.269)

No. of gov't parties × Dispersion of power × QoG		0.351 (0.576)		-0.509 (0.894)		3.134* (1.564)
Lagged revenue level	-0.279*** (0.027)	-0.285*** (0.027)	-0.204*** (0.030)	-0.212*** (0.030)	-0.448*** (0.054)	-0.473*** (0.051)
GDP change	-0.075*** (0.020)	-0.074*** (0.020)	-0.056* (0.028)	-0.056* (0.028)	-0.082** (0.030)	-0.076* (0.030)
Unem-ployment	-0.020 (0.022)	-0.015 (0.023)	-0.008 (0.029)	-0.006 (0.029)	0.010 (0.044)	0.033 (0.045)
Debt	0.019*** (0.005)	0.020*** (0.005)	0.015** (0.005)	0.016** (0.005)	0.007 (0.013)	0.005 (0.014)
Inflation	-0.006*** (0.001)	-0.006*** (0.001)	0.015 (0.037)	0.012 (0.037)	-0.005** (0.002)	-0.006** (0.002)
Fiscal rule index (EC)	-0.186* (0.091)	-0.189* (0.095)	-0.020 (0.095)	-0.031 (0.095)	-0.454** (0.170)	-0.403* (0.188)
Maastricht	-0.029 (0.155)	-0.075 (0.155)	-0.278 (0.224)	-0.295 (0.223)	0.229 (0.303)	0.276 (0.318)
N	537	537	374	374	163	163
Adjusted R^2	0.225	0.236	0.157	0.163	0.359	0.371

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A6.3. Regression results with the European Commission's fiscal rule index. Dependent variable: annual change in government debt, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of govern-ment par-ties	0.073 (0.590)	-0.443 (2.199)	-0.293 (0.815)	-8.106 (4.697)	0.531 (0.678)	4.475 (2.717)
Right-left	-0.027 (0.023)	-0.028 (0.023)	-0.000 (0.027)	-0.002 (0.026)	-0.010 (0.039)	0.000 (0.039)
Quality of govern-ment	-0.307 (0.391)	-0.528 (0.683)	0.261 (0.481)	-0.874 (1.008)	-0.613 (0.650)	1.388 (1.219)
Dispersion of power	-0.761 (10.758)	16.916 (46.574)	-0.503 (15.636)	-84.781 (76.090)	8.416 (13.024)	113.557* (47.828)
Caretaker time	7.644 (3.950)	7.730 (3.951)	8.795 (4.557)	7.562 (4.740)	4.502 (4.333)	3.923 (4.431)
Effective no. of parliamen-tary par-ties	-0.270 (0.512)	-0.234 (0.522)	-0.448 (0.687)	-0.354 (0.698)	-0.824 (0.610)	-0.762 (0.592)

No. of gov't parties × Dispersion of power	0.157 (4.805)	-8.446 (19.090)	3.744 (7.521)	62.943 (37.253)	-3.444 (5.471)	-44.577* (21.325)
No. of gov't parties × QoG		0.058 (0.286)		0.870 (0.533)		-0.658 (0.428)
Dispersion of power × QoG		-2.674 (6.132)		9.093 (8.965)		-16.629* (7.614)
No. of gov't parties × Dispersion of power × QoG		1.313 (2.608)		-6.588 (4.289)		6.653 (3.451)
Lagged debt change	0.203*** (0.046)	0.201*** (0.046)	0.117 (0.066)	0.112 (0.066)	0.255*** (0.046)	0.244*** (0.041)
GDP change	-0.782*** (0.091)	-0.781*** (0.091)	-1.052*** (0.158)	-1.037*** (0.157)	-0.602*** (0.072)	-0.591*** (0.072)
Unem-ployment	0.517*** (0.125)	0.518*** (0.125)	0.910*** (0.163)	0.934*** (0.163)	-0.005 (0.103)	0.046 (0.106)
Debt	-0.096*** (0.025)	-0.098*** (0.025)	-0.091** (0.031)	-0.100** (0.031)	-0.136*** (0.036)	-0.151*** (0.036)
Inflation	-0.042*** (0.004)	-0.041*** (0.004)	-0.066 (0.182)	-0.045 (0.172)	-0.037*** (0.006)	-0.036*** (0.005)
Fiscal rule index (EC)	0.173 (0.423)	0.164 (0.424)	0.362 (0.460)	0.424 (0.448)	-0.339 (0.563)	0.010 (0.554)
Maastricht	-0.336 (0.619)	-0.300 (0.630)	-1.821 (1.036)	-1.533 (1.052)	0.324 (0.641)	0.853 (0.673)
N	530	530	372	372	158	158
Adjusted R^2	0.407	0.405	0.402	0.403	0.609	0.603

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A6.4. Regression results with the European Commission's fiscal rule index. Dependent variable: net lending (+) or borrowing (–), % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.163 (0.238)	0.013 (0.889)	0.078 (0.340)	2.703 (1.656)	-0.424 (0.320)	-1.073 (1.162)
Right-left	0.018* (0.008)	0.018* (0.008)	0.005 (0.009)	0.006 (0.009)	0.032 (0.019)	0.034 (0.020)
Quality of government	0.023 (0.165)	0.192 (0.270)	-0.124 (0.180)	0.366 (0.379)	-0.379 (0.342)	-0.320 (0.616)
Dispersion of power	2.376 (4.241)	-6.429 (17.948)	5.132 (5.952)	23.362 (31.027)	0.459 (6.415)	-8.716 (26.287)
Caretaker time	-0.435 (1.336)	-0.536 (1.343)	-0.569 (1.692)	-0.115 (1.716)	0.212 (0.842)	0.212 (0.925)
Effective no. of parliamentary parties	0.081 (0.189)	0.097 (0.188)	0.049 (0.227)	0.028 (0.232)	0.574 (0.299)	0.642* (0.293)
No. of gov't parties × Dispersion of power	-0.961 (1.916)	5.472 (8.124)	-3.368 (2.982)	-16.226 (15.019)	0.605 (2.683)	7.989 (11.093)
No. of gov't parties × QoG		-0.014 (0.123)		-0.289 (0.193)		0.102 (0.190)
Dispersion of power × QoG		1.450 (2.462)		-1.627 (3.772)		1.609 (4.003)
No. of gov't parties × Dispersion of power × QoG		-0.995 (1.142)		1.270 (1.776)		-1.212 (1.802)
Lagged net lending	0.609*** (0.034)	0.595*** (0.034)	0.631*** (0.044)	0.619*** (0.046)	0.304*** (0.063)	0.292*** (0.064)
GDP change	0.323*** (0.037)	0.321*** (0.036)	0.431*** (0.049)	0.426*** (0.049)	0.243*** (0.029)	0.239*** (0.029)
Unemployment	-0.050 (0.046)	-0.062 (0.047)	-0.082 (0.067)	-0.094 (0.068)	-0.098 (0.051)	-0.106 (0.055)
Debt	0.019* (0.009)	0.019* (0.009)	0.018 (0.010)	0.020* (0.010)	0.045* (0.021)	0.042 (0.022)
Inflation	0.022* (0.010)	0.020* (0.010)	0.144** (0.055)	0.132* (0.052)	0.005 (0.009)	0.003 (0.009)

Fiscal rule index (EC)	0.423** (0.142)	0.451** (0.145)	0.323* (0.149)	0.318* (0.149)	0.550 (0.279)	0.570 (0.297)
Maastricht	0.634** (0.214)	0.622** (0.212)	1.349*** (0.275)	1.262*** (0.283)	-0.258 (0.368)	-0.150 (0.384)
N	535	535	374	374	161	161
Adjusted R^2	0.564	0.564	0.618	0.615	0.450	0.444

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A6.5. Regression results. Dependent variable: primary balance, % of GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.022 (0.263)	-0.941 (0.978)	0.209 (0.362)	-0.944 (2.357)	-0.258 (0.315)	-0.971 (1.155)
Right-left	0.035** (0.011)	0.036*** (0.011)	0.029* (0.012)	0.032* (0.012)	0.027 (0.021)	0.027 (0.020)
Quality of government	0.314 (0.183)	0.296 (0.311)	0.344 (0.216)	0.238 (0.468)	-0.171 (0.346)	-0.404 (0.581)
Dispersion of power	3.281 (4.426)	-33.258 (19.530)	7.949 (6.043)	-41.416 (36.484)	0.629 (6.272)	-29.096 (25.252)
Caretaker time	-0.340 (1.445)	-0.404 (1.455)	-0.966 (1.669)	-0.944 (1.714)	1.320 (0.958)	1.156 (0.948)
Effective no. of parliamentary parties	0.028 (0.259)	0.048 (0.255)	0.016 (0.339)	-0.042 (0.331)	0.492 (0.301)	0.510 (0.289)
No. of gov't parties × Dispersion of power	-1.360 (1.994)	17.616* (8.724)	-3.829 (3.030)	19.348 (18.894)	0.699 (2.566)	13.576 (10.708)
No. of gov't parties × QoG		0.131 (0.135)		0.140 (0.274)		0.120 (0.188)
Dispersion of power × QoG		5.207 (2.676)		6.336 (4.406)		4.606 (3.803)
No. of gov't parties × Dispersion of power × QoG		-2.740* (1.227)		-2.968 (2.203)		-2.019 (1.723)
Lagged primary balance	0.554*** (0.039)	0.539*** (0.040)	0.568*** (0.051)	0.572*** (0.052)	0.301*** (0.066)	0.306*** (0.066)
GDP change	0.323*** (0.041)	0.320*** (0.040)	0.442*** (0.060)	0.444*** (0.061)	0.222*** (0.031)	0.219*** (0.031)
Unemployment	-0.009 (0.054)	-0.023 (0.055)	0.004 (0.085)	0.022 (0.084)	-0.037 (0.053)	-0.053 (0.055)
Debt	0.029** (0.011)	0.032** (0.011)	0.034* (0.013)	0.037** (0.013)	0.051* (0.022)	0.055* (0.023)
Inflation	0.042*** (0.010)	0.041*** (0.010)	0.524*** (0.107)	0.523*** (0.108)	0.030*** (0.008)	0.030*** (0.009)

Fiscal rule index (IMF)	0.301 (0.287)	0.300 (0.291)	-0.444 (0.413)	-0.481 (0.436)	0.343 (0.283)	0.307 (0.273)
Maastricht	0.633 (0.378)	0.657 (0.374)	1.879** (0.667)	1.740* (0.705)	-0.305 (0.474)	-0.363 (0.470)
N	446	446	285	285	161	161
Adjusted R^2	0.536	0.534	0.611	0.608	0.447	0.442

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table A6.6. Regression results. Dependent variable: cyclically adjusted balance, % of potential GDP.

	All countries		EU15, Malta and Cyprus		Post-communist	
	I	II	III	IV	V	VI
Number of government parties	-0.023 (0.204)	0.441 (0.854)	0.183 (0.290)	4.194* (1.769)	0.288 (0.341)	-0.897 (1.389)
Right-left	0.011 (0.007)	0.012 (0.007)	0.008 (0.008)	0.012 (0.008)	0.000 (0.018)	-0.009 (0.020)
Quality of government	0.049 (0.154)	0.254 (0.259)	0.030 (0.188)	0.779 (0.402)	-0.104 (0.333)	-0.812 (0.622)
Dispersion of power	3.984 (3.624)	1.338 (17.355)	6.049 (5.229)	50.073 (31.593)	12.732 (6.590)	-49.134 (35.888)
Caretaker time	0.096 (1.164)	0.080 (1.170)	0.013 (1.407)	0.627 (1.399)	2.395 (1.211)	2.594 (1.351)
Effective no. of parliamentary parties	0.112 (0.158)	0.111 (0.160)	0.083 (0.191)	0.054 (0.194)	0.202 (0.317)	0.133 (0.332)
No. of gov't parties × Dispersion of power	-1.761 (1.667)	1.539 (7.751)	-3.714 (2.663)	-29.259 (15.982)	-3.829 (2.693)	16.960 (13.928)
No. of gov't parties × QoG		-0.050)		-0.442* (0.203)		0.203 (0.231)
Dispersion of power × QoG		0.614 (2.354)		-4.659 (3.756)		10.287 (6.028)
No. of gov't parties × Dispersion of power × QoG		0.614 (2.354)		2.730 (1.858)		-3.484 (2.356)
Lagged cyclically adjusted balance	0.702*** (0.034)	0.686*** (0.035)	0.689*** (0.044)	0.665*** (0.046)	0.494*** (0.081)	0.518*** (0.084)
GDP change	0.024 (0.033)	0.026 (0.033)	0.069 (0.045)	0.065 (0.044)	0.017 (0.038)	0.013 (0.038)
Unemployment	0.068 (0.037)	0.065 (0.037)	0.011 (0.054)	0.001 (0.053)	0.180*** (0.049)	0.180*** (0.048)
Debt	0.016* (0.008)	0.015* (0.007)	0.025** (0.009)	0.028** (0.009)	-0.018 (0.017)	-0.015 (0.017)

Inflation	0.006*** (0.001)	0.006*** (0.001)	0.148* (0.063)	0.147* (0.060)	0.009*** (0.002)	0.009*** (0.002)
Fiscal rule index (IMF)	0.165 (0.191)	0.264 (0.202)	-0.162 (0.247)	-0.030 (0.254)	0.858** (0.271)	0.807** (0.256)
Maastricht	0.258 (0.250)	0.167 (0.262)	1.052** (0.322)	0.801* (0.356)	-0.678 (0.453)	-0.872* (0.428)
N	582	582	426	426	156	156
Adjusted R^2	0.463	0.464	0.510	0.512	0.365	0.368

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Chapter 7
Budgetary Commons in Context: State Institutions, Popular Influence and Endogenous Rules

The notion of the budgetary commons has implications not only for empirical research concerned with explaining actual fiscal policy outcomes. It also has implications for evaluating democratic practices. If the political process takes on features of overexploitation problems that lead to the depletion of physical resources, one can expect that the sustainability of the public economy is endangered. The existing literature has emphasised the role of democratic accountability in bringing about such equivalence between common-pool resource dilemmas and budgetary politics. A rather negative vision of what a normative democratic theorist might call openness or representativeness emerges: instead of increasing the legitimacy of decisions it implies that special-interest politics outstrips general-interest politics, targeted projects displace universal programmes and partial optimisation imposes an unduly heavy cost burden on the society, including the future generations.

This contradiction between democratic ideals and what the literature on fragmented policymaking says, is at least partially a function of the eagerness to make universal claims about 'democracy' without paying attention to the environment in which democratic politics takes place. As has been highlighted in the preceding chapters, democratic politics can be about programmes and ideas, but it can also be about the distribution of material benefits. Moreover, those aspects of politics seem to be substitutes rather than complementary, i.e. when one gains importance the other is weakened. This trade-off is essential to assessing the role of democratic processes in the development of sustainability problems.

The results obtained thus far suggest that low-quality government institutions, implying partiality in the implementation of laws and policies, make the location of the cabinet on the programmatic right-left axis largely irrelevant with respect to outcomes. It is highly unlikely that without the ability to present credible programmes to the public, any government can secure public approval to attempts to balance the budget or to contain the increase of public spending. As long as the norm of reciprocity guides public sentiments, the general public can hardly be expected to conform to an austerity programme if they perceive that people with money and connections survive unscathed from any austerity measure. The government of a thoroughly corrupt country can without doubt impose an austerity programme, but its inability to have the backing of the public means that such a programme is not on a sustainable basis.

There are normative reasons to expect that in a democracy, decisions are responsive to the preferences of the public. In particular, in order to make democratic decision

making conducive of the sustainable management of public finances, decisions should be responsive to the programmatic preferences of the public, not non-programmatic distributive preferences that easily undermine any attempt to introduce policies with long-term benefits but short-term costs. The preceding chapters have highlighted conditions in which the programmatic outlook of the cabinet explains policy outcomes, but the preferences of cabinet parties are not necessarily in line with those of the public. Hence, more direct links between popular preferences and policies are traced in what follows. The difficulty of defining 'what the public wants' must be acknowledged. The position of the median voter is used as a feasible approximation. While the theory behind the median voter's decisiveness builds on quite restrictive assumptions, the notion has considerable normative appeal and there are good reasons to expect that its empirical explanatory power indicates the existence of normatively desirable democratic linkages.

One of the noteworthy features of the empirical results reported thus far has been the fact that political variables have very few effects on fiscal policy outside the post-communist area. The countries in question are, for the most part, highly institutionalised democracies. Elgie and McMenamin (2008) claim that the fractionalisation of the party system, in exactly those kinds of countries, should predict fiscal policy outcomes. The credibility of this claim was already questioned in Chapter 5 by referring to the fact that conditions in those countries should be conducive of programmatic effects instead. Yet, even against this background it is unexpected to see that even the programmatic outlooks of cabinets have no discernible effects on spending and revenue and only limited effects on debt and deficits, even though high-quality government institutions that most of the countries have should enable clear programmatic effects. One may ask whether this tells about another kind of degeneration of representative democracy, not due to the lack of effective state machinery but because of an excessively active bureaucracy that determines policies independently of electorally accountable politicians. This chapter addresses this question by analysing Western European data that precedes the abolition of the Iron Curtain – that is, from a period when programmes and ideologies allegedly mattered more. However, even before the 1990s Western European politics appears largely void of programmatic content, at least as far as fiscal policy goes.

Earlier in this work, references have been made to the notion that the public bureaucracy may act as a substitute for a 'stable community of appropriators' (Raudla 2010) in a democracy where cabinets and parliaments come and go. Such communities may encourage the adoption of more stringent fiscal rules. This chapter also examines the plausibility of this claim. Countries with higher quality of government scores indeed tend to have higher fiscal rule index scores, particularly in the old member states. The chapter closes with a discussion on whether this reflects technocratic tendencies or democracy with a long time horizon, or perhaps both.

Democratic Responsiveness: The Power of the Median Voter

There is no objectively correct size of the public sector and neither is there an objectively correct priority that should be given to balancing the budget vis-à-vis other policy objectives. The lack of correct outcomes makes these issues inherently political, and therefore the optimality of outcomes – an essential notion that partially defines common-pool resource dilemmas – cannot be determined without reference to the views that have gained success in the political process. Outcomes as such cannot be used as normative yardstick without further information about what brought them about.

It is straightforward to argue that in a democracy, outcomes should be in line with the views of the citizens. This raises complications as one cannot validly infer that outcomes reflect a 'popular will'. In his modern classic on social choice and democratic theory, *Liberalism against Populism*, William Riker (1982) argues that visions of democracy as the implementation of the will of the people lack a logical basis. This is because there is no way of aggregating individual preference orderings into social preference orderings so that the latter can be guaranteed to be independent of the aggregation method. Instead, Riker argues that democracy cannot be given other content than citizens' possibility to get rid of the incumbents of the day.

In a more recent critique of populist conceptions of democracy, Christopher H. Achen and Larry M. Bartels (2016) adopt a more behavioural and social psychological perspective. Achen and Bartels argue that most people lack clear preferences in the first place, let alone detailed information on politically relevant issues. They claim that people's electoral choices are affected by group identities and myopic retrospection, policy issues being of secondary importance at best. Consequently, electoral results cannot be seen as a reflection of the distribution of preferences in the society. Incumbents do not have a mandate to enact certain policies, at least not in the sense of that mandate being granted on the basis of a rational weighing of alternatives.

According to Achen and Bartels (2016), seeing representative democracy as the transformation of popular preferences into electoral outcomes and finally into policy outcomes opens the door to excessive interest group influence as resourceful special interests can exploit the bounded rationality and ignorance of the general electorate to their own benefit while 'democracy' justifies the outcomes. This claim bears a certain resemblance to Mark E. Warren's (2004) notion of political corruption as breaches of the democratic norm of inclusion. Warren defines political corruption as the duplicitous exclusion of those that are affected by political decisions – 'duplicitous' in the sense that the norm of inclusion is violated, while the violators continue to publicly profess the norm. The corrupt, then, use their control of resources to achieve gains at the expense of the excluded. Warren also distinguishes between different parts of government. In the executive sphere, corruption consists of violations of public trust by deviating from laws and norms, and hence Warren's definition is compatible with the quality of government as the impartial implementation of laws and policies. Warren

furthermore argues that in legislative functions, corruption breaks the link between expressions of interests and opinions, on the one hand, and enforcement, on the other.

Acknowledging the problems of defining popular preferences does not eliminate the fact that one usually wants correspondence between the expressed views of the citizens and policy outcomes. If we observed a die-hard neoliberal agenda being implemented after an election where parties advocating leftist agendas were victorious, we would hardly be satisfied with the way in which the democratic process works. The problem is to find a workable indicator of the expressed preferences of the citizens that does not rely on too many assumptions about the process by which those preferences may affect policy outcomes.

The Median Voter Theorem: Appealing But Restrictive

In the preceding chapters, the weighted mean of government parties' positions on the right-left axis was used as the indicator of the programmatic orientation of the cabinet. This was based on the assumption that what cabinets do results from negotiations among the government parties, unless there is only one government party that is, in principle, free to implement its own agenda – subject to restraints imposed by the features of the political system, including the constitution, the state bureaucracy and the economic environment. The weighted mean represented a negotiation outcome where each party influences the policy package in proportion to its size (see Chapter 4 for a justification of using the weighted mean) which, in turn, reflects its popular support at least to some extent, depending on how disproportional the electoral system is. Hence, the weighted mean also has normative implications: parties that attract more support should have a larger say on policy outputs.

Another indicator that assumes less structure in the process in which collective choices are made (i.e. majority voting instead of bargaining) and therefore appears more relevant in the case of mass electorates is the position of the median voter. Assume that policies can be arranged on a single continuum and voters' ideal points can be expressed as placements on that continuum. More specifically, to express the basic idea in more concrete terms, assume that each voter has a single-peaked preference concerning the appropriate size of the public sector, which means that the utility of the voter decreases (quasi-)monotonically as one moves to either direction from the ideal point. As before, the preferences concerning the size of the public sector can also be expressed as placements on a left-right continuum, so that the further to the right a voter is placed, the smaller the public sector she considers ideal. If voters could make proposals about public sector size that should be collectively chosen, it could be shown that the ideal point of the median voter would eventually prevail in a series of majority votes, the median voter being the voter who has as many voters to her left as she has to her right. As that point cannot be beaten in a majority vote, it has a normative justification as a 'democratic' outcome (Powell 2000, 164).

What has become known as the median voter theorem was first formulated by Duncan Black (1948), and its impact on political science and political economy has been immense. However, its assumptions are quite restrictive. The theorem assumes that the policy space is unidimensional. It is possible to extend the theorem to a multidimensional policy space, but in that case the ideal point of the median voter loses much of its appeal as an equilibrium concept. Charles R. Plott (1967) identifies the *n*-dimensional median, which could be called the median in all directions, as an equilibrium in majority voting when the policy space is *n*-dimensional. This occurs when the ideal points of voters can be arranged around the ideal point of at least one voter (if the number of voters is uneven), or that of an even number of voters or a point that is no-one's ideal point (if the number of voters is even) in a diametrical way. Plott notes that the likelihood of such an equilibrium is very low unless additional elements are introduced into the model, such as constraints on possible proposals. Moreover, Richard D. McKelvey (1976) shows that when no equilibrium point exists, any point in the policy space can emerge as the collective choice in a series of majority votes. Specifically, if an agenda setter has complete information about voters' preferences, by appropriately pairing alternatives against each other, she can reach any point as the final outcome. Even if an equilibrium in the sense of a multidimensional median exists, the agenda setter can eliminate it by voting strategically, that is, by mispresenting her sincere preferences. In sum, unless strong conditions are met, anything can happen and this can be utilised by a well-informed agenda setter.

The multidimensionality of the policy space undermines the median voter theorem and with it the normatively appealing 'democratic' voting outcome. However, Kang and Powell's (2010) results give the theorem empirical clout as the position of the median voter on the right-left dimension emerges as a significant predictor of redistributive welfare spending in a sample of 17 established democracies in 1960–1991. Specifically, after controlling for a host of plausible explanatory variables, they conclude that a more leftist position of the median voter induces higher spending, which is in line with the notion that leftist orientations are more favourable of welfare policies. The mechanisms Kang and Powell identify draw on the programmatic promises that parties make in election campaigns. Drawing on Anthony Downs's (1957) model of two-party competition, they posit that competition in single-member districts leads to convergence to the median, and moreover the clarity of responsibility associated with majoritarian elections encourages the winner to carry out the policies it promised. In systems of proportional representation, in turn, the partisan composition of the legislature corresponds to the ideological spectrum that exists in the electorate. In post-electoral bargaining, the median party – whose programmatic outlook is close to the preferences of the median voter – is in an advantaged position, which creates a connection between policy outcomes and the position of the median voter. Kang and Powell only consider redistributive welfare spending, but given the relationship between the right-left dimension and fiscal policy outputs, the relationship should be analogous when those outputs are concerned.

Kang and Powell's study assumes, of course, that parties are programmatic in the first place. As Kitschelt (2000) argues, one function of programmatic parties is to reduce the dimensionality of the policy space and hence act as partial solutions to problems of collective choice. That is, whereas the policy space is inherently multidimensional in the case of clientelist politics with emphasis on distributive issues, the feasibility of programmatic linkages between parties and the public presupposes that the public is offered policy packages that can be arranged on one overarching dimension, or at least on a considerably smaller number of dimensions. In this sense, the factors that favour programmatic politics should also increase the predictive power of the median voter theorem.

Empirical Effects of the Median Voter's Position

Insofar as a high quality of government improves the prospects of programmatic politics, the effect that the position of the median voter has on fiscal policy outcomes should depend on the quality of government. In Chapter 5, it was argued that a low quality of government cuts the linkage between the programmatic preferences of the voters and policy outcomes. As the empirical analyses reported in the preceding chapters only contained a measure of the programmatic location of the cabinet, they provided evidence for the claim that the programmatic content of politics decreases with the quality of government. They did not, however, constitute a direct test of the claim that the preferences of the citizens have less impact on outcomes. In principle, it is possible that the programmatic centre of masses of the cabinet deviates, for one reason or another, from the median voter's position, but electoral pressures still encourage the cabinet to please the median voter, whereby outcomes are brought back in line with the median voter's position. This is unlikely to be the case; if citizen preferences weigh little in cabinet formation, it is not probable that they weigh much in actual policymaking. Instead, the effect of the median voter's position on the right-left dimension can be expected to depend on the quality of government, much like the effect of the cabinet's position did in Chapter 5.

To test this, a series of regressions analogous to those reported in Chapter 5 were run, with the exception that the weighted mean of the right-left positions of cabinet parties is excluded and the right-left position of the median voter is included instead. Again, an additive and an interaction model are estimated for three groups of countries, i.e. the set of 28 countries, the post-communist member states and the rest of the countries.[20] Dependent variables considered here are total government spending and the budget balance defined as net lending or borrowing. With respect to revenue and debt, political variables had only weak and, for the most part, statistically insignificant ef-

[20] Median voter positions are not available for Malta and data on some years is missing for Cyprus and Latvia. Therefore, the Ns are slightly smaller than in corresponding tables in Chapter 5.

fects, which is in line with the results discussed in Chapter 5. Detailed results obtained using those dependent variables are not reported here.

Table 7.1. Regression results. Dependent variable: annual change in total general government spending, % of GDP.

	All countries		Old member states, Malta and Cyprus		Post-communist countries	
	I	II	III	IV	V	VI
Number of government parties	0.074 (0.121)	0.068 (0.123)	0.031 (0.142)	0.031 (0.142)	0.274 (0.205)	0.403* (0.188)
Quality of government	0.158 (0.171)	0.187 (0.167)	0.153 (0.191)	0.151 (0.193)	1.030 (0.528)	1.194* (0.480)
Caretaker time	0.464 (1.302)	0.419 (1.297)	0.638 (1.559)	0.638 (1.559)	-0.601 (1.671)	-0.329 (1.740)
Effective no. of parliamentary parties	-0.282 (0.152)	-0.295 (0.151)	-0.273 (0.174)	-0.274 (0.176)	-0.588 (0.305)	-0.477 (0.269)
Median voter position	-0.017 (0.010)	-0.088 (0.053)	-0.003 (0.010)	-0.000 (0.080)	-0.073** (0.025)	0.313* (0.152)
Median voter position × QoG		0.008 (0.006)		-0.000 (0.009)		-0.062* (0.025)
Lagged spending level	-0.290*** (0.033)	-0.296*** (0.033)	-0.239*** (0.043)	-0.239*** (0.043)	-0.548*** (0.051)	-0.561*** (0.051)
GDP change	-0.397*** (0.029)	-0.399*** (0.029)	-0.495*** (0.041)	-0.495*** (0.041)	-0.301*** (0.028)	-0.302*** (0.029)
Unemployment	-0.008 (0.045)	-0.008 (0.045)	0.009 (0.059)	0.009 (0.060)	0.016 (0.074)	0.004 (0.067)
Debt	0.006 (0.008)	0.006 (0.008)	-0.008 (0.010)	-0.008 (0.010)	0.002 (0.022)	0.001 (0.020)
Inflation	-0.014*** (0.001)	-0.014*** (0.001)	-0.144** (0.048)	-0.144** (0.048)	-0.013*** (0.002)	-0.014*** (0.002)
Fiscal rule index (IMF)	-0.558* (0.216)	-0.565** (0.214)	-0.140 (0.250)	-0.138 (0.251)	-0.369 (0.325)	-0.339 (0.336)
Maastricht	-0.068 (0.248)	-0.087 (0.249)	-0.966** (0.329)	-0.966** (0.328)	0.622 (0.641)	0.328 (0.620)
N	592	592	429	429	163	163
Adjusted R^2	0.404	0.405	0.395	0.394	0.539	0.554

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 7.1 reports the results when the dependent variable is the annual change of government spending. As with the cabinet right-left position, the median voter's position should have a minus-signed effect as larger values indicate that the median voter is located further to the right, which in turn should indicate a preference for less spending. In the data covering all EU countries, no statistically significant effects are discernible. This applies to the group of 17 countries consisting of the old member states, Cyprus and Malta. In the post-communist countries, political variables again have

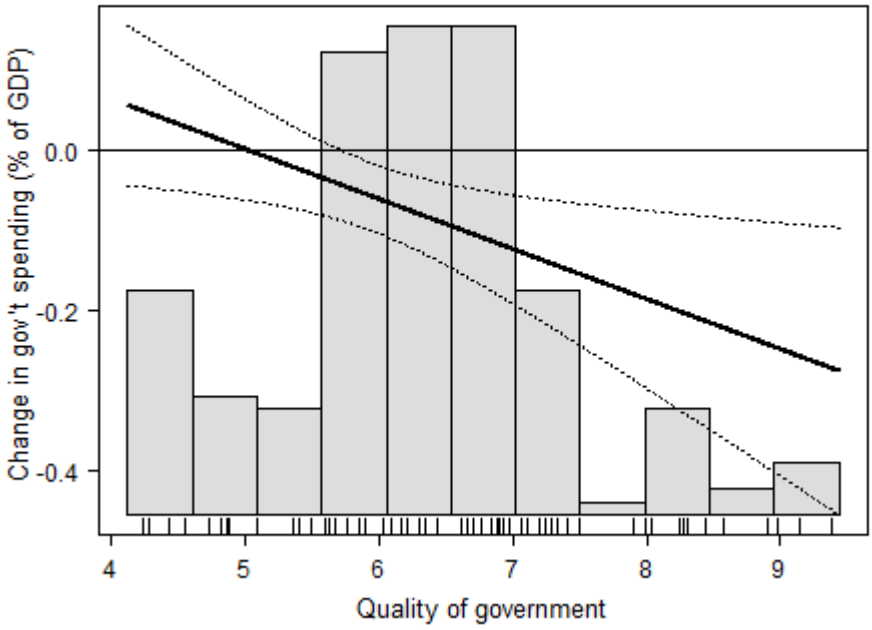

Figure 7.1. The marginal effect of the median voter's right-left position on government spending in the post-communist countries.

much clearer effects. On average, more rightist median voter positions are associated with less spending, as indicated by the additive model reported in Column V. As Column VI suggests, the median voter position interacts with the quality of government. Specifically, the regression coefficients indicate that the estimated effect of the median voter position is opposite to what should be expected when the quality of government is extremely low, whereas improvements in the quality of government bring the effect towards the 'correct' negative sign. It can also be noted that when the median voter position is interacted with the quality of government, the number of government parties assumes a positive, statistically significant effect on spending in the post-communist countries.

Figure 7.1 shows how the marginal effect of the median voter's right-left position changes with the quality of government. Note how similar it looks to Figure 5.2 in Chapter 5, where the marginal effect of the right-left position of the cabinet is plotted against the quality of government. The fact that the marginal effect is statistically insignificant in the left-hand part of the figure supports the claim that on low quality of government levels, the policy preferences of the citizens have little effect on policy outputs. However, as the quality of government score increases, the effect becomes more deviant from zero with the 'correct' negative sign, indicating that the movement of the median voter to the right tends to be associated with spending decreases and,

conversely, that the movement of the median voter to the left is associated with spending increases. The range of empirically relevant quality of government scores on which the effect is statistically significant is relatively large.

Table 7.2. Regression results. Dependent variable: net lending (+) or borrowing (–), % of GDP.

	All countries		Old member states, Malta and Cyprus		Post-communist countries	
	I	II	III	IV	V	VI
Number of government parties	-0.218 (0.132)	-0.216 (0.133)	-0.219 (0.160)	-0.219 (0.160)	-0.226 (0.173)	-0.317* (0.146)
Quality of government	-0.100 (0.157)	-0.113 (0.155)	-0.152 (0.177)	-0.152 (0.180)	-0.517 (0.353)	-0.642 (0.326)
Caretaker time	-0.237 (1.225)	-0.221 (1.225)	-0.588 (1.568)	-0.588 (1.457)	0.613 (0.910)	0.388 (1.176)
Effective number of parliamentary parties	0.190 (0.160)	0.197 (0.159)	0.252 (0.189)	0.252 (0.191)	0.410 (0.268)	0.284 (0.254)
Median voter position	0.011 (0.010)	0.046 (0.055)	0.002 (0.010)	0.003 (0.079)	0.028 (0.021)	-0.280* (0.116)
Median voter position × QoG		-0.004 (0.006)		-0.000 (0.009)		0.050** (0.019)
Lagged deficit	0.646*** (0.032)	0.645*** (0.032)	0.681*** (0.039)	0.681*** (0.039)	0.325*** (0.066)	0.315*** (0.067)
GDP change	0.320*** (0.038)	0.321*** (0.038)	0.433*** (0.045)	0.433*** (0.045)	0.238*** (0.031)	0.242*** (0.031)
Unemployment	-0.065 (0.044)	-0.063 (0.044)	-0.096 (0.058)	-0.096 (0.060)	-0.087 (0.057)	-0.073 (0.049)
Debt	0.022** (0.007)	0.022** (0.007)	0.026** (0.009)	0.026** (0.009)	0.044** (0.017)	0.043** (0.016)
Inflation	0.020* (0.010)	0.020* (0.010)	0.089 (0.046)	-0.089 (0.046)	0.013 (0.008)	0.017 (0.011)
Fiscal rule index (IMF)	0.067 (0.212)	0.068 (0.211)	-0.289 (0.256)	-0.289 (0.257)	0.266 (0.294)	0.264 (0.292)
Maastricht	0.497* (0.249)	0.507* (0.247)	1.190*** (0.010)	1.190*** (0.334)	-0.418 (0.461)	-0.178 (0.403)
N	590	590	429	429	161	161
Adjusted R^2	0.583	0.582	0.640	0.638	0.437	0.453

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

To assess whether other policy outcomes depend on the position of the median voter in a similar way, regressions reported in Table 7.2 repeat the analysis with the budget balance, defined as net lending or borrowing, as the dependent variable. As more rightist positions on the right-left dimension should indicate preference for the avoidance of deficits, the effect of the variable should have a positive sign. The additive models (columns I, III and V) suggest that, on average, the effect of the median voter position is very close to zero. Outside the post-communist area, the interaction terms

whose coefficients are practically zero, too, indicate that there is also no evidence of the median voter position interacting with the quality of government. This is again different in the post-communist countries. Again, the negative coefficient on the median voter position in column VI suggests that the effect is reversed when the quality of government is extremely low, whereas it approaches the 'correct' positive-signed effect as the quality of government improves. The effect of the number of government parties can again be noted. In the post-communist countries, coalition size has a negative effect on the budget balance when the median voter position is interacted with the quality of government. Hence, when this interaction is accounted for, larger government coalitions not only tend to spend more but also to run larger deficits, which is what the standard view about the consequences of multiparty government would lead one to expect.

As can be seen from Figure 7.2, the position of the median voter has no statistically significant effect on the budget balance on the lowest empirically relevant quality of government levels, while it assumes a positive-signed effect as the quality of government improves. The ranges of the quality of government score on which the median voter position has statistically significant effects on spending and the budget balance are not exactly the same, but both marginal effect plots convey the same message: the position of the median voter on the right-left continuum affects fiscal policy outcomes only when the quality of state institutions is sufficiently high.

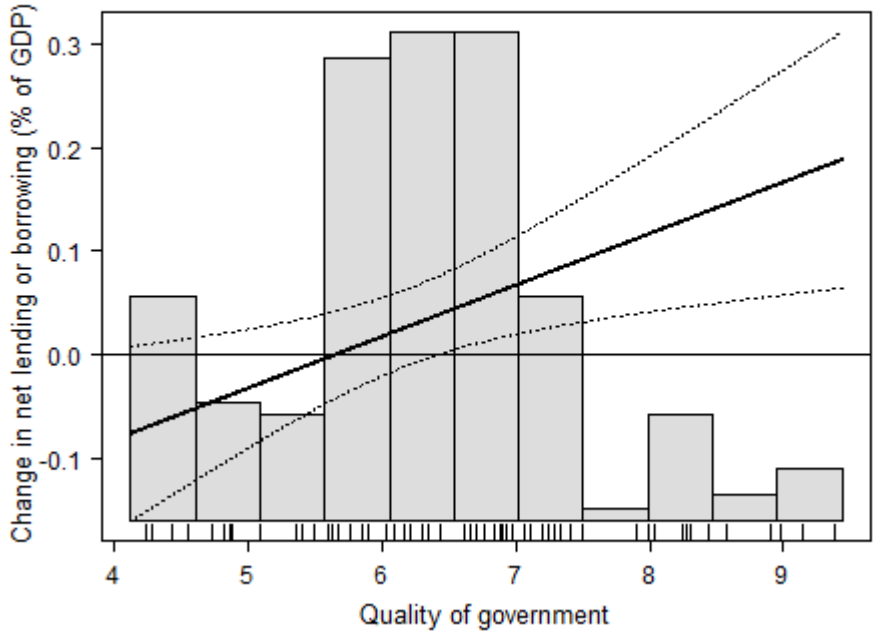

Figure 7.2. The marginal effect of the median voter's right-left position on government net lending or borrowing in the post-communist countries.

In the preceding chapters, the effect of the number of government parties was found to be strongest when the quality of government is low. It is therefore highly unlikely that spending increases associated with coalition size follow from the responsiveness of government parties to the programmatic preferences of the electorate. Moreover, deficits in environments characterised by a low quality of government are unlikely a function of electorates' programmatic preferences. Hence, insofar as spending increases and deficits are perceived as problematic in such cases, it is difficult to justify them by claiming that they are in line with the preferences of democratic majorities. Conversely, it is difficult to blame profligate majorities for budget imbalances and the expansion of spending.

To recapitulate, the right-left scores used here are originally from the Comparative Manifesto Project and are based on party programmes containing statements about aims and issue priorities. An objection often raised to scores based on such material is that they do not necessarily reflect 'true' policy positions, but instead reflect what parties say with tactical and other context-dependent issues in mind (Budge 2000). For the present purposes, this is a benefit rather than a shortcoming. It is possible to compare what parties do once they obtain government power to what they *say* they would do. If the former is a function of the latter, there is at least a programmatic trait in representative decision making; a strong and systematic mismatch, visible even after controlling for a host of variables plausibly affecting policy outcomes, can be seen as an indicator of dishonesty being widespread.

Western Europe before the Fall of Communism

The preceding analysis suggested that the position of the median voter affects policy outcomes in a limited set of cases, that is, in those post-communist countries where the quality of government is relatively high. The results are hence in line with what the previous chapters revealed about the effects of the cabinet's right-left centre of masses: it largely lacks discernible effects in post-communist countries with low-quality government institutions, on the one hand, and outside the post-communist area, on the other. Given that the lack of programmatic effects is normatively undesirable, the question arises whether the two sets of cases represent degenerate forms of democracy, while post-communist countries, with relatively high quality of government, emerge as champions of democracy.

The lack of programmatic effects outside the post-communist area is unlikely a function of a low quality of government, although it is a plausible explanation in the post-communist context. Plausible explanations can, however, be sought from changed historical circumstances. Globalisation and economic openness have arguably restricted the room for manoeuvre that national governments and electorates used to have. It is

not, however, simple to draw an unambiguous temporal boundary where national, programme-driven politics may have lost its fiscal consequences.

A plausible demarcation line coincides with the fall of communism in most parts of the world, including Central and Eastern Europe and the Balkans. As Tanzi (2011, 132–137) notes, by the early 1990s, pro-market ideas had become popular and increasingly translated into concrete policies favouring privatisation and public-private partnerships. The turn of the decade was also marked by the liberalisation of capital movements which considerably restricted the ability of national governments to control the economy. More generally, the period was characterised by a wave of globalisation accompanied by technological advances, especially in the field of information processing and communication. To the accelerating globalisation of the economy can be added the effects that the end of the Cold War allegedly had on the political clout of ideological differences. The fall of communism eliminated the main competitor of capitalism and, arguably, crucially weakened the centre-left in western democracies, as it was no longer able to back its demands for the regulation of the economy, extensive welfare state policies and redistribution of income with the claim that those are the only ways of preventing capitalist economies from sliding into communism. In short, all parties independently of their ideological orientations were forced to adapt to the new global order, where the task of the state was to create and uphold conditions favourable to markets. Moreover, European integration, which at the time was a Western European project, reached a new phase with the founding of the European Union with the Maastricht Treaty of 1992. In sum, the turn of the decade brought qualitative changes in the environment in which party politics takes place, those changes being identified as relevant also by some of those studying the fiscal consequences of multiparty government (e.g. Bäck *et al.* 2017).

Hence, in order to assess whether the once-programmatic politics of Western Europe has changed into something else, data from the era before the fall of European communist regimes is analysed next. The data covers 14 Western European countries from approximately 1970 to 1989. That is, the countries are the 'old' member states of the European Union, excluding Luxembourg for which data on a number of essential variables is lacking for this period. Moreover, quality of government scores cannot be included as they are only available from 1984 onwards. As Germany was the only country with fiscal rules (an expenditure rule and a balanced budget rule) in place before the end of the 1980s, the stringency of fiscal rules is not controlled for.

If political programmes did have more importance during the period preceding the fall of communism, this should be reflected in substantively and statistically significant effects that the programmatic centre of masses of the cabinet and the median voter's position have on fiscal policy outcomes. Table 7.3, however, suggests that this is not the case. The table contains results from six models, two for each of the following fiscal policy outcomes: the annual change of government spending, the budget balance operationalised as net lending or borrowing and the annual change of government debt. One of the models pertaining to each dependent variable contains the centre of masses

of the cabinet as the programme-related variable, whereas the other contains the median voter's position.

Table 7.3. Regression results. 14 EU countries from 1970 to 1989.

	Dependent variable: annual change of spending		Dependent variable: net lending or borrowing		Dependent variable: annual change of debt	
	I	II	III	IV	V	VI
Number of government parties	0.235* (0.108)	0.265* (0.124)	-0.025 (0.134)	-0.069 (0.143)	-0.328 (0.355)	-0.149 (0.385)
Right-left	-0.003 (0.006)		0.003 (0.007)		-0.029 (0.017)	
Caretaker time	0.878 (0.920)	1.022 (0.937)	0.100 (1.018)	-0.124 (1.034)	0.731 (2.563)	1.789 (2.686)
Effective no. of parliamentary parties	-0.276 (0.201)	-0.312 (0.210)	0.019 (0.221)	0.069 (0.222)	-0.064 (0.617)	-0.307 (0.602)
Median voter position		0.009 (0.013)		-0.014 (0.012)		0.048 (0.035)
Lagged spending level	-0.080** (0.031)	-0.083** (0.031)				
Lagged deficit			0.769*** (0.054)	0.762*** (0.053)		
Lagged net lending					0.187 * (0.081)	0.193 * (0.078)
GDP change	-0.431*** (0.055)	-0.427*** (0.054)	0.248*** (0.061)	0.241*** (0.061)	-0.554*** (0.161)	-0.510** (0.159)
Unemployment	-0.043 (0.059)	-0.034 (0.061)	-0.052 (0.021)	-0.067 (0.062)	0.651*** (0.191)	0.694*** (0.182)
Debt	-0.019* (0.008)	-0.020* (0.008)	0.017* (0.009)	0.018* (0.009)	-0.076*** (0.021)	-0.081*** (0.021)
Inflation	0.038 (0.033	0.044 (0.032)	-0.008 (0.038)	-0.018 (0.036)	0.029 (0.108)	0.086 (0.104)
N	245	245	245	245	232	232
Adjusted R^2	0.416	0.417	0.604	0.605	0.236	0.234

Results obtained using within-unit transformation. Panel corrected standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Columns I and II that pertain to spending show that while the number of government parties has a statistically significant, positive-signed effect, the effects of the programmatic variables are practically zero. Indeed, the number of government parties is the only political variable with a statistically but also substantively significant effect: on average, the addition of one party to the government coalition led to a more than 0.2 percentage point increase in spending.[21] What also deserves to be noticed is the coeffi-

[21] One might suspect that the result is driven by Italy, a country with a fragmented party system and, in the period for which data is available, a low quality of government by Western European

cient on the lagged spending level. It is much smaller than the corresponding coefficient in comparable models based on newer data. One can infer that the restrictive effect coming from the level of existing spending was weaker in this earlier period, which may then have led to distributive spending as indicated by the effect of coalition size.

Columns III to VI pertain to the budget balance operationalised as net lending or borrowing and the annual change of debt. Again, none of the variables pertaining to the programmatic aspects of politics have discernible effects. Despite the rather strong relationship between the number of government parties and spending, that relationship does not appear to directly translate into budget imbalances. The same applies to government revenue, the results of which are not reported for reasons of space.

In the light of these results, Western European politics before the end of the Cold War shared features with the politics of post-communist countries with low-quality government institutions. Unfortunately, the interaction between political variables and the quality of government during the earlier period cannot be tested with the available data. Such interactions made it possible to rule out, with great confidence, the possibility that the association between the number of cabinet parties and spending increases in the post-communist countries is about to approach an optimal spending level from below thanks to improved representation (see Chapter 3). Here, that cannot be done. It is possible that independently of the quality of government, distributive issues had more weight in party politics before the 1990s, whereas programmatic aspects were as marginal, at least with respect to fiscal policy, as they have been in the later period.

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It has to be noted that even the data analysed in this section dates back to the early 1970s, which already marked the end of the so-called ‘golden age of capitalism’ with relatively steady income increases, extensions of social protection and little perceived

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standards. The robustness of the result was checked by excluding Italy from the analysis. The coefficients of the number of government parties decreased somewhat but remained statistically significant. The removal of Italy does not lead to qualitative changes in the regressions where the dependent variable is net lending/borrowing or the change of the debt level. The results are available from the author upon request.

need to worry about the sustainability of public finances. Older data might reveal different effects between variables related to programmatic aspects of politics and fiscal policy outcomes. Going further back in time is, however, outside the scope of this work.

The Potential Endogeneity of Fiscal Rules

In the opening chapters of this work, references were made to the growing literature on fiscal rules. The general message from that literature is that by adopting more stringent rules, governments can effectively avoid and solve common-pool problems – in fact, the metaphor of the common-pool problem seems to be especially popular in that literature. The claim that the rule-boundedness of fiscal policy alleviates tendencies to increase spending without limits and to engage in deficit spending is by now well established. However, as Elinor Ostrom (2005), among others, points out, the creation and implementation of such rules may create a second-order social dilemma that raises the original one on a different level. The endogeneity problems associated with fiscal and procedural rules as explanatory variables have been repeatedly acknowledged but they have not been satisfactorily addressed. As Charlotte Rommerskirchen (2015) argues, despite the voluminous literature on fiscal rules, the independent effects of such rules are still highly uncertain.

The same applies to procedural rules. For example, Hallerberg *et al*. (2009) start from a model of a budgetary common-pool problem and show how the decentralisation of decision-making authority leads to spending increases and to a propensity to spend sooner rather than later. Hallerberg *et al*. then argue that rules that regulate the process in which the budget is formulated and passed can solve the common-pool problem, as long as the procedural rules fit into the general institutional environment of the country. The authors note that countries indeed tend to adopt the kinds of procedural rules that are in line with the rest of their political institutions; Hallerberg *et al*. are much vaguer in their attempts to explain the adoption of those rules. Fundamentally, the explanations they provide are functionalist: countries adopt certain kinds of rules because they have beneficial consequences. Hallerberg *et al*.'s focus is exclusively on formal rules and the institutional structure of representative government; they do not consider informal institutions or the larger societal fabric in which those institutions, formal and informal alike, are embedded.

Advising countries to adopt more stringent fiscal or procedural rules has a flavour similar to many anti-corruption programmes. Based on a view of corruption as an agency problem where misconduct follows from conflicts of interest and insufficient monitoring between principals and agents (cf. Besley 2006), numerous programmes have sought to solve problems of corruption by enacting more stringent legislation that involves heavier sanctions and more effective monitoring, thereby assumedly deterring officials from abusing their positions. Anti-corruption programmes of this kind are

notoriously prone to failure, however. Persson *et al.* (2012) argue that they presuppose that the institutional environment that anti-corruption legislation seeks to create already exists (see also Mungiu-Pippidi 2006, 2015). In other words, they assume that there is an electoral, administrative or judicial principal implementing and enforcing the anti-corruption legislation. This is not necessarily the case when corruption is systemic, implying that it should be characterised as a collective action problem rather than an agency problem. In such settings, corruption is not a deviation from a general norm but a norm in its own right, whereby people expect others to be corrupt and therefore engage in corruption themselves. It is hence unlikely that a principal who could take charge of enforcing anti-corruption legislation would exist. Corrupt politicians at the top of a society pervaded by corruption are exactly the people who would lose most from changes in the established state of affairs, and therefore lack the motivation to initiate changes.

Similarly, offering formal rules as solutions to problems in the management of the public economy appears to suffer from analogous excessive reliance on the notion that there is an actor in whose interest it is to enforce those rules. After all, the notion of the budgetary common-pool problem draws attention to the nature of fiscal problems as collective action problems in which none of the relevant players finds it worthwhile to take charge of enforcing fiscal or procedural rules.

Hence, although indices of fiscal rule strength were used as explanatory variables in the statistical analyses reported thus far, the exact role of those rules deserves further attention. The fiscal rule index based on IMF data that was used in the regressions discussed in the main text often turned out to have weak or statistically significant effects, but when it did affect policy outcomes, its effects were in line with expectations. The robustness checks using the European Commission's fiscal rule index, with a smaller temporal coverage but potentially better information content (see Chapter 4), also performed largely as expected. In other words, more stringent and encompassing fiscal rules tend to curb increases of spending and revenue as well as restrict budget deficits, in line with the notion of 'fiscal discipline' that has become popular in everyday political parlance.

The extent to which fiscal discipline is a function of rules as such can be questioned, however. In particular, one needs to ask whether rules are solutions in themselves or just manifestations of solutions to problems of collective action that have been reached on a more fundamental level. If the latter view is correct, it is not particularly surprising to see empirical connections between the adoption of rules and policy changes. This pertains not only to (numerical) fiscal rules, which are in the spotlight of the present treatment, but also to procedural rules of the kind analysed by Hallerberg *et al.* (2009). Just like numerical targets and limits can be seen as part of the solution to a commons problem, the procedure in which budgets are made can be changed in order to secure the aims of the solution (cf. Molander 2001). As noted earlier, procedural rules fall outside the scope of this work, and in the following the emphasis is on fiscal rules.

Table 7.4. Average values of the fiscal rule indices per country.

	IMF index	IMF index (national rules)	Commission's index
Austria	0.44	0.28	-0.15
Belgium	0.45	0.22	-0.03
Bulgaria	0.70	0.74	0.27
Croatia	0.24	0.35	-0.33
Cyprus	0.28	0.00	-1.01
Czech Republic	0.28	0.00	-0.38
Denmark	0.45	0.28	0.83
Estonia	0.57	0.43	0.91
Finland	0.58	0.43	0.31
France	0.81	0.62	0.04
Germany	0.56	0.43	0.51
Greece	0.31	0.00	-0.93
Hungary	0.63	0.43	-0.41
Ireland	0.27	0.00	-0.91
Italy	0.27	0.00	-0.49
Latvia	0.28	0.00	0.01
Lithuania	0.58	0.53	0.10
Luxembourg	0.98	0.87	0.66
Malta	0.28	0.00	-1.01
Netherlands	1.13	1.04	0.65
Poland	0.65	0.69	1.09
Portugal	0.32	0.00	-0.59
Romania	0.58	0.45	-0.62
Slovakia	0.34	0.09	-0.13
Slovenia	0.53	0.32	-0.02
Spain	0.88	0.64	0.63
Sweden	0.66	0.50	0.91
United Kingdom	0.81	0.68	0.81

It is useful to first take a look at the geographical variation in fiscal rules. Table 7.4 shows the country averages of three indices. The first of them is the IMF index used in regressions throughout this work. The second is an index of domestic fiscal rules, i.e. those not originating from EU legislation and treaties, that more accurately reflects the rules that are in the control of national policymakers. The third one is the European Commission's index. The indices give largely the same impression about which countries have the strongest and the weakest rules, although they do not produce identical rank orders. As for the IMF indices, a general impression arises that post-communist countries tend to have relatively strong rules in general, whereas outside the post-communist area, countries with a higher quality of government tend to have higher fiscal rule index scores. For example, the index of national rules is zero for Greece and Italy, those countries having the lowest quality of government scores in the group of old member states. The level of public debt is also very high in those countries. More generally, Southern European countries (except Spain) tend to have lower scores than the countries of Northern and North-Western Europe when any of the indices is concerned. This informal examination of country averages renders preliminary support for

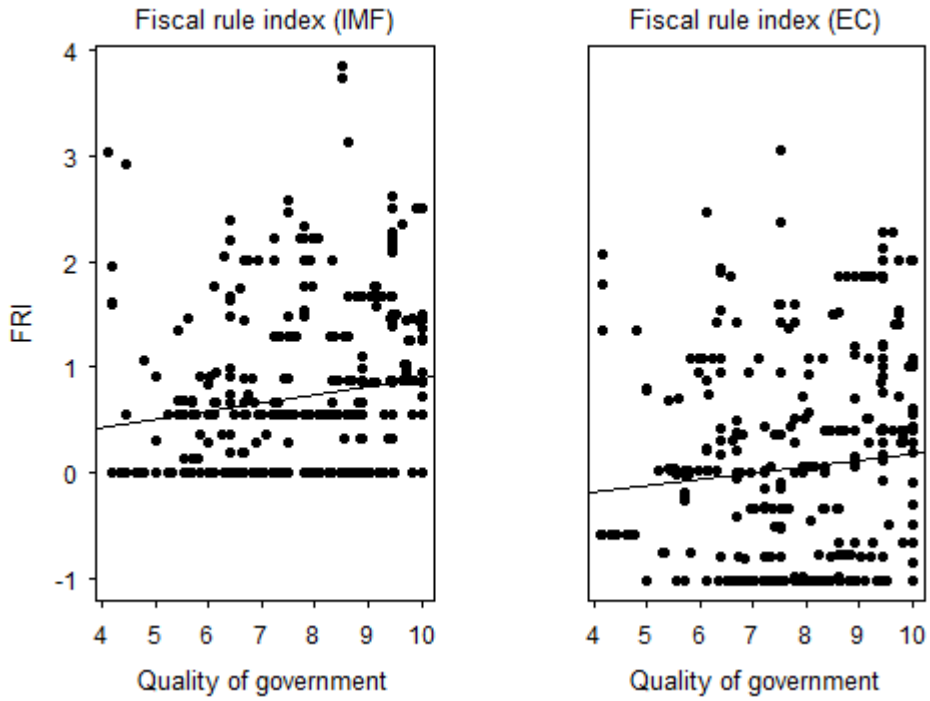

Figure 7.3. The relationship between the quality of government and fiscal rule indices.

the expectation that the quality of government and the adoption of strong fiscal rules are connected, although the division between non-post-communist and post-communist countries again seems to make the picture somewhat more complicated.

Country averages give a crude impression of the stringency of fiscal rules as they do not account for the fact that rules can change over time. Figure 7.3 shows the values of the IMF and Commission indices plotted against the quality of government in each country-year. There appears to be no systematic relationship between fiscal rules and the quality of government, however. The values of both fiscal rule indices are widely dispersed on any quality of government level and the least squares lines included in both panels, summarising the linear relationship between the variables, have positive but quite small slopes. Hence, the overall relationship between the quality of government and fiscal rules does not appear to have much connection.

Country averages do, however, give a somewhat different picture of the relationship between fiscal rules and the quality of government, even in a more detailed examination. Table 7.5 reports three regressions using between-unit estimations. That is, the regressions use country averages of all variables included in the model. The dependent variables are the three fiscal rule indices presented in Table 7.4, i.e. two IMF indices based on all rules and national rules, respectively, and the Commission's index. The independent variables are the quality of government, a dummy variable indicating status as a post-communist country, and the interaction of the two. The interaction is in-

cluded to test the hypothesis that fiscal rules are connected to quality of government in non-post-communist countries but not in the post-communist area. The regression results indicate that this is indeed the case, at least for the indices based on IMF data. In the reference group without a communist past, countries with a higher quality of government tend to have more stringent and encompassing rules than countries with a lower quality of government. However, status as a post-communist country suppresses the effect.

Table 7.5. The impact of the quality of government on fiscal rules.

	Fiscal rule index (IMF)	Fiscal rule index (IMF, national rules)	Fiscal rule index (EC)
Quality of government	0.238 (0.078)**	0.293 (0.087)**	0.461 (0.131)**
Postcommunist	2.196 (1.040)*	3.071 (1.158)*	3.898 (1.723)*
Quality of government × postcommunist	-0.305 (0.147)*	-0.402 (0.164)*	-0.438 (0.243)
Constant	-1.239 (0.675)	-2.004 (0.752)*	-3.962 (1.139)**
N	28	28	28
Adjusted R^2	0.316	0.301	0.293

Between-unit estimations. Standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

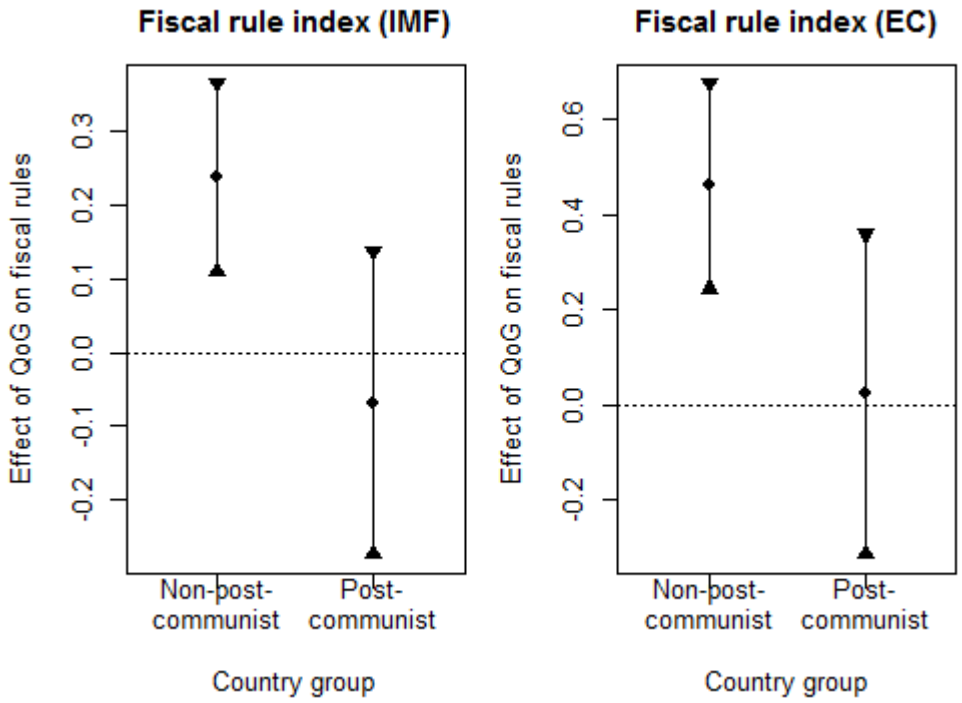

Figure 7.4. The effect of the quality of government on fiscal rule indices.

This is visualised in Figure 7.4. which shows the effect of the quality of government on the overall IMF fiscal rule index and the European Commission's index.[22] Outside the post-communist area, the effect is clearly positive with respect to both indices. However, in the post-communist countries, the point estimate of the effect is very close to zero, and the boundaries of the 95% confidence intervals span far on both sides of the zero line, indicating the lack of significance of the estimate. The difference between the country groups is clearer when it comes to the IMF index (the same applies to the index of national fiscal rules, for which no plot is shown here as it would be almost identical to the left-hand panel of Figure 7.4).

It could be argued that regressing country averages against country averages does not provide convincing evidence about the role of the quality of government in the adoption of fiscal rules, as those rules may affect the quality of government scores countries are assigned. After all, the quality of government indicator used here draws on assessments of country risks, especially when it comes to investment and business, and lax fiscal rules might increase the assessed level of risk. Hence, one would like to see that the quality of government scores countries were assigned in the past credibly predict the fiscal rules the country adopts later on. The effects are largely similar if, for example, the values of the fiscal rule indices in 2007, the last year before the global economic downturn, are regressed against the first quality of government scores that are available. In the old member states, the coefficient of the quality of government score is 0.440 (p = 0.002, adj. R^2 = 0.483) when the European Commission's index from 2007 is regressed against the first quality of government score, which in most cases pertains to 1984; in that year, fiscal rules were still uncommon. Substantively the same result is obtained if the index of national rules based on IMF data is used. There is a gap of more than two decades between the fiscal rule index values and quality of government scores, and a connection between the two suggests that countries with a higher quality of government are indeed more likely to adopt more stringent rules.

To recapitulate, this result pertains to the traditionally capitalist countries. In the post-communist countries, no clear pattern emerges. For example, the Romanian quality of government scores are among the lowest in the European Union, but the country has had, at least periodically, very stringent fiscal rules in place. Neighbouring Hungary, in turn, exhibits some of the highest quality of government scores in the area but has had generally lax fiscal rules. It may be the case that outside the post-communist area, fiscal rules have evolved to reflect solutions to problems of public finance that high-quality government institutions have helped to find. In transition countries, by contrast, countries where corruption, bureaucratic inefficiencies and other aspects of a low quality of government have been perceived as problems, the adoption of fiscal rules has provided one way of trying to solve situation – or at least to show international donors and the European Union that problems are being addressed.

[22] The figure is drawn with R using code modified from Strezhnev (2013).

As stated above, the aim here is not to delve deeply into the processes that have led to the adoption of fiscal rules, since the main goal is to establish whether and how the quality of government is connected to fiscal rules. The data supported the conclusion that a higher quality of government levels tends to translate into stronger fiscal rules, albeit the effect appears to be conditional. However, if an empirical analysis suggests that the fiscal rules of a country affect the level of spending, changes in debt levels or other outcomes that analysts are often concerned with, it is not self-evident that the rules in the best performing countries can actually be used as a set of best practices that could be successfully emulated elsewhere. The question is not only about the formal institutional environment in which such rules would be transplanted (cf. Hallerberg *et al.* 2009), but also the informal institutions of the society.

Quality of Government and Technocracy

Outside the post-communist area, the quality of government tends to be high with some notable exceptions, like Italy and Greece. Moreover, in most countries the institutions of representative democracy have had ample time to take root in the society, and the relative stability of party systems – again with some notable exceptions – have created possibilities for parties to establish their programmatic outlooks. Together, these facts could be expected to make it possible to see strong connections between variables related to programmatic aspects of politics and policy outcomes. Yet generally this is not the case: in light of the evidence accumulated in the preceding chapters and the present one, those programmatic aspects have only a marginal influence on outcomes. Some might take this as an indication that in mature capitalist democracies, such as those of Western Europe, fiscal policymaking is as it should be, in the sense that it reacts to changes in the macroeconomic environment but not in the composition of governments. According to this benign interpretation, political risks faced by economic actors are small as there is no danger of the public sector starting to forcefully expand once a leftist cabinet assumes office, or conversely that productivity-enhancing government programmes are terminated by an anti-state rightist cabinet on ideological grounds.

Another explanation, not at odds with the aforementioned explanation, draws on the role of prevalent ideas. The period from the Second World War until the early 1970s is often portrayed as the period of a Keynesian paradigm in economic thinking, although as Hall (1994) notes, national interpretations and applications of Keynesian ideas varied considerably. Starting from the 1970s, monetarist and neo-liberal doctrines have broken through, first in academic circles and later in the sphere of practical policymaking, ending in a kind of culmination in the so-called Washington Consensus in the early 1990s (e.g. Tanzi 2011). As Raudla (2010) notes, with physical common-pool resources, reliable information about the functioning of the resource helps its sustainable management, this also being so in the case of the budgetary commons. Yet, as highlighted in Chapter 3, what counts as ‘reliable information’ is not as self-evident in the

budgetary case, as the relevant information pertains to highly disputable aspects of how economic systems work. This is not to deny that prevailing ways of thinking do change over time. Insofar as high-quality government institutions bring epistemic content to the political process, such doctrinal tides have their effects on the management of the public economy and restrict the effects of the programmatic colour of the government of the day. Studying changes in economic paradigms goes beyond the scope of a work intended to investigate the effects of multiparty government, although those changes might be relevant to understanding how the management of the budgetary commons works. This points to the importance of creating closer connections between different bodies of work on institutions, quantitative data and 'objective' observations, on the one hand, and works with a more qualitative and discursive approach, on the other.

A strong role of the state administration in transmitting prevailing doctrines into policy choices is not entirely unproblematic as it may imply that bureaucrats, technocrats or experts effectively set policies, not electorally accountable politicians. Such a view is not necessarily entirely without grounds, given the often-heard claim that politics of established democracies has declined to little more than the day-to-day administration of the public sector. An impartial and effective public bureaucracy that is capable of operating under the norm of universalism requires that the bureaucracy is sufficiently autonomous from political pressures (Fukuyama 2014); otherwise, the public sector would easily turn into an instrument of clientelism and patronage, whereby the impartial implementation of laws and policies would be undermined. The relationship between quality of government and autonomy Fukuyama depicts is not, however, linear: when autonomy becomes excessive, bureaucracy becomes unresponsive and can effectively set policy goals.

Thus, a problem that countries with high-quality, autonomous state institutions face, and one that has scarcely been addressed by the quality of government literature, is the risk of epistemocracy, or the replacement of democratic will-formation with the will of those who purportedly know better. The quality of government literature has convincingly argued that high-quality state institutions are conducive of satisfaction with democracy among the public (Dahlberg and Holmberg 2014). However, the emergence of populist movements in a number of countries with the highest quality of government scores highlights the possibility that even high-quality public-sector institutions do not prevent electoral phenomena where experts, officials and other 'elites' are placed against 'ordinary people'.

Conclusion

This chapter continued investigating the relationships between the quality of government and fiscal policy. The emphasis was more explicitly democratic than in the preceding two chapters that were more concerned with characteristics of cabinets. An overarching argument in this work has been such that high-quality government institu-

tions increase the programmatic content of politics and thereby limit the dependency of budgetary outcomes on the number of parties in government. This chapter asked whether a high quality of government also improves the responsiveness of the political process to the programmatic preferences of the public. Given the difficulties of defining or measuring those preferences, the position of the median voter was used as a workable indicator, given its normative appeal and, based on earlier research, empirical relevance in other contexts.

In line with other evidence presented throughout this work, a low quality of government effectively eliminates the impact of the median voter's position on policy outcomes. In contrast, the effects were largely as they should be when the quality of government is sufficiently high, but this finding only pertains to the post-communist countries and to certain dependent variables. In those political systems, the movement of the median voter to the right is associated with spending reductions and larger budget surpluses (or smaller deficits), which is in line with the notion that rightist orientations emphasise restricting the role of the public sector and keeping the budget in balance.

However, the position of the median voter turned out to have no discernible effects outside the post-communist area. The lack of programmatic effects in this set of countries, which was already visible in the previous chapters, is anomalous in light of the claim that a high quality of government is conducive of programmatic politics. An analysis of older data from the 1970s and 1980s suggested that programmes had practically no effects in past decades, either; spending did depend on the number of government parties, much like in the post-communist countries with low-quality state institutions.

As that effect is not visible in newer data, one could say that the countries of Western Europe have managed, since the 1980s, to solve that common-pool problem of budgeting that was visible in the dependency of spending on the number of government parties. In that process, the role of state institutions may have played a role. Despite the generally high level of confidence that contemporary research literature and political practice put on fiscal rules, their nature as truly exogenous restraints on profligacy has been called into question. Fiscal rules share the feature with many anti-corruption programmes that there may be no actor with genuine incentives to implement them. Rather, stringent fiscal rules may reflect a more fundamental commitment to fiscal discipline that is then codified in the budgetary legislation or even the constitution. Insofar as a high quality of government is conducive of such commitment, it should also be associated with more stringent rules. Outside the post-communist area, this turned out to be the case. In fact, quality of government scores from the mid-1980s were statistically significant predictors of fiscal rule index values more than two decades later, despite the fact that fiscal rules in the 1980s were rare.

In sum, the quality of government appears to facilitate the solution of budgetary common-pool problems in post-communist and non-post-communist countries alike, but how it does so differs between the two sets of countries. In the post-communist countries, the quality of government increases the programmatic content of politics;

while this does not guarantee the sustainable management of public finances, it at least makes it possible to present programmes aimed at sound fiscal stances. Outside the post-communist area, the quality of government has facilitated the adoption of fiscal rules. While the latter may in principle offer a more direct route to sustainable public finances – the empirical record being less clear, as has been seen throughout this work – it is also more problematic in democratic terms. That is, it creates the risk of eliminating everything political from politics and replacing it with rule by technocrats.

Chapter 8
Conclusion

The notion of the budgetary common-pool problem has become immensely popular in comparative political economy and institutional approaches to public finance. There appears to be a tendency, however, to use the notion quite light-heartedly without thinking about its full set of implications. Notably, the common-pool problem has often been described as something that more or less necessarily emerges in joint decision making by multiple actors, unless formal rules restrict those actors' room for manoeuvre. The notion of the common-pool problem creates an analogy to the management of certain kinds of physical and natural goods and resources that are liable to overuse and depletion. However, a body of research, that by now is large and well established, has repeatedly shown that the view of common-pool resources as being inherently under threat of depletion is outdated. Instead of trying to avoid common-pool resource situations, it is more fruitful to seek to identify the conditions in which the management of common-pool resources succeeds or fails.

This work has focussed on one, widely discussed manifestation of common-pool problems in budgeting: the dependency of fiscal policy outcomes on the number of parties in cabinet in countries applying the parliamentary system of government. What by now could be described as something of an established wisdom, states that the more parties there are in government, the more public spending and taxation grow, the more difficult it is to keep budgets in balance, and the larger the debt burden consequently grows. The political economy literature has focussed on two sets of solutions, one consisting of restricting the number of parties by constitutional means, the other of imposing rules and restrictions on allowable budgetary outcomes and decision-making processes.

In line with the general idea that the management of common-pool resources can succeed or fail depending on a host of factors, this work set out to identify the conditions in which the number of parties in government affects fiscal policy outcomes in the way it should according to the existing literature. Addressing this puzzle is relevant not only in terms of understanding the factors affecting the fiscal standing of governments, which in the contemporary European Union is constantly on the political agenda. It is also relevant in terms of understanding how party democracies work, particularly when it comes to the nature of political competition, i.e. whether it resembles a rush to exploit scarce resources or the more programmatic, and perhaps more long-sighted, management of public affairs. An overarching claim in this work has been such that the 'budgetary commons' must not be detached from the wider political, economic and historical environment, and that it is not enough to consider only the number of parties and formal rules that are in place. Consequently, it is questionable

whether one can sensibly speak of 'the' fiscal policy effects of multiparty government as they plausibly vary across cases and over time.

In particular, it was argued that multiparty government is likely to have the kinds of fiscal consequences that the 'established view' predicts when people have reasons to expect that public power is used according to particularist rather than universalist principles, connections rather than publicised laws and policies decide what people receive from the public sector and distributive interests trump far-reaching programmes. When this is the case, representative politics becomes largely void of programmatic content and models of fragmented decision making gain explanatory power. In contrast, when people can be fairly confident that laws and policies are implemented impartially, and that people get from the public sector what they are entitled to according to laws and official policies, political competition is based on programmes rather than the non-programmatic distribution of resources. Consequently, the programmatic statements of the relevant political actors – i.e. the parties in government – predict what governments do, leaving less room for non-programmatic distributive politics.

Based on a large body of literature, the quality of government, defined as the impartiality of the officials responsible for the implementation of laws and policies, can be expected to affect this trade-off between the different paths that representative politics takes. In short, when the quality of government is high, policy outcomes should depend on the programmes with which the parties in government fought elections, while in low quality of government conditions, the outcomes should rather be predicted by the number of government parties. Analysis of data from the member states of the European Union supported this argument, but with exceptions and not in all cases.

Summary of Findings

The starting point of the analysis was the notion that the management of the budgetary commons is representative and collective as budgetary decisions – including policies that are not strictly budgetary yet affect the way in which the public sector uses money – are for the most part made by electorally accountable actors who must secure the support of a parliamentary majority. Moreover, it is not straightforward to determine when the budgetary commons is managed successfully or unsuccessfully, as opinions differ with respect to what politics should attain and in what priority order. Democracy largely builds on the idea that opinion differences are legitimate and that a single correct choice is often lacking in public affairs. When this democratic principle is taken seriously, merely looking at budgetary outcomes – for instance, whether the level of spending rises or whether budgets are in balance – does not necessarily constitute a sufficient basis for normative conclusions. That is, the fact that government spending level rises cannot be considered a problem out of hand, without also considering the expressed preferences of the relevant political actors.

What turned out to strongly condition the effects of political variables was a com-

munist past: in the post-communist member states, variables related to the number of parties as well as the programmatic outlooks of cabinets and electorates had statistically significant effects much more often than outside the post-communist area. However, even the post-communist countries did not constitute a homogeneous group when it comes to the fiscal effects of political variables, as they were to a large extent conditional on the quality of state institutions.

In settings characterised by a low quality of government, public spending was found to increase with the number of cabinet parties, whereas the programmatic outlook of the cabinet had no discernible effect. That is, in post-communist countries where particularism in the use of public authority is widespread, it did not seem to matter whether the cabinets were composed of parties that campaigned on rightist or leftist programmes – rather, what mattered was how many parties participated in government, like the conventional view on fragmented decision making would lead one to expect. In contrast, on relatively high quality of government levels, the roles were reversed as the number of cabinet parties lost its explanatory power, while the position of the cabinet on the right-left dimension gained it. Rightist programmes emphasising, for example, economic orthodoxy and the limitation of social services were associated with spending decreases, whereas leftist programmes giving weight to the expansion of social services and the regulation of capitalism made spending increase, which is what one should expect if outputs are determined by the policy goals that parties in power publicly endorse.

These effects of politics on total public spending were quite clear in the post-communist countries. However, the examination of spending categories produced mixed and much less certain results. Those categories were chosen so that they correspond to plausible mechanisms linking the prevalence of particularism to the fiscal effects of multiparty government. No mechanism could therefore be singled out as the most important one, which is in line with the claim that diverse particularist practices can co-exist in different mixtures in societies characterised by a low quality of government.

These results can be interpreted as evidence in support of the claim that the combination of a communist past and a low quality of government are conducive of distributive objectives and favouritist practices that displace programmatic politics. This was also visible when the bargaining power of the government parties was included in the analysis. Given the notion that policies are largely determined in bargaining among parties in government while bargaining outcomes must be accepted by a parliamentary majority, parties' bargaining strengths were measured with the Shapley-Shubik index of *a priori* voting power. When government parties were equal in terms of bargaining power, the effect of the number of cabinet parties on spending tended to be stronger compared to cases where bargaining power was unequally distributed. Moreover, this was most readily discernible in settings characterised by a low quality of government.

Special attention was given to government spending as it was expected to most directly react to changes in the political variables. The effects of political variables on

other important aspects of the public economy, revenue, debt and deficits, were indeed weaker and less consistent even in the post-communist countries, albeit they also did not run counter to the theoretical arguments presented in this work. Government revenue was found to increase with the number of government parties when the quality of government was low and the parties equally powerful, but effects on debt were largely statistically insignificant, although they tended to have the expected signs. The effect of the programmatic 'colour' of the cabinet on debt and deficits, however, was conditional on the quality of government, much like its effect on spending: rightist cabinets were found to run smaller deficits on relatively high quality of government levels, whereas no effect was discernible when the quality of government was low.

What was said about the implications of the programmatic orientation of cabinets in the post-communist countries largely applies to the programmatic orientation of electorates, measured with the position of the median voter. The movement of the median voter to the left or the right turned out to affect fiscal policy outputs only on relatively high quality of government levels, but otherwise changes in electoral winds had no discernible effects.

Outside the post-communist area, political variables had much fewer effects on fiscal policy. This was so even in the case programmatic outlooks of cabinets, although there were good grounds to believe that programmatic traits would be stronger in the country group largely consisting of old, established democracies than in the group of post-communist countries. Yet the locations of cabinets on the right-left axis turned out to have some effects budget balances, whereas practically no effects were found with respect to other political variables, or when it came to government spending or revenue. It was hypothesised that the overall lack of political effects might not always have been the case and that before the end of the Cold War programmatic features of Western European politics would have been stronger. However, that was not the case, as in the 1970s and the 1980s the only discernible political effect was such that spending tended to increase with the number of cabinet parties – much like in the post-communist countries with low-quality government institutions.

The lack of political effects outside the post-communist countries also pertained to the position of the median voter. As far as empirical association between policy outputs and the position of the median voter can be considered an indication of the responsiveness of the representative system to the preferences of the electorate, high institutional quality strengthened responsiveness in the post-communist countries. However, in the rest of the countries, responsiveness in this sense was not discernible.

Quality of government does not seem to have been entirely without fiscal policy relevance even in Western and Southern Europe. In this group of countries, a high quality of government has favoured the adoption of stringent and encompassing fiscal rules, while in the post-communist countries no clear association between the two can be found. Thereby, the quality of government has improved the odds of conforming to today's popular doctrine, the rule-boundedness of fiscal policy. Fiscal rules, in turn, do have the kinds of effects that can be expected: whenever the fiscal rule indices turned

out to be statistically and substantively significant, they were associated with less spending and smaller deficits. 'Whenever' is an important qualifier, as the significance of the effects depended on the operationalisation of the dependent variable as well as on the country group. The observed relationship between the quality of government and fiscal rules – even when the temporal gap between measurements was considerable – is in line with some recent works questioning the genuinely independent role of fiscal rules in the prevention of deficits and other outcomes that may endanger the sustainability of public finances.

The Applicability of the Framework

In sum, the theoretical framework developed in this study appears to fit the post-communist area better than the rest of the European Union. That is, the quality of state institutions conditions the effects of coalition size and the programmatic outlook of the cabinet more clearly in post-communist societies. In countries where civil societies were severely damaged by undemocratic regimes and the institutions of liberal democracy – including party systems and electoral laws – had to be quickly established while command economies were replaced by market economies, impartial state institutions have supported programme-driven politics. Where the impartiality of state institutions has been on shakier ground, the number of cabinet parties rather than their programmes has affected the use of resources in the public sector.

The general invisibility of political effects outside the post-communist area in this work does not imply that political factors have no policy implications whatsoever. Fiscal policy aggregates are largely not associated with them, but in other policy areas clearer effects could be visible, or if other policy dimensions than the right-left dimension were considered.

The results should also not be interpreted so that the post-communist countries with relatively high-quality state institutions, where programmatic effects are most clearly discernible, are ideal democracies. Programmes do affect outcomes, but this does not imply that politics is particularly participatory or that alternatives are weighed based on high-quality arguments. Moreover, it is not guaranteed that even when politics is programmatic, the actors involved are concerned with the sustainability of the public economy or other long-term developments.

The weakness of political effects does not eliminate the fact that debt levels in the old EU states are in many cases high, which may be problematic. The causes of the difficulties to keep budgets in balance should, however, perhaps be sought from elsewhere than political developments, as they have been operationalised in this work. In particular, the political variables that were considered in this work for the most part pertained to individual cabinets or parliaments; in other words, they pertained to relatively short-lived phenomena. This observation may offer a key to understanding why the effects in Northern, Western and Southern Europe turned out so differently

from those in the post-communist area: in the latter set of countries, short-term political developments matter, and how they matter depends on the institutional environment state institutions provide. Elsewhere, longer-term processes may be more relevant.

Something akin to common-pool problems can still be going on outside the post-communist area, as well. As Wolfgang Streeck (2013) argues, it may be more profitable to analyse those problems in terms of the forms that the market economy, especially financial markets, takes. Have the traditionally capitalist countries of the EU fallen prey to influential actors of financial markets? The theoretical framework developed in this work provides few analytical tools to assess that claim. Or have the old member states entered a phase of Olsonian institutional sclerosis whose implications are visible in rising debt levels, although the disease operates not through electoral politics and party systems but via other mechanisms? A very different research setting would be needed to evaluate claims of this kind.

In the opening chapters of this work, it was argued that existing works on 'fragmented' decision making and its fiscal implications have downplayed the role of state institutions and historical circumstances. The aim of this work was accordingly to introduce those considerations to the study of the budgetary commons. However, this study accepted a more fundamental assumption, that relatively short-term political developments have discernible fiscal effects. In particular, the focus was on party politics and the linkages between political parties and electorates. Empirical expectations formed against this background received support more often in the post-communist countries, where parties tend to be detached from the rest of the society, arguably more so than in the institutionalised democracies of Western Europe.

This work also contributes to the literature on the quality of government. The quality of state institutions seems to have few direct effects on fiscal policy outcomes. Instead, their effects are largely dependent on other political variables. However, given the ways in which the quality of government interacts with political variables, especially in the post-communist countries but also to some extent outside the post-communist area, using the results of this work in practical policy reforms is not completely straightforward.

Using the Results

Given the political relevance of the sustainable management of public finances, one might hope that an investigation into its background factors would end with a list of practical policy recommendations. Unfortunately, the contents of this work do not easily translate into concrete pieces of advice, at least not to ones that could be implemented quickly and with minimal cost and effort. As almost any association between variables discussed above is conditional on some other variable or specific to some group of countries, it is very difficult to say anything universally applicable on desirable reforms.

The benefits of building and upholding high-quality state institutions perhaps constitute the most important lesson that can be learnt from the preceding chapters. Establishing an impartial and efficient public sector is, of course, more easily said than done, and at present the origins of good government are not known with certainty. Attempts to root corruption and plant institutions based on the norm of impartiality instead have frustratingly often failed, and this work does not pretend to be a guidebook on successful reforms of the public sector. Rather, it adds one motivation for such reforms especially in the post-communist countries.

It has to be noted that even quality of government by itself does not seem to provide a solution if the purpose is to curb deficits or the expansion of budgets. Institutional quality can perhaps better be described as a facilitator, as it appears to make programmes with credible budgetary implications feasible in the first place. That is, even if parties that campaigned on fiscally conservative programmes – contributing to a 'rightist' position as the term has been used in this study – gained government power, the likelihood of deficits and spending actually decreasing would be quite low if corruption, clientelism and other forms of particularism are prevalent in the public sector. Similarly, parties campaigning on socially progressive programmes whose implementation requires the expansion of budgets and possibly giving up the objective of balancing the budget are unlikely to actually expand public services, redistributive social spending and other policies typically associated with leftist programmes. Low-quality state institutions hence prevent the translation of both rightist and leftist programmes into concrete outcomes. Whether parties and electorates consider socially progressive or fiscally conservative agendas desirable, they are unlikely to attain their objectives without sufficiently impartial and efficient bureaucracy. They are instead trapped with distributive strategies that make universalist and far-sighted programmes unfeasible.

The role of fiscal rules is, given the current state of knowledge, quite unclear. According to previous research they help restrict deficits and the expansion of public spending, and this conclusion received notable, although not perfect, support in the analyses throughout this work. What affects the adoption of fiscal rules has, however, been much less intensively studied, and therefore it is not entirely clear whether the adoption of rules is just an expression of a more fundamental commitment to 'fiscal discipline,' in which case it would not be particularly surprising to see systematic associations between fiscal rules and reductions of deficits and spending. Even if specific rules appeared to have the expected effects in some setting, 'exporting' them to other environments might easily lead to a disappointment.

In sum, the present study suggests that 'easy fixes' are not in sight. Fundamental changes to the ways in which politics is made may be needed if fiscal indicators are spiralling down. Acknowledging this is only the first step in devising reforms that are tailored to the case at hand. Even then, institutional reforms may not be enough: politicians and political parties have the responsibility to consider the society-wide and long-term consequences of their programmatic bids, take relevant information into account and communicate the trade-offs associated with alternative policies to the public.

As repeatedly noted throughout this work, the 'fragmentation' of decision making also has normative implications when it comes to evaluating, designing and reforming democratic institutions. In particular, the notion of the common-pool problem has often been evoked to justify reforms that restrict the number of 'appropriators', such as the number of parties that are likely to make it into the cabinet. These kinds of reforms often imply increased deviations from the norm of proportionality and hence are not unproblematic, at least if one subscribes to proportional visions of democracy (see Powell 2000). As the effects of partisan fragmentation tend to be confined to environments characterised by a low quality of government, improving and sustaining the quality of government seems to allow circumventing the trade-off between proportional representation and fiscal responsibility. However, insofar as that is impossible – and given the 'stickiness' of state institutions that may be the case at least in the short term – limitations on the openness of the political system can indeed have efficiency justifications (cf. Lizzeri and Persico 2005). But even then, the fundamental problem is in the qualitative aspects of representation and political competition, not in 'excessive' representation and competition. This is the essence of the dilemmas and tragedies of the budgetary commons; feasible alternatives exist, but attaining them is by no means a trivial task.

Avenues for Further Research

In Chapter 5, it was argued that the quality of government may condition the effects of other political variables via several mechanisms whose importance may vary across political systems and over time. Acknowledging this was deemed sufficient for the present purposes, as the principal aim was to establish that the quality of government indeed has conditioning effects. Further research would benefit from analysing specific cases in greater detail. A small-N research design could shed light on what kinds of policy outputs people demand and expect from their representatives, how demands and expectations are expressed in given elections of government formation situations and how the subsequent policy choices are related to those expressions.

Case studies and small-N comparisons could also help understand the adoption of fiscal and procedural rules and hence the extent to which the effects of such rules are truly exogenous. Especially the relationship between the quality of state institutions and the adoption of fiscal rules deserves to be addressed in greater detail than what has been possible in the present study. Investigating that relationship is relevant not only with respect to improving fiscal governance but also in order to better understand the relationship between quality of government and democracy. The aim to curb debt and deficits may justify stringent rules, but the restrictions they set on the room for manoeuvre of democratic majorities can be problematic (Piketty 2016). Restrictions may be desirable if they prevent the degradation of democracy into something akin to Hardinian commons. They may be undesirable if they prevent genuine freedom of choice

between programmatic goals. Studies with a more qualitative approach could fruitfully address the context in which rules were adopted in different settings: who the relevant actors were, what motivated them to advocate or resist reforms, and what followed from the introduction of new rules.

Much scholarly and practical attention has been given to rules governing the budgetary process. In this work, only fiscal rules based on numerical limits and targets were considered; procedural rules were largely neglected. Instead, a new approach to procedural fragmentation, based on the dispersion of bargaining power, was introduced. Further research could address the relationship between this approach and the 'conventional' approach that draws on explicit procedural rules.

Programmatic aspects of politics in this study were considered in terms of the right-left dimension. That dimension has clear implications for spending, revenue and debt, but this is not to say that the dimension is all there is for programmatic politics. To better understand how the quality of government affects the actual programme-dependency of policies and the responsiveness of the political system to the preferences of the public, other policy dimensions ought to be considered as well. Further research could investigate whether similar conditional effects are visible on dimensions whose economic and fiscal implications are not straightforward, such as issues pertaining to morality and post-materialist values. Comparing the results to those of the present study would most probably provide very interesting insights into the relationship between impartial government and programmatic politics.

A related question is whether quality of government favours deliberative and participatory forms of democracy. That is, future research could address the question on whether the weight of argument-based debates and citizen involvement is actually greater in the crafting of budgets when institutional quality is high. This would provide additional valuable information about the association between quality of government and programme-driven politics.

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