

**Legislatures, Democratic Control and Budgeting:
A Comparative Institutional Analysis**

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**Thesis to be submitted for the degree of
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Declaration

I hereby declare that the work presented in this thesis is mine alone.

A handwritten signature in black ink, appearing to read 'Wehner', with a stylized, cursive script.

Joachim Hans-Georg Wehner

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Abstract

There is a growing literature by political scientists and increasingly economists on the institutional determinants of public policy, in particular broad constitutional parameters such as presidential versus parliamentary regimes and different electoral systems. However, given the fact that resource allocation is at the heart of the political process, surprisingly little work supports a theoretically rigorous assessment of the cross-national distribution of parliamentary power over budget policy. This thesis presents an explicitly comparative analytical framework for assessing legislative budgeting and applies this framework to a sample of contemporary democracies. The focus is on how institutional arrangements determine both the extent of legislative control as well as budget outcomes. The thesis uses a unique dataset on legislative budget institutions in 36 industrialised, developing and transition countries, along with case study evidence.

The historical evolution of legislative budgeting underscores the importance of institutions in achieving democratic control. One way of enabling rigorous cross-national comparison is to focus on a set of essential institutional prerequisites for legislative control of public finance. These variables are operationalised in the form of an index of legislative budget institutions, which demonstrates substantial variation in the budgetary role of legislatures across liberal democracies. Former UK colonies have particularly poorly developed legislative capacity for financial control, whereas the opposite typically holds for countries with protracted periods

of minority government. While a number of institutional arrangements determine the extent of legislative control, the empirical evidence supports the theoretical prediction that few variables unambiguously affect fiscal outcomes, notably the nature of legislative powers to amend the budget tabled by the executive. Legislatures that self-impose constraints to support fiscally prudent choices, such as the Swedish Parliament, can nonetheless remain powerful budgetary actors, as long as they retain control over the design of the process itself. In taking the institutionalist agenda in political science further, this thesis demonstrates the benefits of complementing research on broad constitutional differences with more nuanced studies of the institutional setting in particular policy areas.

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1 Introduction: Perspectives on legislative budgeting

Political scientists have an established tradition of studying and debating differences in political institutions between countries (e.g. Lijpart 1984 and 1999, Weaver and Rockman 1993, Tsebelis 2002). This is complemented with a burgeoning interest amongst economists in the policy effects of institutional arrangements (Persson and Tabellini 2003, Congleton and Swedenborg 2006a). Arguably the primary focus in the literature is on fundamental constitutional choices, such as between presidential versus parliamentary regimes, federal versus unitary states, and proportional versus majoritarian electoral systems. For instance, Persson and Tabellini (2003) study the economic effects of constitutions and find that presidentialism and plurality rule electoral systems result in lower levels of central government expenditure compared with parliamentary regimes and proportional representation electoral formulas.

Fundamental constitutional differences are important, but to properly assess the impact of institutional arrangements on policy outcomes it is at least equally important to look beyond these broad systemic features into the more detailed machinery for policy-making. For instance, Cheibub and Limongi (2002: 176) reconsider the presidential versus parliamentary regime distinction in relation to the survival rates of democracies, and conclude that institutional effects derive not from such macro-level constitutional fundamentals, but rather ‘the way the decision-making process is organized.’ Similarly, Congleton and Swedenborg

(2006b: 27) acknowledge that ‘the details of democratic constitutional design matter.’ One challenge for the institutional debate in political science and economics is to broaden the analysis beyond broad macro-constitutional differences to the institutional setting in particular policy areas (Bechberger 2007). I argue here that this is a crucial point of departure for research on the policy effects of institutions. The focus in this thesis is on one particularly important aspect of legislative decision-making, the annual decision about the allocation of public funds, and the way in which institutions shape legislative control over budgets and fiscal policy outcomes.

A core concept at the heart of this thesis is that of institutions. Institutions have experienced a revival in political science since March and Olsen’s (1984) reminder of the importance of organisational factors in shaping political behaviour. With the term ‘institutions’ I refer to ‘formal rules that have been decided in a political process’ (Rothstein 1996: 145). This excludes concepts such as culture and social norms that might be regarded as ‘informal’ institutions. The stricter definition enables a focus on how formal political institutions, in particular constitutional features, affect public policy (Weaver and Rockman 1993, Tsebelis 2002). Despite a revival, the ‘new institutionalism’ in political science is far from united (Hall and Taylor 1996). For instance, historical institutionalism emphasises path dependence and unintended consequences (Pierson 2000, Pierson and Skocpol 2002), whereas rational choice institutionalism, or the analytical politics approach, stresses the rationality of organisational choice in the context of addressing problems of collective action (e.g. Shepsle 1979). I will argue that both

perspectives can make a unique contribution to understanding legislative budgeting, but that the analytical politics approach is more useful for the purpose of systematic cross-national comparison. It will be useful to revisit this conceptual issue following the empirical analysis, with a stronger sense of the strengths and limitations of this approach.

The emphasis on budgets, too, requires conceptual clarification. The word budget can mean very different things to different people. Some see its essence as an impenetrably dense collection of quantitative details: 'It's got a lot of numbers in it', according to George W. Bush.¹ Somewhat more nuanced, Aaron Wildavsky skilfully summarises the budget's multiple meanings as 'a prediction', 'a series of goals to which price tags are attached' and 'a contract' (Wildavsky and Caiden 2001: 1-2). The word budget developed from *bougette* or 'small bag' in old French. The use of the word spread to England, where it came to designate the leather bag in which ministers of the Crown carried financial plans to parliament,² and eventually it became synonymous with its contents. In the UK the word budget now refers to the spring financial statement, which focuses on taxation measures.³ In most countries, however, the term refers to the annual expenditure and revenue plans tabled in the legislature, and I use the word in this broader

¹ Reported by Reuters on 5 May 2000, and quoted from <http://www.slate.com/id/76886/>.

² I use the terms parliament and legislature interchangeably throughout this thesis.

³ During the 1990s, there was a short-lived experiment with unifying expenditure and revenue proposals and table them at the same time, bringing the country more into line with most of the rest of the world, but the Labour government discontinued this practice upon gaining power in 1997 (Dorrell 1993).

sense. Probably the first legal definition of the budget is contained in a French decree of 1862: 'The budget is a document which forecasts and authorizes the annual receipts and expenditures of the State...' (quoted from Stourm 1917: 2). Although budgets have been derided as 'useless and demeaning' and allegedly 'suck enormous quantities of time away from real work' (Osborne and Gaebler 1992: 117), they are essential for democratic accountability. Moreover, they reflect the balance of power between political actors (Wildavsky 1961).

1.1 Existing theoretical and empirical work

Theories of budgeting have evolved considerably over the past century (Kraan 1996: 1-8). A first milestone was Aaron Wildavsky's (1964) theory of budgetary incrementalism, according to which budgeting is so complex that decision-makers largely forfeit a review of existing expenditure, referred to as the 'base.' Rather, 'this year's budget is based on last year's budget, with special attention given to a narrow range of increases or decreases' (Davis *et al.* 1966: 529-530). Incrementalism was a theory of organisational behaviour, rather than a theory specific to budgeting (Schick 1988b: 62). Although Wildavsky clarified his concept in later years (Dempster and Wildavsky 1979), incrementalism has been heavily criticised as 'an extraordinarily elastic and elusive concept' (Schick 1983: 2, see also the powerful critique by Meyers 1994). The theory was eventually abandoned by Wildavsky (1988) himself, as it became evident that its core ideas did little to explain budgetary trends and interactions in times of economic

stagnation and fiscal adjustment. Moreover, this work is very specific to the US context, rather than explicitly comparative.

Another theoretical approach is associated with William Niskanen (1971 and 1973) and his theory of budget-maximising bureaucrats. Niskanen put forward a microeconomic theory of bureaucracy that dealt specifically with the interaction between bureaucrats and their legislative sponsor in the budget process. In Niskanen's basic model, assumptions of asymmetrical information, bilateral monopoly, and the power to make package proposals heavily favour bureaucrats over their legislative sponsor (for some modifications, see Niskanen 1975). While Niskanen focuses on bureaucratic supply, later work in the public choice tradition explored some conditions that may facilitate greater legislative control (in particular Miller and Moe 1983, Bendor *et al.* 1985). Niskanen's book provided the intellectual foundation for the new right attack on big government and was 'hugely influential' (Hindmoor 2006: 152) with conservative politicians in the US and elsewhere. His theoretical contribution was to bring the public choice approach to the study of budgeting, in particular the tools of microeconomic analysis, with its focus on methodological individualism, the rationality assumption, the search for equilibria, and formal modelling. Yet, Niskanen assumes a weak and passive sponsor, which is 'extremely artificial' (Dunleavy 1991: 211). While relaxing Niskanen's extreme institutional assumptions can tell us something about how alternative arrangements can yield more optimal results (Mueller 2003: 368), his account of the demand side remains under-developed.

For legislative scholars, a proper assessment of the design of the budget process is important for understanding the balance of power between different actors in a political system. Control of financial measures is the original function of modern legislative bodies, and the requirement for legislative approval of taxes and public expenditures is a constitutional fundamental of democracy.⁴ Yet, the cross-national study of legislative budgeting, despite some progress in recent years, is in a lamentable state. Legislative scholars have contributed a number of descriptive country studies of financial scrutiny, often laced with normative connotations.⁵ Although the comparative study of legislatures has become more systematic in recent years, for instance through the work of Döring (1995a) as well as Döring and Hallerberg (2004), this does not yet extend to legislative budgeting. Perhaps the most substantial collection of country studies on legislative budgeting is several decades old (Coombes 1976), and while it provides rich information on a few countries it lacks a rigorous theoretical basis that would make the studies comparable and enable an overarching perspective. Thus, the legislative studies literature on financial scrutiny is largely outdated and methodologically weak.

⁴ Stourm (1917), Einzig (1959), Harriss (1975) and Webber and Wildavsky (1986) provide some interesting historical accounts.

⁵ Some examples are Amselek (1998), Chinaud (1993) and Lalumière (1976) on France; Burnell (2001) on Zambia; Chubb (1952), Einzig (1959) and Reid (1966) on the UK; Premchand (1963) on India; Young (1999) on Australia; Leston-Bandeira (1999) on Portugal; Eickenboom (1989), Friauf (1976), Gerster (1984) and Sturm (1988) on Germany; LeLoup (2004) on Hungary and Slovenia; and Krafchik and Wehner (1998) on South Africa. See also the collections by Olson and Mezey (1991) as well as Coombes (1976).

In contrast, political economists have made a number of important contributions that are relevant for the comparative study of legislative budgeting. Following a period of economic crisis in the advanced industrialised countries during the 1970s, countries displayed remarkably different speeds of adjustment. This puzzle prompted some to explore determinants of fiscal policy beyond purely economic variables, for instance party political factors (Roubini and Sachs 1989, Franzese 1999, Alt and Lowry 1994). Other authors found that one of the keys to understanding fiscal policy is the design of the budget process itself (Poterba and Von Hagen 1999, Strauch and Von Hagen 1999, Kirchgässner 2001). This fiscal institutionalist perspective has been influential with policy makers (Molander 1999). Compared with the legislative studies literature, this work is typically more quantitatively oriented and methodologically sophisticated, but its consideration of legislative aspects tends to be very selective and focused on particular details rather than providing an overarching perspective.

In addition to partisan and fiscal institutionalist theories, a more recent strand of constitutional economics has investigated the fiscal policy effects of fundamental features of the design of political systems (for an overview, see Congleton and Swedenborg 2006a). However, the most important contribution to this strand of the literature, by Persson and Tabellini (2000 and 2003), has focused on two constitutional aspects only, i.e. electoral rules and forms of government. The authors 'leave out many potentially important constitutional features, including... budgetary procedures...' (Persson and Tabellini 2006: 85). The strengths of the constitutional economics literature are its attention to rigorous theoretical methods

and quantitative analysis, but it adds little to our understanding of how legislative institutions shape fiscal policy.

The fiscal policy effects of institutions are of increasing interest to policy makers themselves. One reason is a concern with fiscal sustainability, for instance in the context of European Monetary Union (Hallerberg 2004), and how to limit the potential for legislatures to threaten fiscal discipline. Moreover, and more broadly, the 1990s saw a substantial number of developing and post-communist countries move towards democracy. This often required the wholesale redesign of political institutions, including legislative bodies. Their performance has increasingly come under the spotlight as donor agencies and international organisations seek to promote ‘good governance’ by enhancing accountability with initiatives that aim to ‘strengthen’ the legislative branch (Messick 2002: 1, see also US Agency for International Development 2000, Hudson and Wren 2007). This concern fits into a broader debate on institution-building in countries receiving foreign aid, in particular as donors move from project specific funding to general budget support (Stapenhurst and Pelizzo 2002, UK Department for International Development 2004, De Renzio 2006). The idea is to improve domestic oversight in order to fight corruption and enhance the effectiveness of aid (Santiso 2006). Yet, it is not clear what is required for ‘strong’ legislative financial scrutiny, and whether it really delivers the desired effect.⁶

⁶ At the time of writing, I am advising the UK Department for International Development on how to strengthen legislative financial scrutiny in countries that receive donor funds (Wehner 2007b).

It is paradoxical that many public choice theorists and public finance practitioners regard legislatures as fiscally dangerous, and argue for limitations on their powers, while legislative strengthening is fashionable with legislative studies scholars and in parts of the development community. Some go as far as to boldly claim that ‘the presence of a powerful legislature is an unmixed blessing for democratization’ (Fish 2006: 5), which is also reflected in the aid policies of some donor governments (UK Department for International Development 2006: 19-32). Yet, the relationship between legislative control of public finances and democracy remains empirically very poorly understood. These debates add urgency to the need for additional and more systematic analysis.

Thus, the state of the literature and practical concerns generate a number of questions about the role of legislatures in public finance: How can we measure and compare legislative budgeting across countries? What factors explain cross-national variation? If countries differ in the way in which legislatures engage with the budget, how does this affect fiscal policy? What are the implications for institutional reforms? This thesis addresses these questions in an explicitly comparative framework focusing on the institutional design for legislative budgeting. More specifically, the aims of this thesis are (i) to establish and apply a framework for assessing how institutional arrangements affect the budgetary role of legislatures, (ii) to explore the determinants of cross-national variation in these

institutional arrangements, and (iii) to assess empirically the impact of legislative budget institutions on fiscal policy.⁷

1.2 Building on the fiscal institutionalist approach

In tackling these questions, I build on the work on the effect of institutions on fiscal policy. This work draws on the basic idea that spending will be higher when decision-makers do not internalise the full costs of their actions. Weingast, Shepsle and Johnsen (1981) expressed this as the ‘law of 1/n’ (see also Shepsle and Weingast 1981). In their model, expenditure x can be targeted at a particular geographical district where it produces benefits b , while costs c are shared equally across all districts. This implies that the optimal level of spending for district i is achieved when its marginal benefit equals its marginal cost:

$$b'_i(x) = \frac{1}{n} c'(x) . \quad (1)$$

The larger the n in equation (1) the smaller the share of the tax burden that is considered in spending decisions. Hence, the authors conclude that ‘the degree of inefficiency in project scale... is an increasing function of the number of districts’ (Weingast *et al.* 1981: 654). In other words, the possibility to disperse costs and

⁷ Schick (1986 and 1988a) further distinguishes between macro and micro-budgetary institutions. He defines the former as institutions that affect aggregate spending, and the latter as those that affect particular programmes and decisions. I do not make this distinction here.

target benefits leads to higher spending as the number of decision-makers who have these incentives increases.⁸

Von Hagen and Harden (1995: 772-775) present a much-cited model that builds on the same idea, but which is more directly linked to formulating recommendations for the design of the budget process. They model decision-making in a government consisting of i spending ministers, each of whom gets funds z_i that are used to produce activities x_i . They assume spending ministers to have a simple linear production function $x_i = f_i z_i$ where f_i captures the ability of each minister to convert funds into policy output. Each spending minister pursues a policy target x_i^* . The government's joint utility function is:

$$U = -\sum_{i=1}^n \frac{\alpha}{2} (f_i z_i - x_i^*)^2 - \frac{m}{2} B^2 \quad (2)$$

Here α determines the utility loss from not fully meeting the policy target; B^2 , $B = \sum z_i$, is the excess burden from taxation to society; and m , $0 < m \leq 1$, is the share of this excess burden considered in decision-making. In their paper, Von Hagen and Harden assume that $f = 1$ and $x_i^* = x^*$ for all i , and common knowledge of f and x^* . The joint utility function thus simplifies to:

$$U = -n \frac{\alpha}{2} (x_i - x^*)^2 - \frac{m}{2} (n x_i)^2 \quad (3)$$

⁸ For a critique, see Primo and Snyder (2005). Fiorino and Ricciuti (2007) and Bradbury and Crain (2001) present empirical evidence.

Setting up the first order condition, solving for x_i and multiplying the result by the number of spending ministers n yields a total optimal budget for the government:

$$B^0 = \frac{n\alpha\alpha^*}{nm + \alpha} \quad (4)$$

However, each spending minister individually has different incentives compared with the government as a whole as represented by equation (2). While each has an interest in achieving her policy target and minimising the excess burden from taxation, each also receives a private utility gain from her budget allocation, for example because it enhances electoral prospects in her constituency. Moreover, each spending minister only considers her constituency's share m_i of the total excess burden.⁹ Hence, Von Hagen and Harden posit the following utility function for individual spending ministers:

⁹ This assumption is justifiable. As Hallerberg (2004: 24) notes, 'ministers are often judged by how well they protect the interests of the constituents of their particular ministry... [W]here one stands on budget issues within one's party depends on where one sits at the cabinet table.' The case studies in his book illustrate the point, as does the empirical work by Perotti and Kontopoulos (2002). Using a panel of 19 OECD countries over the 1970 to 1995 period, they find that cabinet size is a determinant of fiscal outcomes. More consistent with the underlying theoretical argument, Volkerink and De Haan (2001) investigate the fiscal impact of the number of spending ministers, i.e. the total number of government ministers minus the minister of finance and/or the budget as well as the prime minister. They find that this measure affects budget deficits in a panel of 22 OECD countries covering the years 1971 to 1996.

$$V_i = \gamma z_i - \frac{\alpha}{2}(fz_i - x_i^*)^2 - \frac{m_i}{2} B^2 \quad (5)$$

Here, γ determines the extent of private utility gain from spending. Given the simplifying assumptions that $f = 1$ and $x_i^* = x^*$ for all i , equation (5) can be rewritten as:

$$V_i = \gamma x_i - \frac{\alpha}{2}(x_i - x^*)^2 - \frac{m_i}{2} B^2 \quad (6)$$

If the budget process follows a bottom-up approach that allows each spending minister to separately draft a budget, so that the total budget consists simply of the sum of all bids submitted by the spending ministers, each of them will maximise:

$$V_i = \gamma x_i - \frac{\alpha}{2}(x_i - x^*)^2 - \frac{m_i}{2} (x_i + \sum_{j \neq i} x_j)^2 \quad (7)$$

If $m = \sum_i m_i$ equation (7) yields a total budget of:

$$B = \frac{n(\alpha x^* + \gamma)}{m + \alpha} \quad (8)$$

The aggregate budget outcome resulting from the bottom up process (8) is larger than the optimal total of the government as a whole (4). This result holds as long as a spending minister derives private utility from expenditure, i.e. $\gamma > 0$, and as long as there is more than one spending minister, i.e. $n > 1$. Von Hagen and

Harden (1995) go on to show that when a minister without portfolio, who has an incentive to consider the overall impact of excess taxation, is given strategic power vis-à-vis his colleagues in spending ministries, the resulting amount of total spending is closer to the joint optimum than under the bottom-up process. The model can be adapted to different contexts, such as legislative decision-making, or where the process involves disciplined political parties in a coalition government (Hallerberg 2004: 22-27, Hallerberg 1999). The basic result is always that a spending bias will result when decision-makers do not internalise the full cost of their actions, i.e. when they suffer from 'fiscal illusion' (Von Hagen and Harden 1995: 772).

The fiscal institutionalist response to what is also referred to as the 'common pool resource' or 'fiscal commons' problem is to impose hierarchical budget institutions. These are institutional arrangements that centralise budgetary decision-making in the hands of an actor who is more likely to consider overall costs, such as the finance minister or the prime minister, than a spending minister in order to contain free-riding and to safeguard fiscal discipline (Von Hagen 1992, Poterba and Von Hagen 1999, Strauch and Von Hagen 1999). This has spawned a substantial body of empirical work on the fiscal effects of budget institutions, for instance in Western Europe (Von Hagen 1992, Hallerberg 2004), but also Latin America (Stein *et al.* 1998, Alesina *et al.* 1999b, Hallerberg and Marier 2004), and more recently Central and Eastern Europe (Gleich 2003, Yläoutinen 2004).

While the institutionalist literature has contributed an important perspective on the determinants of fiscal performance, it also has limitations. First, there is a theoretical contradiction in the sense that formal modelling efforts produce predictions about spending levels (Von Hagen and Harden 1995, Hallerberg 1999 and 2004) whereas empirical work ‘has consistently found an impact of budget institutions on fiscal deficits and debt, but almost as consistently has failed to find an association with government size’ (Stein *et al.* 1998: note 35). Moreover, some papers do not properly justify the choice to use other dependent variables when the theoretical discussion calls for the use of indicators of government size, in particular public spending. For instance, the paper by Alesina *et al.* (1999b: 263), which is one of the most widely cited works on the topic, uses primary deficits as the dependent variable and contains only a short justification. Interestingly, the paper by Stein *et al.* (1998), using the same dataset, finds no association between budget institutions and government size, and their results are strongest when using the primary balance as the dependent variable. Sceptics might be forgiven for thinking that some of this literature uses post-hoc justifications for the choice of indicator of fiscal performance. In this thesis, I develop a theoretical framework that generates predictions about the impact of particular institutional features on spending levels, and use appropriate data to test these.

Another limitation of the fiscal institutionalist literature, in the context of this thesis, is that it typically investigates only a limited range of legislative institutions. The most widely considered variable is legislative powers to amend the budget tabled by the executive (Von Hagen 1992, Alesina *et al.* 1999b, Stein

et al. 1998). Another legislative variable considered in earlier studies is the sequencing of the voting process (Von Hagen 1992), but subsequently Von Hagen acknowledged the theoretical work by Ferejohn and Krehbiel (1987) and modified his claims about the effects of sequencing (Hallerberg and Von Hagen 1997). Crain and Muris (1995) consider how legislative committee structure affects spending levels. Other relevant features of the budget process, such as execution rules, are rarely considered from a legislative perspective. Moreover, in some of the empirical work the institutional variables are under-theorised or based on simple conjectures, such as the claim that the reversionary budget affects fiscal policy (Alesina *et al.* 1999b, Hallerberg and Marier 2004). In this study, I bring together a range of relevant variables in a more unified framework of legislative budget institutions than was previously available.

I accept the basic premise of the common pool literature, that budgetary decision-making in legislatures is vulnerable to free-riding, and that the resulting pro-spending bias can be mitigated by institutional arrangements. However, it is far too simplistic to argue that ‘constraints’ on the power of the legislature to shape the budget will improve fiscal performance. A core argument of this thesis is that the effect of legislative institutions on fiscal performance needs to be analytically separated from understanding how institutional arrangements affect the set of outcomes available to the legislature. Put differently, we need a more thorough understanding of how exactly a constraint works before it is possible to generate predictions about its impact on fiscal outcomes. Paradoxically, institutional arrangements may constrain legislative choice without affecting fiscal outcomes,

and some constraints on legislative powers may even have adverse effects on fiscal policy. In short, if an institutional feature constrains the budgetary options available to the legislature, it does not necessarily follow that it also constrains spending. Once the predictions about the fiscal effects of legislative budget institutions have been clarified, this provides a strong theoretical basis for empirically investigating the fiscal effects of legislative budget institutions.

From an empirical perspective, this study is also more comprehensive in terms of countries covered than previous research related to legislative budget institutions. Oppenheimer's (1983) thorough literature survey may be slightly outdated, but it still highlights the scarcity of research on the impact of legislatures outside the US on policies and budgets (see also Mezey 1983). It is in fact only more recently that innovative survey work by the Organisation for Economic Co-operation and Development (OECD) has started to address the lack of data on comparative legislative budget practices (OECD 2002b and 2006, OECD and World Bank 2003). I adapt and use these data to present the most broadly based comparative overview of legislative budgeting to date.

Moreover, this thesis combines quantitative and qualitative methods.¹⁰ Some recent research on fiscal institutions complements quantitative analysis with qualitative work (Hallerberg 2004), but overall the bias in this literature is heavily towards quantitative methods. One of the advantages of case studies is that they allow us to gain a deeper understanding of exact causal mechanisms (Gerring 2004 and 2005, George and Bennett 2005, Bennett and Elman 2006). The debate about the pros and cons of quantitative and qualitative analysis in the social sciences is not new (Jackman 1985, Ragin 1987 and 2000, King *et al.* 1996), but the choice of research techniques does not have to be exclusive. For instance, Lieberman (2005) propagates a ‘mixed methods’ approach to harness the respective strengths of different methods of inquiry. I use a case study approach to complement and deepen my more broadly based quantitative analysis.

1.3 The structure of the thesis

I commence with a short historical excursion in chapter two, which looks at the evolution of parliamentary control of public finance in the UK, with additional comparative references. This is useful for understanding the origins of

¹⁰ Mahoney and Goertz (2006: 245-246) challenge these two labels, which in their view ‘do a poor job capturing the real differences between the traditions. Quantitative analysis inherently involves the use of numbers, but all statistical analyses also rely heavily on words for interpretation. Qualitative studies quite frequently employ numerical data; many qualitative techniques in fact require quantitative information... [Better labels] would be statistics versus logic, effect estimation versus outcome explanation, or population-oriented versus case-oriented approaches.’

institutional arrangements for financial scrutiny, how they have developed over time, and how they are intimately connected with parliamentary control of public finance. I develop the formal theoretical basis for most of the empirical analysis in the thesis in the second chapter, in which I discuss a range of institutional arrangements and how they affect the budgetary choices available to the legislature. In this chapter, I also generate a number of testable predictions about the impact of these features on fiscal policy.

Following these historical and theoretical parts, chapter four moves on to empirical analysis. Using data from a 2003 survey of budget processes in the industrialised democracies as well as additional countries, I translate the theoretical framework of chapter three into an index of legislative budget institutions, and present the resulting ranking for 36 countries. The following two chapters are dedicated to working with these data. In chapter five, I first explore factors that account for cross-national variation in legislative financial scrutiny, considering variables that relate to colonial history, party political dynamics, other fundamental features of political systems, as well as the development context of a country. In chapter six, I move to the core concern of the institutionalist research agenda, and systematically test the impact of various legislative institutions on fiscal policy. This also entails a detailed reconstruction and disaggregation of two other and influential measures of legislative budget institutions.

The thesis concludes with case study evidence on budget reform and legislative control. Because Sweden implemented radical reforms to the budget process in

the mid-1990s that directly followed the recommendations of Von Hagen (1992), and since we now have a reasonable amount of data for the years prior to as well as after the reforms, this provides an ideal choice to further test several institutionalist hypotheses. Moreover, for reasons discussed more fully in chapter seven, some of these cannot be investigated properly with the available cross-sectional and panel data. A further contribution of the case study material is that it facilitates a broader understanding of the determinants of reforms, while at the same time allowing the use of precise data and in-depth qualitative analysis to consider the impact on legislative control and fiscal policy. The conclusion draws together the main findings, highlights several cross-cutting themes and implications, and explores possible directions for follow-up research.

2 The evolution of democratic control of public finances

The finance of the country is ultimately associated with the liberties of the country. It is a powerful leverage by which English liberty has been gradually acquired... If the House of Commons by any possibility lose the power of the control of the grants of public money, depend upon it, your very liberty will be worth very little in comparison. That powerful leverage has been what is commonly known as the power of the purse – the control of the House of Commons over public expenditure.

William Ewart Gladstone, 1891 (from Einzig 1959: 3)

Parliament does have control in the sense that the Government cannot obtain funding from the public purse without Parliament's consent... [The current procedures] are also the lever which ensures a wide range of financial information is made available to the House each year. But this is, at present, the limit of the House's power: if not a constitutional myth, it is close to one.

House of Commons Procedure Committee, 1998 (from Walters and Rogers 2004: 257)

Nowadays parliamentary approval of taxation and public spending is a regular, usually annual routine in any democracy. There was a time when this function was bitterly contested. It took a series of long and often violent conflicts for this principle to acquire the ubiquitous constitutional importance that it enjoys across democratic countries today. The UK House of Commons was at the vanguard of this struggle for parliamentary supremacy in public finance. As the annual budget is a key economic policy tool of the government, and constitutes arguably its most comprehensive statement of priorities, one might expect that once gained,

parliamentary powers over financial decisions would be jealously guarded. Yet, there is broad agreement that the present financial scrutiny arrangements of the Commons are deficient and in need of reform (Davey 2000, Schick 2002, Brazier and Ram 2005). Paradoxically, the financial role of the Commons is considered ineffective as well as essential to democracy.

This chapter summarises the development of parliament's budgetary power by focusing on three particularly important stages, viz. the struggle to ensure consent to taxation during the seventeenth century, the rise of modern budgeting and expenditure control in the nineteenth century, and the decline of parliament's power of the purse in the twentieth century. This discussion cannot do justice to the rich history of budgeting (see Webber and Wildavsky 1986 for a comprehensive account). Rather, it serves to highlight stages and issues in the battle for parliamentary supremacy in public finance that are important for understanding how parliament acquired the budgetary role it exercises today, and how institutional arrangements for financial scrutiny evolved. The chapter makes occasional reference to relevant developments in other countries, in particular the US and France, to place the experience of the UK in a comparative context.

2.1 Revolutionary origins of parliamentary control

The struggle to ensure consent to taxation was a central battlefield in the evolution of parliament in medieval England (Harriss 1975). Parliament sought to limit

royal powers to impose taxes in order to curtail their ability to maintain a standing army beyond times of war and immediate threat. The principle of parliamentary consent to taxation gained constitutional recognition in the Magna Carta, a list of concessions to the barons that King John signed at Runnymede in 1215: 'No 'scutage' or 'aid' may be levied in our kingdom without its general consent...' ¹¹ But this agreement did not resolve the conflict over the power to impose taxes, which continued to simmer throughout the following centuries. The Stuart Parliaments of the seventeenth century proved to be crucial in the development of parliamentary control of taxation (Smith 1999: 49-63).

During the reign of Charles I the relationship between Crown and Commons deteriorated sharply. The House stubbornly refused to grant sufficient subsidy to the king, whose finances suffered from substantial debt inherited from his father and an unsuccessful military campaign in Spain. Charles I continued to unilaterally impose taxes despite his undertaking in the Petition of Right in 1628 that no tax should be levied without the consent of the nation. Resistance to the 'ship-money' triggered civil war, which, however, failed to clearly establish the principle that was being contested. Parliament's power over the purse remained defective after the demise of Charles I in 1649.

¹¹ A 'scutage' was a tax paid in lieu of military service in feudal times, and was used by the king to maintain a paid army. In times of emergency and on special occasions, such as the marriage of his eldest daughter, he could also impose a levy known as an 'aid.'

A crucial shortcoming of parliamentary control was that it did not extend to royal borrowing on the monarch's personal credit. After Charles II claimed the throne in 1660 parliament started to demand estimations of cost before voting money to be granted to the king, who claimed to get short shrift. To evade expenditure control, a popular royal tactic was to resort to borrowing with the hope that parliament would subsequently consent to the raising of funds to repay such loans. But this practice was not sustainable as parliament refused to oblige. In 1672 the government in effect declared the only state bankruptcy in British history when payments on loans from City bankers were suspended initially for twelve months, which was later on repeatedly renewed (Einzig 1959: 98). Only after the revolution was executive borrowing tied to parliamentary consent, which restored trust with lenders and ensured large-scale access to finance for imperial expansion over the following centuries.

Nonetheless, the bitter contest between kings and parliaments in the seventeenth century precipitated procedural innovations that advanced parliamentary control of state finance. In particular parliament's increasing use of a Committee of the Whole House brought several advantages, due to the fact that the procedures of committees applied for such deliberations, rather than the standard rules. This allowed the Commons to appoint their own chairperson, which reduced the influence of the Speaker, who at the time was generally regarded as aligned with the monarch (Reid 1966: 45).¹² The committee procedure also allowed each

¹² As from 1641 taxation proposals were discussed in the Committee of Ways and Means. Although the committee was abolished in 1667, making way for a standing committee to consider

member to speak more than once and thus facilitated much freer debate. It became easier for the Commons to delay passing the bill to grant subsidies to the Crown until the end of a session, a tactic that afforded time to extract concessions from the monarch (Einzig 1959: 55). Initially, Smith (1999: 73) emphasises, the procedure was 'certainly not intended as a weapon against the Crown.' Rather, it was convenient to remove portions of the debate from the floor of the House. Once established, however, the strategic advantages of the procedure were soon discovered. But clever use of these procedural devices was not enough to establish parliamentary supremacy over taxation.

The Glorious Revolution of 1688 brought a decisive victory for parliament, and it is a landmark in the evolution of its financial role. Most importantly, the revolution firmly established the principle that only parliament could authorise taxation. The 1689 Bill of Rights captures the outcome of the struggle. William III and Mary II had to accept its principles as a condition for ascending the throne in 1689, including the provision 'That levying money for or to the use of the Crown by pretence of prerogative, without grant of Parliament, for longer time, or in other manner than the same is or shall be granted, is illegal.' Still, at this stage there was still no such thing as an annual budget, and there was no comprehensive control of expenditures.

parts of the annual finance bill, the chairman of ways and means still generally occupies the chair during the budget speech.

Before the revolution the royals freely mingled public and private income. The idea of *public* finance with concomitant notions of accountability could not be established as long as there was no distinction between the property of the monarch and that of the state (Webber and Wildavsky 1986: 212). In 1698 parliament passed the Civil List Act that granted the Crown tax revenues of £700,000 per annum 'to meet the costs of the civil government and the royal establishment' (Smith 1999: 63). The monarch in turn relinquished most of the hereditary revenues. Originally, the list was intended to cover the financial requirements of the king and his household as well as the expenditure of the central civil government excluding debt charges. Expenditure items for civil administration were gradually transferred from the list to the supply services and, later, the consolidated fund, in a process that lasted until 1830 (Einzig 1959: 149). The creation of the civil list put a decisive end to the tradition that the king should 'live of his own' (Smith 1999: 61-63). At the same time it was the first step towards the separation of public and royal expenditures.

Paradoxically, lasting and significant limitations on parliament's fiscal role originated during these early days of growing financial control by the Commons. Although the revolution of 1688 brought an important breakthrough in terms of the formal recognition of parliamentary powers, during much of the following century parliament was politically weak vis-à-vis the monarchs, whose governments were usually able to secure majorities. Direct bribery was not uncommon and the royal powers of patronage further helped to ensure a generally compliant parliamentary majority (see Namier 1929). During the early eighteenth

century unexpected revenue surpluses tempted private members to secure a share of these funds for spending in their constituencies (Einzig 1959: 130-131). The Commons proceeded to resolve in 1706 'That this House will receive no Petition for any sum of Money relating to public Service, but what is recommended from the Crown' (quoted from Reid 1966: 36). The financial initiative of the Crown has been enshrined in the standing orders since 1713 and this limitation on the power of the purse is considered an essential constitutional principle to this day (May 1997: 770).¹³ Without sufficiently strong influence of the executive over the Commons it is hard to imagine that parliament would have agreed to the lasting curtailment of its newly gained budgetary powers. Therefore, while the British Parliament was at the forefront of claiming budgetary rights, it was also the first parliament to voluntarily cede the right to financial initiative (Inter-Parliamentary Union 1986: 1093):

Parliament still respects this long-standing custom and practice and, as a result, it may not vote sums in excess of the Government's estimates. Consequently, the only amendments that are in order are those which aim to reduce the sums requested and have as their purpose the chance for Members to raise explanations before the sums in question are approved.

After the Glorious Revolution, it was not long before parliamentary control over taxation spread beyond Britain. Parliament proved to have a short memory of the

¹³ At the time of writing, Standing Order No. 48 of the House of Commons reads: 'This House will receive no petition for any sum relating to public service or proceed upon any motion for a grant or charge upon the public revenue, whether payable out of the Consolidated Fund or the National Loans Fund or out of money to be provided by Parliament, or for releasing or compounding any sum of money owing to the Crown, unless recommended from the Crown.'

passions that could be incited by unilateral imposition of fiscal measures. As imperial finances were exceedingly stretched by the task of protecting vast colonial territories, parliament sought to force the inhabitants of the empire's North American possessions to contribute towards the defence of their territory. In 1765 it ordered the imposition of a tax on a stamp affixed to a range of documents including such essentials as newspapers and playing cards. This gave rise to great discontent in the colonies, and led to a boycott of British goods by the colonialists. Despite a partial retreat by parliament, which abolished the 'stamp tax' and several other duties, the continued imposition of a duty on tea was sufficient to provoke unrest and ultimately led to the war of independence. At the First Continental Congress in 1774 delegates from the colonies rejected 'every idea of taxation, internal or external, for raising a revenue on the subjects in America, without their consent' (Ford *et al.* 1904-37: 1:69). After the decisive battle of Saratoga parliament abolished the hated duty and resolved not to impose further taxes on America.

2.2 The rise of modern budgeting

Parliamentary control remained incomplete as long as governments continued to enjoy extensive discretion in expending public revenues. Without detailed knowledge of expenditure needs parliament could not properly evaluate the government's requests for funds. Moreover, the absence of comprehensive accounting and audit procedures meant that parliament was not positioned to

authoritatively ascertain whether moneys were actually spent for the purposes for which they had been requested and appropriated. Following the Glorious Revolution, it took parliament two further centuries to put in place a comprehensive system to oversee public expenditures. There were some interim achievements, but the development of modern budgeting as a means of parliamentary control took longer in the UK than in some other countries.

By the beginning of the nineteenth century, the US Congress already constrained executive discretion through detailed line item appropriations, including strict limits on specific expenses such as firewood and candles in particular offices (Schick 2000: 11). This tradition has its origins in colonial times, when legislatures were distrustful of British rule and invested much effort in scrutinising administrative expenditures. The colonialists were suspicious of governors they did not appoint and who were regarded as agents of the king in distant Britain. They thus devised stringent and humiliating control mechanisms including the annual voting of salaries, detailed specification of the object of spending and the amount to be spent, and the reversion of unspent funds to the treasury at the end of the fiscal period (Webber and Wildavsky 1986: 365). This advanced level of congressional scrutiny of expenditures was exceptional compared with other countries at the time.

The rise of modern budgeting in nineteenth century Europe was linked to the Enlightenment idea that government, through conscious effort, could be made rational (Webber and Wildavsky 1986: 323-326). France was first in developing

modern expenditure control mechanisms, starting with reforms of state audit during the first half of the nineteenth century.¹⁴ Napoleon put in place the institutional fundamentals of modern public audit when he created the *cour des comptes* in 1807. In the initial years following the creation of the court the benefits of the new audit system for the French National Assembly were marginal. Many audit reports were 'lost in the library' despite apparently frequent but 'in vain' demands for them by parliamentary committees (Stourm 1917: 577). To ensure effective reporting to the assembly, the publication and distribution of audit reports was made a legal requirement in 1832. Since 1819 the assembly passed an annual law approving the execution of each budget, as the accounting officer was held personally responsible for any misspent funds until the passing of a formal vote for 'granting discharge.'¹⁵ The assembly also gradually broadened

¹⁴ The history of state audit in France can be traced back as far as the reign of Philippe V in the fourteenth century (Stourm 1917: 551). Feudal monarchs used early forms of audit to protect themselves against excessive theft from revenue collection agents, and audit was not used to hold kings to account for expenditures. Article 14 of the Declaration of the Rights of Man and the Citizen that was adopted with the French revolution in 1789 promised greater parliamentary control: 'All citizens have the right to ascertain, by themselves, or through their representatives, the need for a public tax, to consent to it freely, to watch over its use, and to determine its proportion, basis, collection and duration.'

¹⁵ René Stourm (1917: 595) reminisces about the debates that ensued when the laws on regulation were discussed during the 1820s: 'Not only did each discussion terminate in a proper resolution, but the general rules resulting from it brought our system of budgetary accounting to a high degree of perfection in a short time.' By the end of the nineteenth century, however, the interest of parliamentarians had waned. They paid scant attention and the approval of the law on regulation frequently took place more than a decade following the end of the relevant fiscal year. To this day,

its control over the approval of expenditures until the specification of detailed items of expenditure for each ministry became a legal requirement in 1831. By the middle of the nineteenth century, France had put in place a sophisticated public financial management system with most of the core elements that are associated with modern budgeting. These included a comprehensive written budget encompassing all revenues and expenditures of government, analytical procedures for estimating financial requirements, a standard fiscal year and the principle of annual authorisation, as well as a developed system of accounting and audit control.

Control of expenditures evolved somewhat more haphazardly in the UK, where parliament appropriated money many centuries before the use of budgets became common. A first known instance of parliamentary appropriation dates back to 1340, when a grant to Edward III was explicitly earmarked for 'the Maintenance and Safeguard of our said Realm of England, and on Wars in Scotland, France and Gascoign, and in no places elsewhere during the said Wars' (Einzig 1959: 79). Particular sources of revenue were also frequently tied to specific expenses in order to exercise some control over royal spending. However, parliamentary oversight of expenditures remained patchy and incomplete. An important improvement was the creation of the consolidated fund in 1787 for the purposes of

however, a formal vote on budget execution closes the cycle of financial control in public finance systems that were influenced by the French traditions (National Audit Office 2001: 23). Refusal to grant discharge can be a serious political threat. When the European Parliament rejected the discharge motion for the 1996 budget, this eventually led to the resignation of the entire commission in March 1999 (Miller and Ware 1999).

collecting revenues and disbursing all monies for the supply of public services (Reid 1966: 57): 'This broke the disorder caused by assigning particular taxes to special purposes and it provided the means of infinite expenditure control through comprehensive appropriation schedules.' But full parliamentary control of expenditures had to wait until the rise of modern budgeting.

The decisive steps towards modernisation of public finances are inextricably linked to William Ewart Gladstone, who first became Chancellor of the Exchequer in 1852. He favoured liberal policies that aimed at loosening economic restraints, minimising the costs of running an empire and curbing public debt. His approach reflects the orthodox economic thinking that started to shape fiscal policy by the middle of the nineteenth century, when the norm of balanced budgets became fashionable (Webber and Wildavsky 1986: 302). Gladstone was determined to force greater economy in public finance and introduced reforms in the 1860s that made annual and comprehensive estimates central to legislative oversight.

An essential advance was made in 1861 when the Commons, based on the initiative of Gladstone, resolved to establish a Public Accounts Committee (Chubb 1952: 32).¹⁶ The following year the committee was made permanent and

¹⁶ However, despite common perception, Gladstone did not invent the Public Accounts Committee. The first such committee was appointed in 1690 under the Act for Appointing and Enabling Commissions to Examine, Take and State the Publick Accounts of the Kingdom (Einzig 1959: 168). But this burst in parliamentary supervision of public accounts under William III was not sustained. The use of the committee for political purposes undermined its reputation and

tasked with ‘the examination of the accounts showing the appropriation of the sums granted by Parliament to meet the public expenditure’ (see current Standing Order No. 148). The provision of relevant information was ensured by statute when the Exchequer and Audit Departments Act of 1866 required all government departments to produce appropriation accounts for audit purposes. The act also created the Comptroller and Auditor General by merging the *ex ante* function of authorising the issue of money to departments with a new *ex post* function of examining every appropriation account and reporting the results to parliament (National Audit Office 2001: 236). The Public Accounts Committee acquired its full functionality when the first complete set of accounts was presented and examined in 1870 (Chubb 1952: 43). Gladstone’s reforms established an audit model predicated on close interaction between the committee and the Auditor General, which has been widely adopted throughout the Commonwealth (McGee 2002, Wehner 2003, Pelizzo *et al.* 2006).

The unique success of the Public Accounts Committee among the financial committees of the Commons can to a significant extent be attributed to the confluence of three crucial factors, viz. the initiative and sustained support of Gladstone during the initial years, the co-operation of the treasury, and the quality of the committee’s work (Chubb 1952: 36). Gladstone did not regret his initiative and in subsequent years remained a firm supporter of the committee’s work. The treasury came to regard the committee as an ally in the struggle to control

effectiveness, and the practice of parliamentary audit lapsed under Walpole’s administration. It also appears that similar committees operated in Canada as from the 1830s (Reid 1966: 95).

spending departments. This was crucial, as the committee had no power to enforce its own recommendations, but relied on the persuasive power of its reports and the co-operation of the government. Co-operation was facilitated by efficient practices that the committee developed in the years after its inception. The main targets of the committee's work became bureaucrats rather than the politicians of the day, and the nature of its work was kept strictly financial and was not allowed to drift into policy debates. To this day, inquiries of the committee focus on the accounting officers of departments rather than the relevant ministers. In addition, access to the specialist advice of the Auditor General became a resource that has remained unique among parliamentary committees in the UK (Laughame 1999). As a result, the work of the committee developed to a high standard of scrutiny and contributed significantly to improvements in the disclosure of financial information in the following decades (Chubb 1952: 42-70).

A final step towards the democratisation of the budget was taken when the hereditary chamber was stripped of its veto power over financial legislation. The Commons considered the Lords unable to amend tax and spending bills by the end of the seventeenth century (Einzig 1959: 114). The formal removal of remaining veto power was triggered by the dramatic struggle over the 1909 budget of Chancellor Lloyd George, who sought increased tax revenues in order to pay for pensions and defence (Porritt 1910). When the Lords rejected the entire Finance Bill, this prompted the passing of the Parliament Act of 1911, the purpose of

which was to debar the Lords from rejecting 'money bills.'¹⁷ Since then, the supremacy of the elected chamber is firmly established. Budgetary bicameralism of various forms continues in countries where second chambers of parliament have democratic credentials (Patterson and Mughan 1999).

Parliamentary fiscal power in the UK was at its peak in the second half of the nineteenth century, when the Commons frequently amended spending and revenue proposals. Paul Einzig (1959: 264-276) lists 26 instances of government defeat over estimates between 1858 and the turn of the century. On many other occasions, government accepted parliamentary proposals when criticism was compelling or to avoid defeat.

¹⁷ The term covers appropriation and tax bills, although this is an over-simplification. The full definition is rather more intricate (May 1997: 806): "Section 1(2) of the Act defines a 'money bill' as a public bill which in the opinion of the Speaker of the House of Commons contains *only* provisions dealing with all or any of the following subjects, namely, the imposition, repeal, remission, alteration, or regulation of taxation; the imposition for the payment of debt or other financial purposes of charges on the Consolidated Fund or the National Loans Fund, or on money provided by Parliament or the variation or repeal of any such charges; Supply; the appropriation, receipt, custody, issue or audit of accounts of public money; the raising of guarantee of any loan or the repayment thereof; or subordinate matters incidental to those subjects or any of them. For the purposes of this definition the expressions 'taxation', 'public money', and 'loan' respectively do not include any taxation, money, or loan raised by local authorities or bodies for local purposes, matters which, on the other hand, *are* included within the scope of Commons financial privilege."

2.3 The budgetary decline of parliament

In truth, the principal peculiarity of the House of Commons in financial affairs is nowadays not a special privilege, but an exceptional disability... The House of Commons – now that it is the true sovereign, and appoints the real executive – has long ceased to be the checking, sparing, economical body it once was. It is now more apt to spend money than the Minister of the day.

Walter Bagehot (1867: 154)

In the early days of parliamentary involvement the need for consent served to restrain profligate monarchs and to limit the burden of taxation. By the time that Walter Bagehot published *The English Constitution* in 1867 parliament's budgetary function had started to fall into disrepute. Critique of the alleged profligate tendencies of parliamentarians is not justified when considering the fiscal effect of parliamentary amendments, which according to constitutional tradition involved cuts in expenditures. To the contrary, Einzig concludes his analysis of parliamentary amendment activity during this period by pointing out that 'in many instances criticisms by the House drew the Government's attention to the possibility of justifiable economies' (Einzig 1959: 276). The success of the Public Accounts Committee also ensured a focus on potential savings and the elimination of waste in spending. Bagehot's critique reveals his deep-seated discomfort with the overall expansion of public spending during this period, which parliamentary scrutiny did not reverse or significantly contain.

Elsewhere, too, parliaments acquired a reputation for fiscal profligacy. The perhaps first ever cross-national survey on budgeting practices, conducted by the

Cobden Club during the 1870s, reveals discontent with parliaments in a number of countries. For instance, the French Finance Minister Léon Say complained that the budget equilibrium was being compromised 'by those very persons whose proper mission should be that of restraining the public administration, in the matter of expenditure, instead of encouraging the augmentation of its Budgets' (quoted from Probyn 1877: 49). Decades later, France eventually constrained parliamentary powers by curbing the right to financial initiative and powers of amendment over executive budgets (Hoffman 1959: 339, Loewenstein 1959: 223).¹⁸ The survey shows that towards the end of the nineteenth century, critique of parliament's budgetary role was not unique to the UK.

But the zenith of fiscal power at Westminster was short-lived. The emergence of organised political parties towards the end of the nineteenth century is significantly associated with the decline of parliament in policy-making (Adonis 1993, Norton 1993). In the wake of the 1867 Reform Act the balance between the Commons and the cabinet began to shift as governments became increasingly reliant on the approval of the electorate and parties sought to project a coherent image to the public (Mackintosh 1962: 161-209). The independent tendencies of members survived for a while, but by 1874 Dod's *Parliamentary Companion* added 'Lib' and 'Cons' after the names of candidates. Government by cohesive parties meant that the interests of the executive and its parliamentary majority

¹⁸ Article 40 of the France's 1958 Constitution establishes limitations: 'Bills and amendments introduced by Members of Parliament shall not be admissible where their adoption would have as a consequence either a diminution of public resources or the creation or increase of an item of public expenditure.'

gained in congruence. The antagonistic contest between the executive and parliament that characterised past centuries was being supplanted by one that pitched the opposition against the majority and for which parliament provided the arena. This required a tightening of party discipline that commensurately diminished the space for individual members to shape public spending and taxes.

At the same time, the reform of parliamentary procedure emerged on the agenda as governments struggled to facilitate smooth passage of legislation and to ensure the voting of supply by August of each year. The deliberately obstructive behaviour of Charles Stewart Parnell and his Irish nationalist followers during the 1870s and 80s provided impetus for such reforms (Mackintosh 1962: 179-182). The government in 1872 obtained concessions that restricted the opportunity for amendments to the motion to move into committee of supply. A decade later, Gladstone proposed a series of reforms to the standing orders that resulted in the prohibition of dilatory motions for adjournment, required speeches to be relevant and allowed a simple majority vote to bring about closure of debate. This was followed in 1896 by the limitation of the number of supply days and the inauguration of the guillotine for the supply procedure (Einzig 1959: 245). Before the latter restrictions were introduced, each departmental vote had to be moved separately, affording ample opportunity for debate and the discussion of amendments. These procedural adjustments made it substantially easier for subsequent governments to get their proposals through the Commons.

Party discipline and procedural restrictions reined in parliamentary activism, and amendments to the estimates came to be regarded as fundamental challenges to the government during the beginning of the twentieth century.¹⁹ When in 1919 the Commons took government calls for economy seriously and denied the Lord Chancellor funding for a second bathroom, Lord Birkenhead refused to move into his official residence. The government considered this incident so embarrassing that the treasury initiated a seemingly innocuous but consequential change in procedure that removed the drafting of money resolutions from the public bills office of the Commons to the treasury. Subsequent governments drafted more restrictive money resolutions that increasingly curtailed the scope for amendments and debate.²⁰ This ended the practice of the preceding two centuries when royal recommendations and money resolutions were sufficiently permissive to allow amendments as long as the stipulated expenditure total was not breached. As successive governments became 'hypersensitive' to parliamentary challenges, every step in the financial procedure became linked to the question of confidence (Reid 1966: 77). Nowadays, amendments to executive budget proposals, if successful, are tantamount to a vote of no confidence. The last government defeat

¹⁹ Amendment experience in many other Westminster type legislatures is similarly dated. It appears that the last time an allocation was reduced in the New Zealand Parliament, for instance, was in 1930 when the vote for the Department of Agriculture was reduced by five pounds. At the time, a minority government had to rely on shifting coalitions (Finance and Expenditure Committee 2001: 11).

²⁰ A money resolution is required for any new bill introduced in parliament which would lead to an increase in public spending (Einzig 1959: 290-294).

over estimates was in 1921, when members' travelling expenses were the object of criticism.

Political constraints combined with technical disadvantages to further undermine parliamentary scrutiny. As public spending expanded and financial management grew in complexity, budgeting increasingly required expertise that largely resided in the Treasury. Towards the end of the nineteenth century it became the prevailing view that only the executive could have 'so extensive and impartial a view of the mass of these details, and no one can compromise the conflicting interests with so much competence and precision' (Stourm 1917: 54). The US Congress held out longest compared with other legislatures by denying the president a formal role in preparing budgets. But it, too, conceded the establishment of an executive budget in 1921 when the Budget and Accounting Act stipulated that the president co-ordinate the drafting of a budget before its submission to congress (Webber and Wildavsky 1986: 411-416). The emergence of modern executive budgeting not only facilitated parliamentary control, but paradoxically it also made many parliaments more reactive and, eventually, passive recipients of financial proposals. As Allen Schick (2002: 21) puts it, executive budgets became 'the authoritative metric for measuring legislative action.'

The decay of financial scrutiny was hastened by parliament's failure to adapt the budget process to changing circumstances. In seventeenth century Britain the delay of approval for financial measures was a clever strategy that forced

economy in the royal handling of public funds and gained parliament time to extract concessions from the monarch. *Erskine May* (1997: 794) still attempts to rationalise the late approval of the budget by venturing that 'the impracticality of framing Estimates too long in advance' makes it impossible to pass the budget in time for the beginning of a financial year. This argument is clearly contradicted by the fact that most industrialised nations have no difficulty to ensure timely passage under normal circumstances.²¹ Nowadays, tardy approval serves to marginalise parliamentary involvement (Schick 2002: 18): 'With appropriations voted after the fiscal year was underway, Parliament came to merely endorse spending that had already been incurred.'

In most other countries specialised committees have become the focus of financial decision-making in parliament (OECDb 2002: 164).²² Specialised committees allow members to acquire relevant expertise and provide a forum for more

²¹ The OECD's (2002a) *Best Practices on Budget Transparency* recommend: 'The government's draft budget should be submitted to Parliament far enough in advance to allow Parliament to review it properly. In no case should this be less than three months prior to the start of the fiscal year. The budget should be approved by Parliament prior to the start of the fiscal year.' This is standard practice in most member countries, as chapter four will show.

²² In 24 out of 27 OECD member countries that responded to the survey, there are specialised budget committees. For instance, to consider revenue measures the US House of Representatives established the Ways and Means Committee in 1802 and the Senate its Finance Committee in 1816. The House Appropriations Committee was established in 1865 and its Senate counterpart in 1867. In addition, in 1974 these committees were complemented with Budget Committees in each chamber to facilitate the control of fiscal aggregates during the congressional budget process (Schick 2000: 15).

technical and in-depth discussions than are possible in the politicised atmosphere of the chamber (Mezey 1979, Mattson and Strøm 1995). In the UK the Public Accounts Committee has maintained and, as a result of the explicit provision of value for money audit in the 1983 National Audit Act, even enhanced its role in *ex post* financial scrutiny. But the Commons have no similar institution for the approval stage of the budget process and other financial committees have amounted to little else but 'temporary experiments' (Chubb 1952: 42). For a long time, it appears that governments objected to the establishment of a select committee on estimates on the basis of a misguided argument that this would interfere with the financial initiative of the Crown (Einzig 1959: 256). When such a committee was set up in 1912 it did not live up to expectations (Chubb 1952: 198-210). The 1979 reforms of the committee system devolved consideration of estimates to the current departmental select committees (Flegmann 1986). Although these committees have powers to examine the expenditure of the relevant government departments, as well as policy and administration, a recent report found that in the 1997-8 and 1998-9 sessions only about a third of select committee inquiries considered any form of expenditure issue and less than a tenth of these specifically examined the estimates (Hansard Society Commission on Parliamentary Scrutiny 2001: 160).

The underdevelopment of specialised committees also characterises the parliamentary approval process for taxation measures. Until 1967, all finance bill committee stages were taken on the floor of the House in the Committee of Ways and Means. To save time, a standing committee stage for the finance bill was

introduced in the following year to deal with the less controversial aspects of the legislation (House of Commons Information Office 2003: 3). Therefore, the Commons today have no specialised committee expertise for the scrutiny of neither spending plans nor revenue measures.

Conclusions

The budgetary role of legislatures is the outcome of a centuries-long struggle for supremacy in public finance. The English Parliament first fought for the right to consent to taxation and achieved proper recognition of this principle with the revolution of 1688. However, the seeds for the eventual decline of its budgetary function were planted only shortly after this important victory when members surrendered their right to financial initiative at the beginning of the eighteenth century. Over the following two centuries, the Commons gradually devised mechanisms to control the expenditure of public funds. The decisive breakthrough came with the Gladstonian reforms in the 1860s, which put in place the institutional machinery for modern expenditure control and successfully revived an earlier experiment with a parliamentary committee to scrutinise government accounts. The twentieth century has been characterised by increasing executive dominance and the withering of parliament's financial prowess. The rise of party discipline towards the end of the nineteenth century reined in members' independence and successive governments initiated restrictive procedural reforms that imposed limitations in order to smooth the path of financial proposals. The

financial procedure became linked to the question of confidence. Lack of specialised financial committees in the Commons to scrutinise expenditure and revenue proposals and the outdated timing of the budget process further ensured that parliament became sidelined from substantive decision-making.

The historical perspective in this chapter highlights that institutional arrangements reflect the power of different actors in the budget process, and that they are shaped over time by struggles for political control. Thus, country-specific factors and contingencies affect institutional design, which we will revisit in chapter five. However, while the historical approach is crucial for understanding the evolution of legislative financial scrutiny in a particular context, it has limits for the purpose of cross-national comparison. While influential, the UK case represents a rather extreme outcome of the executive-legislative struggle for power over budget policy. To gain a broader understanding, a more universal framework is needed. All countries with democratic institutions need to define the budgetary role of the legislature, and certain institutional choices are central to that role. As a first step in developing a tractable framework for comparing and assessing legislative budgeting, the following chapter turns to the analysis of how a set of core budget institutions affect legislative control and fiscal policy.

3 Analysing the institutional foundations for legislative control

Institutional arrangements fundamentally affect public policy and the balance of power between different political actors. In this chapter, I explore and demonstrate the impact of different procedural rules on the role of a legislature in budgeting. Other authors have considered some of the features discussed in this analysis, but not always in a rigorous way. Moreover, what is lacking thus far is a comprehensive view that integrates the various elements. This synthesis is important because looking at the impact of particular decision-making rules in isolation may lead to wrong predictions. The effect of one institutional feature may be balanced or neutralised by another, and hence analytical omissions may lead to unrealistic expectations about the impact of institutional arrangements on fiscal policy. An incomplete analysis may also obscure the fact that similar aims can be achieved with different combinations of institutions. While some authors have developed models that incorporate some of the institutional aspects discussed here, these accounts focus on individual countries (for instance Pereira and Mueller 2004, Baldez and Carey 1999). This leads to a final and perhaps most crucial point in the context of this analysis, i.e. cross-national research requires tools that enable the assessment of institutional arrangements on the basis of a rigorous common framework.

The focus here is on (i) how institutional arrangements influence the legislative-executive balance of power, and (ii) how they affect fiscal policy outcomes. I

consider how different types and configurations of certain fundamental budgetary decision-making rules constrain a legislature, by exploring the size and shape of a legislature's feasible set of budgetary choices under different rules and procedures. Which outcome from the feasible set will be realised depends on the exact legislative preferences, but by focusing on the feasible set, it becomes possible to explore the exact nature of the constraint imposed by institutional arrangements on legislative choice. This also allows us to make testable predictions about their impact on fiscal performance, defined here in terms of the total level of public spending. The analysis considers four sets of essential formal rules, namely those that regulate legislative amendments of the budget, reversionary budgets, executive veto authority, and executive flexibility during implementation. This is the approximate sequence in which these rules are relevant over the budget cycle, and hence I will introduce them in this order. In recognition that budgetary decision-making is not costless, I also consider aspects of legislative organisation that enable a legislature to use its formal powers.

I make several core assumptions. First, I assume a two-dimensional policy space. A single dimension is insufficient to explore the differences between different versions of a constraint, such as different types of amendment powers or executive vetoes. The choice of two-dimensional space can of course be challenged as unrealistic, since many government budgets have more than two dimensions. In the US, for instance, Congress approves separate appropriation bills for different

spending areas.²³ However, two-dimensional space is intuitive in this context, since many fundamental budgetary choices involve trade-offs between two broad categories, such as health versus defence, primary versus secondary education or current versus capital spending. Moreover, an extension of the analysis into n -dimensional space would be more complicated and less accessible, although in principle it is possible. In two-dimensional space, the argument can be illustrated with the help of straightforward diagrammatic exposition. Therefore, thorough two-dimensional analysis is the logical starting point and the extension into n -dimensional space is reserved for later work.

Second, both the executive and the legislature are modelled as unitary actors. I do not consider the interaction of the executive and particular members of the legislature (Huber 1996). Also, this analysis does not extend to dynamics within the legislature, for instance between different chambers of a legislature (Tsebelis and Money 1997, Heller 1997 and 2001, Patterson and Mughan 1999). Nor do I cover intra-executive negotiations, such as between cabinet committees (Breton 1996: 98-111) or government departments and the central budget authority (Steunenberg 2005). This simplification facilitates analysis without challenging the key results of this work. As Tsebelis (2002: 38-63) demonstrates, it is possible to approximate the ideal points of collective actors in spatial models. Moreover, this assumption allows me to focus on the main purpose of this analysis, to

²³ Up to the 2005 fiscal year, Congress considered 13 regular appropriations bills. In 2005, a reorganisation of the Appropriations Committees cut the number of subcommittees to ten in the House of Representatives and 12 in the Senate. As a result, the House had 11 such bills and the Senate 12 (Streeter 2006).

delineate a legislature's feasible set of budgetary choices within different institutional settings. Third, I assume Euclidean preferences over the space of budgetary alternatives. This implies circular indifference curves in the two-dimensional space. Hence, for any set of alternatives an actor prefers the one that is closer to his ideal point to the one that is further away. While circularity is a standard assumption in spatial analyses, it can be relaxed, although the implications are not always straightforward (Ferejohn and Krehbiel 1987: 316).

Some further assumptions are convenient but somewhat less fundamental. Fourth, I assume that the executive makes the first move and tables a budgetary proposal that has to be approved by the legislature. Without this assumption, amendment powers would not be important as the legislature could simply draft a budget according to its preferences. In practice, the task of drafting a budget for debate in the legislature is typically delegated to the executive. While some legislatures retain formal powers to draft a budget on their own, few have the prerequisite technical capacity (Schick 2002), and Von Hagen (1992: 41) notes that 'this possibility is of no practical importance.' Hence, the assumption of executive proposal power is very realistic. Fifth, I initially assume that decisions in a legislature do not entail any transaction costs. This assumption is not realistic, which is acknowledged in the final section of this chapter, where I discuss how legislative organisation complements formal powers to enable their utilisation. Finally, I make the assumption that all spending is in principle variable on a year-on-year basis, but I will show that this assumption can be relaxed without affecting the substance of the analysis.

3.1 Amendment powers

After the tabling of a budget, the scope for the legislature to directly write budget policy is defined by its powers to amend the executive proposal. I make a distinction between three broad types of amendment powers, i.e. unfettered, 'balanced budget' and 'cuts only.' These stylised types reflect the most commonly found constellations (Inter-Parliamentary Union 1986: Table 38A). With 'balanced budget' powers, I refer to a situation where a legislature may not increase an item proposed by the executive unless it makes a commensurate adjustment elsewhere so as to meet an aggregate constraint, typically either the amount of total spending or the budget balance proposed by the executive. With 'cuts only' powers, I refer to the situation where a legislature may only reduce items proposed by the executive, but not increase them or introduce any new items. For now, I leave aside the possibility of non-approval. Some legislatures have no powers at all to amend the budget and may only accept or reject the executive's proposal, which I consider separately in the following section.

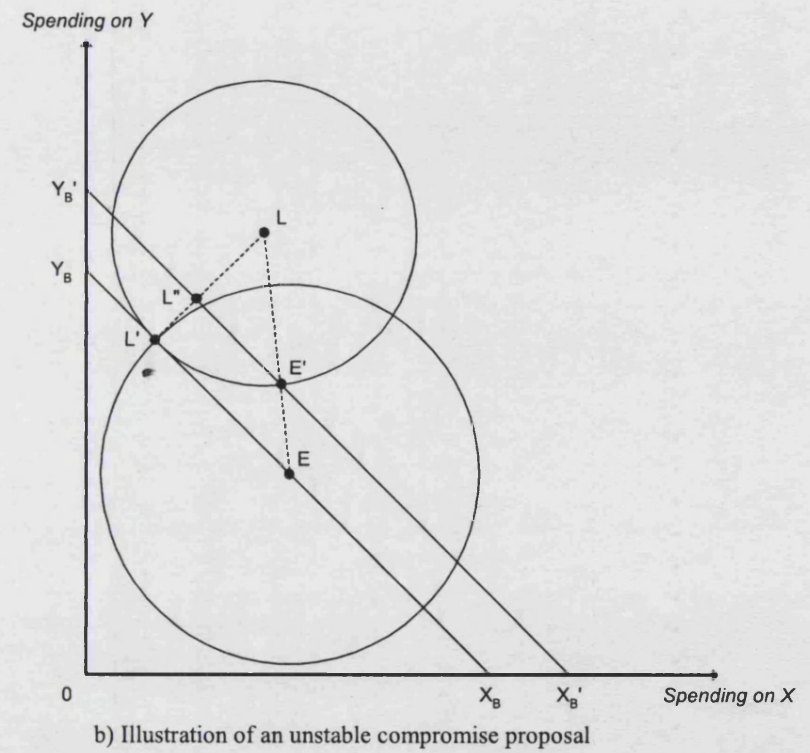
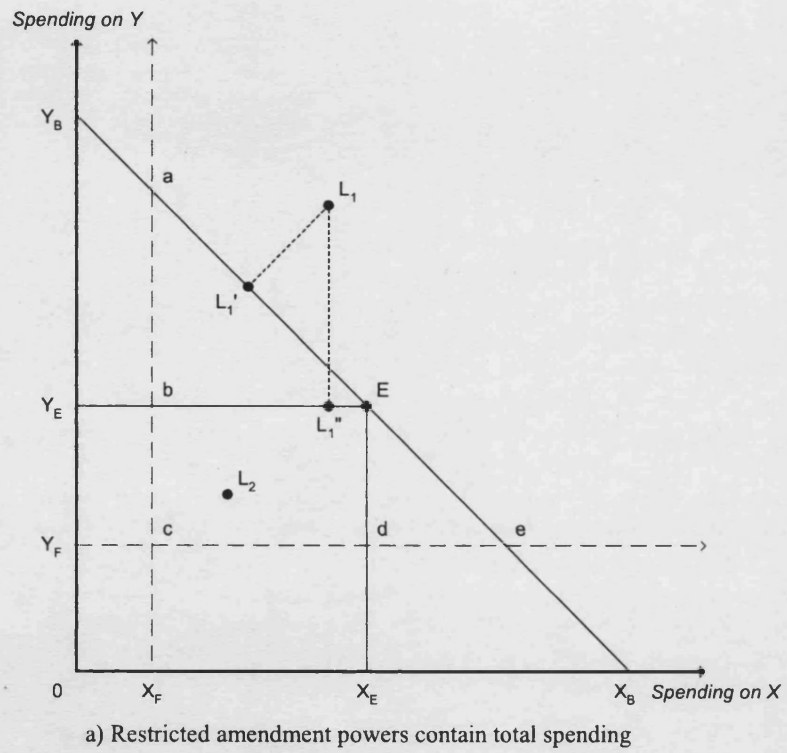
Figure 1(a) explores the effects of the three stylised versions of amendment powers. The point labelled E identifies a hypothetical ideal budget of the executive. If this budget is tabled, unfettered powers allow a legislature to move to any other combination, such as L_1 . Under a balanced budget configuration, however, aggregate spending is constrained by the total amount proposed by the

executive. This is represented by a budget line with a slope of -1 that passes through E . The budget line connects the points that represent the maximum amounts that could be spent on item X or Y respectively if spending were concentrated on one item only (see also Pereira and Mueller 2004: 792).²⁴ With such a constraint, the legislature can amend spending to any combination that is on the line or below it, but it cannot increase spending to any combination beyond the line.²⁵ If its preferred spending package is L_I , then the closest feasible budget is now L_I' . The feasible set with balanced budget powers is the triangle OY_BX_B , formed by the budget line and the two axes of the diagram.

²⁴ When modelling outputs the slope of the budget line depends on the price ratio of the relevant goods or services. However, appropriations on an output basis are rare despite widespread enthusiasm for the idea of performance budgeting (Schick 2003).

²⁵ If the legislature may not increase the deficit proposed by the executive, the budget constraint can be more or less hard. If it is relatively easy to add revenues by adjusting economic assumptions, the legislature may effectively be able to push out the budget line. The 'softness' of the constraint is then determined by the extent to which this is possible.

Figure 1: Amendment powers



In contrast, the ‘cuts only’ configuration essentially breaks down legislative decision-making into separate choices on each spending item. In other words, when a legislature can only reduce an existing item point E imposes a total cap for each individual item. Under this configuration, the feasible set is represented by the area OY_EX_E . The resulting rectangular shape is smaller than the triangular feasible set for balanced budget amendment powers. Still assuming that the legislature’s preferred package is L_1 the closest feasible budget is now L_1'' , which is further than L_1' . Note also that total spending is lower at L_1'' than at L_1' . Hence, the size of a legislature’s feasible set varies depending on its amendment powers. More specifically, it decreases from unfettered to balanced budget and to cuts only powers.

Whether any amendment constraints ‘bite’ depends on the exact preferences of the legislature compared with those of the executive. Figure 1(a) also depicts a fiscally conservative legislature that prefers lower spending on each item compared with the executive, represented here with another hypothetical ideal budget L_2 . Such a legislature can obtain exactly its ideal budget even when its amendment powers are constrained by balanced budget or cuts only provisions. This suggests that a fiscally conservative legislature, relative to the executive, is more powerful than a profligate one.

What happens if we allow for zero spending on items? If proposed spending on either X or Y is zero, then the shape of the feasible sets for unfettered and balanced budget powers are identical. However, for cuts only powers the feasible set is

reduced from an area to a line, i.e. the choice to cut the non-zero expenditure item only. In the highly unrealistic event that the executive proposes a zero spending budget, so that proposed spending on both X and Y is zero, and still leaving aside the possibility of non-approval, the feasible set with restricted (either cuts only or balanced budget) amendment powers consists of one point only. The possibility of either of these scenarios is very remote if we apply the analysis to the main functional divisions of a budget, since it is typically difficult to completely cancel expenditures on, say, health or education. Hence, in the following I assume that $X > 0$ and $Y > 0$.

However, in practice most governments are to some degree constrained in their flexibility to vary the budget year-on-year. Employment contracts and loan agreements typically impose long-term obligations on government, such as civil service pensions and debt servicing costs. There may also be powerful political considerations that protect parts of the budget from adjustment, for instance when the government has to ensure support from trade unions or other pressure groups by maintaining spending on certain programmes. This implies that a substantial proportion of spending may be considered fixed in the short-run, i.e. beyond the scope of the annual budget process. Figure 1(a) incorporates constraints on short-run variability, where the dashed lines indicate hypothetical proportions of spending that are non-adjustable in the short-run. If X_F and Y_F indicate arbitrary fixed levels of spending on X and Y respectively, then only spending beyond these amounts is variable in the short-run. As long as the share of variable expenditure is not exactly zero, which is unlikely except in very extreme cases, the relaxation

of the variability assumption reduces the feasible set at the margin for any constellation of amendment powers, for example to the triangle ace for balanced budget powers and to the rectangle $bcdE$ for cuts only powers. However, it is still true that the feasible set is largest under unfettered powers, and is consecutively reduced by balanced budget and cuts only amendment powers. Relaxing the variability assumption does not fundamentally challenge the analysis.

The potential for compromise is illustrated in Figure 1(b) for a legislature with balanced budget amendment powers. As in the preceding analysis, proposal E would result in outcome L' . Figure 1(b) includes the indifference curve for the legislature in relation to L' , represented by the circle centred on L and with radius LL' , which can be written as (L, LL') . The diagram also contains the indifference curve of the executive (E, EL') . Both would benefit from moving to a point inside the winset of L' , defined as the intersection of the two indifference curves, which contains all points that both the legislature and the executive prefer to L' . More specifically, they would benefit from moving to a point in the winset and on the contract curve between E and L , which contains all Pareto efficient outcomes. So if the executive were to offer a budget such as E' , just inside the winset and on the contract curve, both actors would be better off. The problem with this offer is that the legislature has a second-stage incentive to use its amendment powers to approve budget L'' , which it prefers to L' . This, however, leaves the executive worse off than with outcome L' . Hence, the executive would be unwise to negotiate a compromise E' unless there is a commitment device to ensure that the legislature is not going to renege. Cooperation may also emerge if the time

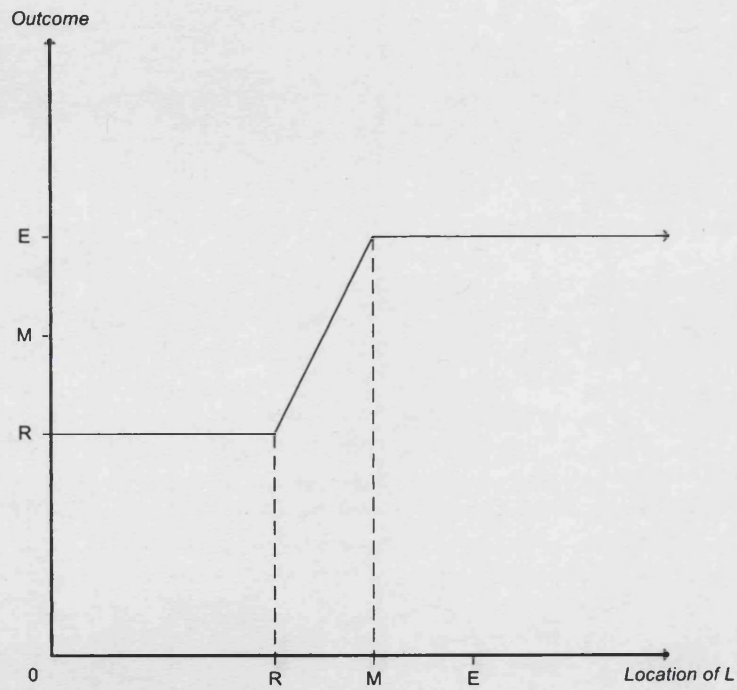
horizon is extended and both actors value future co-operation highly enough. In the absence of such solutions, executive compromise proposals are unstable and the best offer is E .

The main conclusion from this section is that different arrangements of legislative powers of amendment over the budget impact on the shape of a legislature's feasible set of budgetary choices. Restricted amendment powers limit the potential for legislative choice, since the budget proposal in effect fixes either a total expenditure ceiling (balanced budget amendment powers) or a ceiling on each item contained in the budget (cuts only amendment powers). In terms of fiscal performance, the analysis demonstrates that limitations on amendment powers, if enforced, are powerful devices for containing public spending within an aggregate constraint imposed by the government. More specifically, cuts only amendment powers result in at most the same level of total spending as balanced budget amendment powers, which in turn result in at most the same level as unfettered powers. Hence, my analysis predicts public spending to be lower in countries that limit parliamentary powers to amend the executive budget proposal compared with countries where legislatures have unfettered amendment powers.

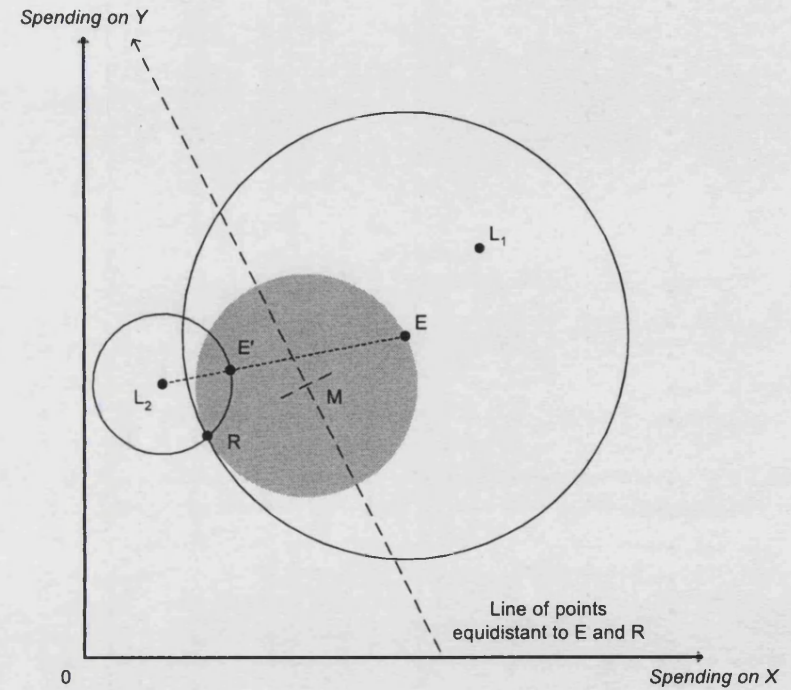
3.2 The reversionary budget

The reversionary outcome takes effect when a previous budget has expired but a new one has not yet been approved. In most countries, there are provisions governing this circumstance in either the constitution or organic budget laws, although there are a few exceptions. Norway is an example where there are no clear formal rules describing the consequences when approval is delayed beyond the beginning of the relevant fiscal year (OECD and World Bank 2003). Although there are variations, we can distinguish three main reversion scenarios: zero spending, last year's approved budget, or the executive budget proposal. The reversionary budget may induce the executive to make concessions in order to avoid rejection or non-approval of the budget (Einzig 1959: 55, Schick 2002). In the following I explore the conditions under which this is likely to occur.

Figure 2: Reversionary budgets



a) Feasible outcomes in a single dimension by legislative location



b) The reversion circle (M, MR) in two-dimensional space

I assume the absence of any legislative powers to amend, so that the executive and the legislature are playing a veto game (Crombez *et al.* 2006, Tsebelis 2002). The executive has to move first and proposes a budget, which the legislature can either accept or reject. If the executive had gatekeeping powers, this would alter the analysis below, since the process would start with a consideration by the executive whether it should table a budget in the first place. However, the absence of gatekeeping powers is a very realistic assumption, since constitutions or other legislation, such as the 1921 Budget and Accounting Act in the US, typically *require* the executive to table a proposal. Therefore, I leave the theoretically entertaining but practically irrelevant possibility of budgetary gatekeeping to be explored elsewhere. If the executive proposal is rejected, the exogenously determined reversionary outcome takes effect. The executive has agenda setting power and makes the proposal at the closest point to its ideal budget that will receive legislative approval (Romer and Rosenthal 1978). I assume that when the legislature prefers the proposal to the reversionary outcome, or when it is indifferent between the two, it will approve the proposal.

In this case, it is easier to start the analysis with a single budget item, and to translate the results into a two-dimensional space later on. Figure 2(a) shows the location of a reversionary outcome R and an executive ideal point E on the horizontal axis. I assume that $R < E$. Total nominal expenditure typically expands from year to year, so that last year's nominal budget is likely to be less than the executive's preferred budget. To an extent determined by inflation, fiscal retrenchment in real terms would still be possible within these assumptions even if

the nominal amount in a given budget year is greater than in the previous year. I exclude the case of $R = E$ to avoid trivial solutions. Figure 2(a) also indicates the midpoint M between R and E , which has particular properties that will help to extend the findings into two-dimensional space. In Figure 2(a), the vertical axis indicates the outcomes of the veto game for each possible location of the legislative ideal point L . When $L \leq R$, there are no concessions the executive could make to obtain an outcome closer to its ideal budget than R . When $R < L < M$, the executive can exploit its agenda setting power and proposes budget $2L - R$, which is the closest possible outcome that it can achieve. Finally, when $M \leq L$, the legislature never prefers reversion to the executive's ideal budget, and hence the executive has no incentive to make any concessions, resulting in outcome E .

The analysis yields some important results. First, the feasible set is the closed interval $[R, E]$. By implication, the further away the reversionary outcome is from the executive's preferred budget, the greater the number of potential budgets that the executive prefers to the reversionary budget and hence the greater the potential for the legislature to extract concessions. Tsebelis and Chang (2004: 460) have calculated that year-to-year shifts between major spending categories seldom exceed one percentage point in industrialised countries. Hence, in a typical situation, budgeting is incremental and successive budgets are likely to be very close. In practical terms, this suggests that reversion to zero spending typically provides greater scope for the legislature to extract concessions than reversion to last year's expenditures. Second, the analysis allows conclusions about the impact of the reversionary budget on fiscal performance. As long as $R < E$ in nominal

terms, the most realistic assumption about their relative size, the simple veto game in a single dimension does not undermine fiscal discipline. If anything, it empowers fiscally conservative legislative bodies to contain spendthrift executives. However, if a legislature is profligate relative to the executive, as is often assumed (Bagehot 1867: 154, Schick 2002, Hallerberg and Marier 2004), the reversionary budget has no effect at all on total spending. This result directly challenges Alesina *et al.* (1999b: 258), who argue that reversionary outcomes unfavourable to the executive give rise to ‘incentives to propose a larger budget.’ My analysis suggests that this effect requires that (i) reversionary spending is higher than the executive prefers, i.e. a nominal cutback scenario, and (ii) that the legislature is more profligate relative to the executive.

Figure 2(b) translates the analysis into two-dimensional space to make it comparable with the discussion in the rest of this chapter. In Figure 2(a), M is the midpoint of the interval of all possible outcomes, which is bounded by R and E . In Figure 2(b), I use this property of M to find the two-dimensional equivalent of this outcome set, represented with the shaded circle (M, MR) , which I call the reversion circle. To illustrate, consider two hypothetical legislative ideal points, L_1 and L_2 . The point L_1 is closer to E than to R , as are all other legislative ideal points to the right of the dashed line representing all points that are equidistant to E and R , which implies that the executive will propose its ideal budget. On the other hand, L_2 is closer to R than to E , and hence induces the executive to propose budget E' to ensure approval. More formally, the executive faces a minimisation

problem in deciding which budget to table in the legislature. The executive's equilibrium offer E^* solves:

$$\min |E - E'| \text{ subject to } |L - E'| \leq |L - R|.$$

Note that some outcomes within the reversion circle require legislative preferences in the negative domain, which may not be realistic. If the possibility of negative spending is excluded, the reversion circle does not represent the feasible set. Suffice it to note here that all outcomes outside the reversion circle are infeasible.

This analysis yields implications for fiscal performance. Unlike in a single dimension, the veto game in two-dimensional space does not always contain outcomes below the aggregate level preferred by the executive. To see why, imagine a budget line through E in Figure 2(b). Some points inside the reversion circle are above this imaginary budget line, implying higher aggregate spending than the executive desires. However, under the assumption that nominal reversionary expenditure for each item is lower than the executive prefers, at most a small proportion of the reversion circle contains budgets that result in higher aggregate spending compared with the executive's ideal budget, and most outcomes are lower. In fact, as long as last year's total is smaller than the executive's ideal total in nominal terms, the majority of outcomes in the reversion circle imply lower aggregate spending.

To conclude, the analysis shows that the size of the feasible set depends on the distance between the executive's ideal budget and the reversionary outcome. In most realistic scenarios, reversion to zero spending will imply a larger feasible set than reversion to last year's spending. Moreover, the analysis shows that the impact of the reversionary budget on fiscal policy is conditional on the position of the ideal points of political actors. If aggregate reversionary spending is lower than the executive prefers, then the majority of feasible aggregate outcomes are also lower than the executive prefers. Contrary to the conjecture offered by Alesina *et al.* (1999b), the threat of non-approval may have no impact on the level of total spending, and it may even lead the executive to propose aggregate budgets that are smaller than it prefers. Hence, the impact of particular reversionary arrangements on fiscal performance is ambiguous, and I do not expect this variable to play a significant role in the determination of fiscal policy.

3.3 Executive vetoes

In some political systems, the executive has the power to veto either a budget bill in its entirety or individual items within a budget bill approved by the legislature. In the following I exclude vetoes that may be overridden by the legislature with a simple majority, because voting an already approved budget a second time with identical majority requirements would be only a minor inconvenience from a legislative perspective. To keep the analysis simple, I also assume that there is no legislative override possibility, or that the hurdle of assembling the relevant

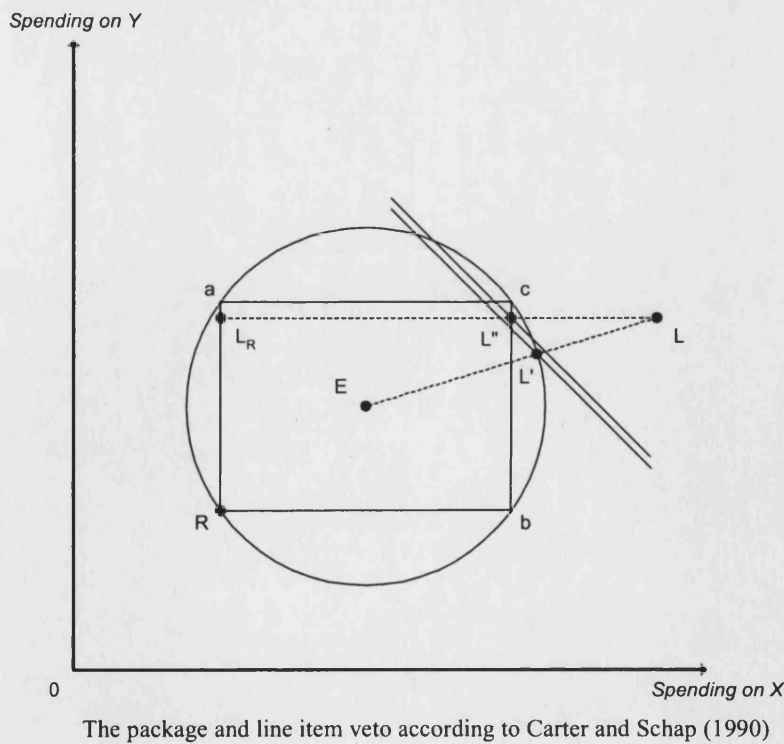
supermajority is too high to override an executive veto.²⁶ Figure 3 draws on the analysis by Carter and Schap (1990) to explore the effects of these two types of veto, respectively referred to as a package and line item veto. Similar to the preceding section, I assume that the executive will not veto any point that is closer or equidistant to its proposal compared with the reversionary outcome. I also again assume that the reversionary budget is less than the executive's proposed level of spending for both items in the budget. In Figure 3, X_R and Y_R indicate a hypothetical reversionary level of spending on items X and Y respectively.

Figure 3 considers a system where a legislature has unfettered powers to amend the budget. In this case, the effect of the package veto is to limit the feasible set to all points that are on or within the circle (E, ER), which represents the executive's indifference curve in relation to the reversionary budget. This implies that the greater the distance between E and R the larger the circle. For instance, with reversion to zero spending the circle would be substantially larger than the one depicted in the diagram. With the package veto, any budget that is approved by the legislature but falls outside the circle will be vetoed, whilst any other budget is veto-proof. A sophisticated legislature with an ideal budget L would know that this proposal is not included in the set of budgets that are acceptable to the executive. If proposed, L would trigger a veto and reversion to R . To obtain a more favourable outcome, the legislature can move along the contract curve between L and E and approve the closest possible budget, in this case L' . Since R and L' are equidistant from E , this proposal is veto-proof.

²⁶ Dearden and Husted (1990: 14) explore the impact of different override provisions.

Ceteris paribus, a line item veto is more restrictive. The feasible set with a line item veto is the rectangle $aRbc$ that fits exactly within the package veto circle. With a line item veto, the executive in effect makes separate veto decisions for each spending item. It will not veto any amount that is as close as or closer to its proposed spending level than the reversionary level for that particular item. A sophisticated legislature with an ideal budget L would avoid the reversionary outcome L_R by offering L'' , the veto-proof budget closest to its ideal point. In sum, the greater the distance between the reversionary budget and the proposed budget, the larger a legislature's feasible set. Moreover, a line item veto constrains legislative choice more than a package veto as long as $E \neq R$, as assumed here.

Figure 3: Executive vetoes



What are the implications for fiscal performance? Despite common misperceptions, the impact of different vetoes on aggregate spending is not clear-cut. Proponents of the line item veto in the US have argued that it is an effective device to contain spending (Schick 2000: 94). However, the analysis here shows that with either type of veto, public spending may end up substantially higher than the executive's ideal aggregate level. Moreover, as Carter and Schap (1990: 111) demonstrate, the line item veto in some cases may even result in *higher* total spending than the package veto. This counterintuitive result is illustrated in Figure 3, where the outcome under the package veto scenario L' leads to lower total spending than the outcome with a line item veto L'' , as can be seen by comparing the budget lines through these two points. In sum, executive vetoes are at best blunt devices for containing public spending.²⁷

There is an even more fundamental reason for the ineffectiveness of the line item veto in particular: its effect depends on where the authority of defining line items is located. The point seems technical but has powerful implications. In public budgeting the term 'line item' refers to the lowest or most detailed level where a political sanction of spending is given in law. If the legislature retains the authority to define exactly what constitutes a line item, it can strategically merge different items into a single line in the budget. More specifically, it might

²⁷ For further work on the effects of executive vetoes on fiscal policy, see in particular Byrd (1998), Carter and Schap (1990), Dearden and Husted (1990), Dearden and Schap (1994), Gabel and Hager (2000), and Holtz-Eakin (1988).

combine spending that the executive cares about with spending that the legislature cares about into a single line in the budget. In this case, the effect of a line item veto starts resembling that of the package veto as represented in Figure 3. This would suggest that enhanced rescission powers, allowing the executive to target cuts in spending approved by the legislature, are potentially far more effective in containing spending than the line item veto. Rescission is a type of impoundment, which is discussed in detail below. This also highlights that there is a hidden assumption in the analysis by Carter and Schap (1990), viz. that line items are exogenously defined.²⁸ This issue appears to be ignored throughout the literature that deals with the line item veto.

In sum, package vetoes and line item vetoes reduce a legislature's feasible set of budgetary choices, but their exact impact depends on the nature of the reversionary budget. For instance, if spending reverts to zero the package veto circle will be large and contain many possible veto-proof budgets for a legislature to choose from, whereas the feasible set is reduced to a single point if spending reverts to the executive proposal. In most cases, reversion to last year's budget would imply an intermediate restriction on legislative choice that falls in between these two extremes. The impact of different types of vetoes on fiscal policy is not clear-cut. The difference between line item and package vetoes is further blurred when the legislature retains authority to define what exactly constitutes a line item

²⁸ I am indebted to Barry Anderson, a former US senior budget official who experienced a short period when President Clinton enjoyed line item veto authority, for bringing this crucial point to my attention.

for budgetary purposes. In terms of fiscal policy, this suggests that restrictions on amendment powers are more effective for containing aggregate expenditures.

3.4 Executive flexibility during execution

Once the budget has been approved, it has to be implemented. Because implementation is in the hands of the executive, it has an opportunity to reshape the approved budget and align it more closely with its preferred spending package. In other words, policy-making may continue during implementation. Therefore, a comprehensive analysis of legislative budgeting has to incorporate execution rules. National budget systems differ substantially in the degree to which they allow executive flexibility during the fiscal year (Hallerberg *et al.* 2001: 15-18). Alesina *et al.* (1999b: 259) note that when the approved budget can be easily revised during its implementation, ‘the entire budgetary process becomes less meaningful.’ Moreover, this section will demonstrate, execution rules have powerful implications for legislative choice. What is lacking is a comprehensive analysis of the implications of execution rules from a legislative perspective, which only few authors have partially explored (e.g. Pereira and Mueller 2004: 797). Here, I systematically analyse three basic ways to alter the budget during the execution stage, i.e. through virement, impoundment and what I call decree powers. I discuss each of these in turn.

Virement allows the transfer or reallocation of funds between budgetary categories such as programmes. Figure 4(a) analyses the effect of unlimited virement authority. If a legislature prefers the same amount of aggregate expenditure as the executive, as for instance is the case with the budget package labelled L_1 , unlimited virement allows the executive to reallocate spending along the budget line until the budget outcome matches its preferred spending combination E . If a legislature prefers a different amount of total spending, as with L_2 for instance, then unlimited virement authority allows the executive to shift allocations along the budget line so as to get as close as possible to its preferred spending package within the total spending constraint set by the legislature, in this case resulting in L_2' . Hence, there is exactly one outcome for each level of total expenditure approved by the legislature. This implies that any actual budget outcome would fall onto the line of (unfettered) virement associated outcomes that is depicted in Figure 4(a). This line is made up of all spending combinations that are closest to the executive ideal budget E at any given level of total expenditure that the legislature approves.

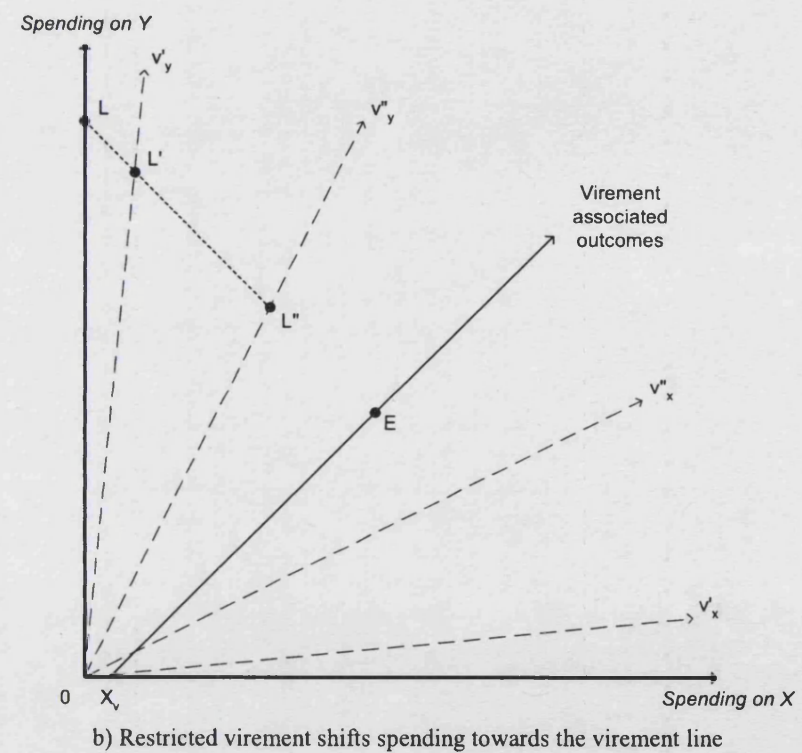
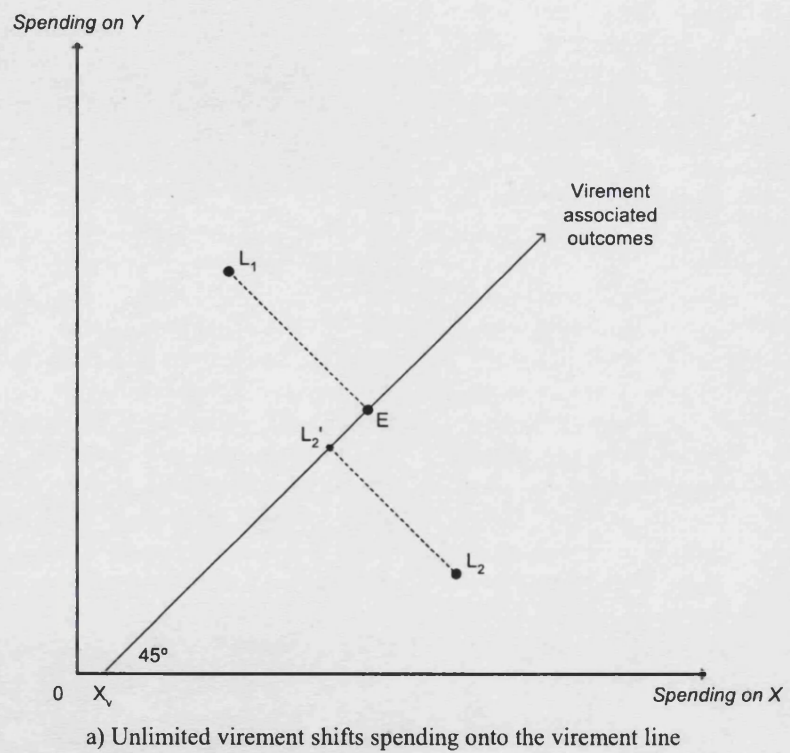
The exact position of the line of virement associated outcomes depends on the position of E . Note that this line does not go through the origin unless the executive desires exactly the same amount of expenditure on X as on Y . In the case of the ideal executive budget E as depicted in Figure 4(a), the executive prefers slightly more spending on X than on Y . Hence, the line runs from the origin to X_v and beyond that point has a slope of 1, passing through E . The significance of X_v is that at this point the slope of the line of virement associated

outcomes changes, since we exclude the possibility of negative spending. If the legislature approved a total amount of spending that is less or equal to the amount X_v , an executive with the preferred spending package E would use unfettered virement authority to concentrate all spending exclusively on X . In sum, unfettered virement reduces a legislature's feasible set to a line, i.e. the line of virement associated outcomes, which contains exactly one feasible budget for each possible total level of expenditure.

Given this powerful potential of unfettered virement to adjust policy, it is not surprising that many systems limit such reallocation to preserve legislative authority. For instance, section 43 of the South African Public Finance Management Act of 1999 allows an accounting officer to shift a 'saving' up to a limit of eight per cent of the amount appropriated under a main division to another main division within the same vote.²⁹ The effect of such limitations is represented in Figure 4(b). I retain the line of (unfettered) virement associated outcomes as a reference point, while the two sets of dashed lines at the margins represent arbitrary examples of a virement limit. A rational executive will move the budget outcome as far as limited virement allows towards its ideal spending package.

²⁹ A 'vote' typically comprises a departmental or agency budget.

Figure 4: Executive flexibility and reallocation



To begin, assume an arbitrary limit on virement of v' percent. If a legislature wants an extreme budget L with all spending concentrated on Y and zero spending on X , the closest budget outcome that it can achieve is L' . If the virement limit is adjusted to v'' per cent, where $v' < v''$, then the executive can shift the budget further, to L'' . The legislature may anticipate executive action and act strategically. For instance, assuming an ideal budget of L'' and a virement parameter of v'' the legislature can propose L and obtain its ideal budget. On the other hand, if L is the legislature's ideal budget, this falls outside the feasible set even with more limited virement authority and will not be achieved if the executive acts rationally and exploits the opportunity to shift spending closer to its ideal budget. As long as E lies in between the relevant pair of dashed lines, which in the subscripts in Figure 4(b) are labelled according to their closest axis, all points on or between the lines constitute a legislature's feasible set, whereas budgets in the margins between a line and the relevant axis cannot be achieved. The feasible set increases when the executive proposes a polarised allocation, so that E falls inside one of the margins, by exactly the area by which the line of virement associated outcomes cuts into the relevant margin.

Figure 5 explores two further implementation rules, which allow the executive to alter the size of the budget during execution. First, when the executive impounds funds it refuses to spend all or part of an appropriated amount, thereby reducing the size of the budget. This also adjusts relative priorities, unless all items are cut by the same percentage (the 'lawnmower method'). Impoundment is often a highly contentious device in budgetary politics. In the US, President Nixon in the

early 1970s refused to spend large sums of congressional appropriations and claimed 'an inherent power to impound' (Schick 2000: 251). This prompted Congress to severely limit impoundment in the form of deferrals (delays) and rescissions (cancellations) by passing the Impoundment Control Act with the Congressional Budget Act in 1974. The power to withhold funds is common elsewhere, too. For instance, a recent study shows that most European Union member states allow the executive to carry over spending into the following fiscal year (Hallerberg *et al.* 2001: 15), which resembles impoundment in the form of deferral. Other countries impose cash availability limits on actual expenditures that give the executive substantial control over the disbursement of funds during the fiscal year (Stasavage and Moyo 2000), which amounts to rescission.

Figure 5: Executive flexibility and the size of the budget

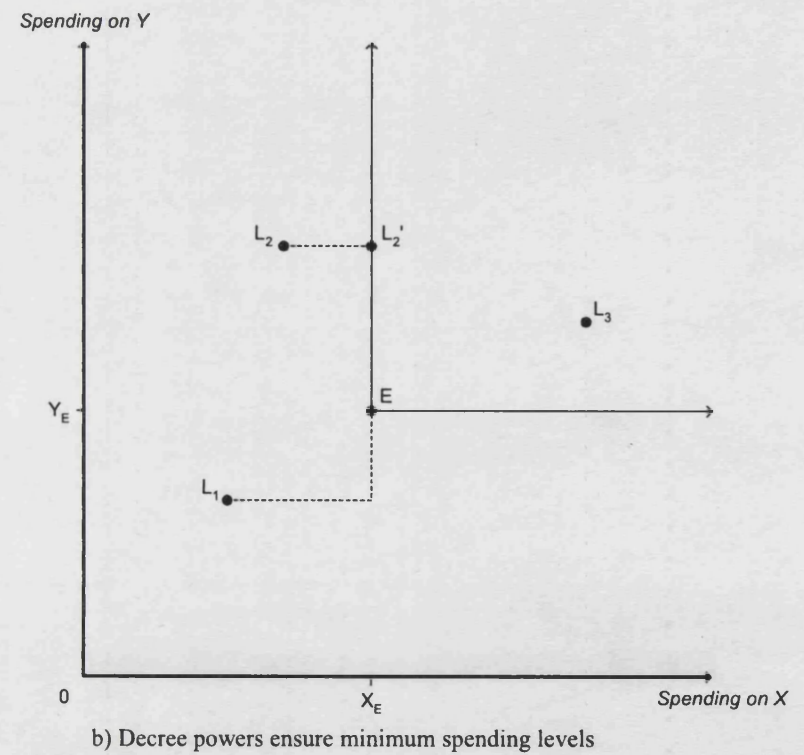
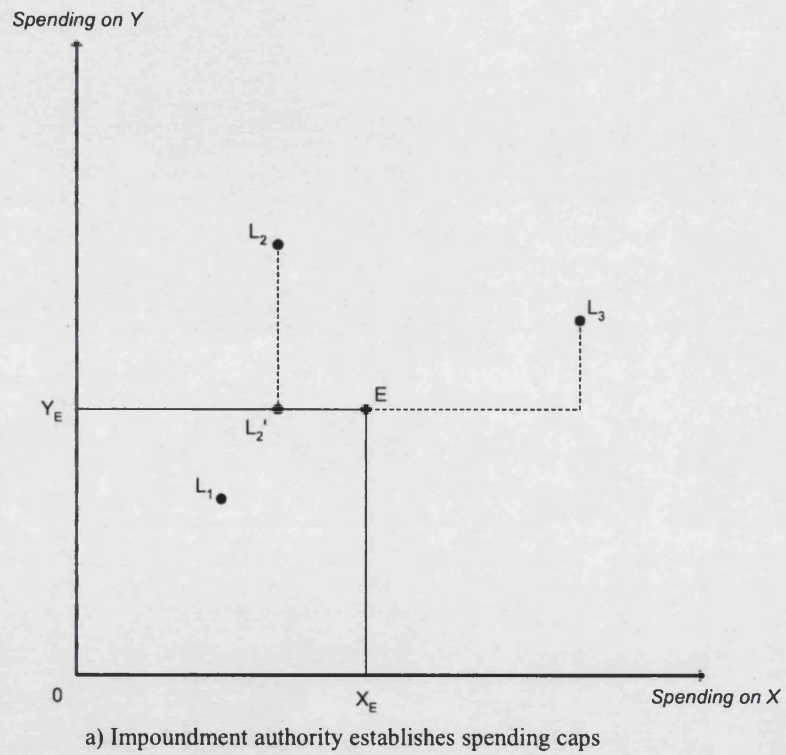


Figure 5(a) illustrates the effect of unlimited impoundment power. A fiscally conservative legislature with an ideal budget L_1 would get its ideal budget, since there is no incentive for the executive to achieve a budget outcome that is even further from its preferred spending level. If a legislature's preferred spending package is L_2 , then impoundment allows the executive to align spending on Y perfectly with its preferred spending level by impounding all funds in excess of Y_E . The executive will not impound funds appropriated for X because the legislature's spending level on this item is already below the executive's preferred level X_E . The resulting spending package L_2' represents the best possible budget a legislature can get under these circumstances. If a legislature wants budget L_3 , where spending on both X and Y exceeds the executive's preferred level, then impoundment will allow the executive to withhold any spending that is in excess of its preferred levels and get exactly the budget it wants. More generally, this shows that with unfettered impoundment authority the executive will cut any spending that falls outside the area OY_EX_E . Only legislative choices within this rectangle are protected from impoundment, as the executive would not cut spending even further below its preferred levels. Hence, a legislature's feasible set with unfettered impoundment authority contains all budgets to the south-west of E . Put differently, unlimited impoundment powers are cuts only amendment powers in reverse. This time, it is the executive that has the power to cut and not the legislature, as in Figure 1, but the overall effect on legislative choice is identical. When impoundment powers are limited by some constraint, the executive will only be able to move the budget outcome some percentage towards the outcome it would have chosen without any constraint on impoundment.

Finally, there are decree powers, which allow the executive to augment the size of the budget during execution. With decree powers, I refer to a situation where the executive has the power to unilaterally disburse funds for expenditure over and above the amount authorised by the legislature. Figure 5(b) demonstrates the effect of unlimited decree powers. If a legislature's approved budget is to the south-west of the executive's preferred spending package E , such as L_1 , so that a legislature's budget is lower on both items compared with the executive proposal, then the executive can use decree powers to top up spending on each item to exactly its preferred level. If only one spending item is below the executive's preferred level, as with L_2 for example, only this item will be topped up to the preferred level, resulting in L_2' . On the other hand, any approved budgets to the north-east of E , such as L_3 , will be completely unaffected, as there is no reason why the executive should push the budget outcome even further away from its preferred package. In short, with unlimited decree power all feasible budgets are to the north-east of the executive's spending proposal. With constrained decree powers, the executive will only be able to move the budget outcome some percentage towards the outcome it would have chosen with unfettered power to decree expenditures. This may apply for instance when the source of executive discretion is a limited contingency or policy reserve.

This analysis demonstrates the powerful effects of budget execution rules on legislative choice. Executive flexibility during budget execution can be used to realign budget priorities away from those approved by the legislature (virement),

or to reduce (impoundment) or augment (decree powers) the size of the approved budget. The use of impoundment and decree powers also is likely to affect the relative priorities of the approved budget. These rules in effect are executive amendment powers of the budget as passed by the legislature. Even with restricted executive flexibility, such powers reduce a legislature's feasible set of budgets. In terms of fiscal performance, impoundment powers help to contain spending within the aggregate preferred by the executive, but they will not make a difference if the executive is profligate relative to the legislature. Conversely, decree powers undermine fiscal discipline if the executive is profligate, but they have no fiscal effect if it is fiscally conservative relative to the legislature.

3.5 Legislative organisation and the use of formal powers

Extensive formal powers alone are unlikely to be sufficient to ensure legislative influence in the budget process. In particular, up to now I assumed the absence of transaction costs in legislative decision-making. This assumption is convenient, but it is also unrealistic. There is a growing body of political science literature that investigates the implications of transaction costs on decision-making (Horn 1995, Epstein and O'Halloran 1999, Huber and Shipan 2002). In his groundbreaking contribution, Horn (1995: 13-22) identifies several sources of transaction costs, including the time and effort necessary to reach legislative agreement, and the fact that agency problems make it costly for the legislature to ensure executive compliance. Decision-making costs may prevent a legislature from fully

exploiting formal powers to budget, and agency costs result in a gap between the approved budget and the actual outcome. However, formal powers can be complemented with organisational features that accommodate or reduce legislative transaction costs.

Sufficient time is an essential requirement for legislative decision-making (OECD 2002a, Döring 1995b). Legislators have to invest time to acquire information and to co-ordinate their budgetary actions, but the timing of some budget processes does not fully accommodate these costs of decision-making. For instance, some systems subject budgetary debates to ‘guillotine’ procedures that enforce the closure of parliamentary deliberation after a limited time period. This procedure helps governments to ensure the timely supply of funds but at the same time curtails parliamentary capacity to debate estimates in detail (Reid 1966: 70). During the budget approval stage the timing of the process has to allow legislators to scrutinise the government’s proposal, formulate responses and to cut deals with colleagues, otherwise the ability of the legislature to process amendments to the budget may be restricted.

Information acquisition is also costly. In particular when the quality of budget documentation is poor, it is difficult to ascertain the government’s fiscal intentions and to exercise oversight (Von Hagen 1992: 35). To some extent a legislature can shift the cost of acquiring relevant information to the executive by requiring in statute the provision of budgetary information that is in line with international standards of transparency, as developed by the International Monetary Fund (IMF

1998, 2001 and 2007) and the OECD (2002a). A modern public financial management system in line with these standards generates information such as medium-term fiscal plans, a comprehensive budget covering all operations of the government, regular expenditure updates during the financial year, and a comprehensive and timely year-end report, amongst others. A legislature may also maintain an independent budget research office in order to gather required information and as a check on the quality of information supplied by the executive. Such bodies may also support a legislature in monitoring executive compliance and contain agency loss, shifting some of the burden of oversight away from individual legislators. In short, statutory measures and independent legislative budget offices facilitate legislative access to information.

However, the mere supply of information alone is unlikely to facilitate legislative control if the legislature lacks capacity to absorb it. Committee structures play a crucial role in ensuring that legislatures have access to relevant expertise and time in order to extract, interpret and process information. Notably, committees boost legislative productivity by enabling a division of labour (Mezey 1979). This can partly compensate for time constraints in the budget process. Moreover, the efficiency gain in legislative throughput that a committee system can achieve is particularly important since the budget competes for time with regular legislation. In other words, division of labour through committees limits the opportunity cost of budget scrutiny in terms of other legislative measures. Second, committees allow the collective legislative body to reap information gains as a result of specialisation, and hence reduce the cost of information acquisition (Krehbiel

1991). Powerful legislatures such as the US Congress take great care to dispatch members to those committees where they act as conduits of information (Krehbiel 1990). Committee expertise is not only crucial for scrutinising policy *ex ante*, but also to keep an eye on its execution (McCubbins and Schwartz 1984). Bawn (1997) finds that the costs of oversight of an agency are lower for members of a specialised committee with jurisdiction over that agency compared with non-members. Hence, systems that enable specialisation through membership of committees should be better able to contain agency loss. In short, a well-developed committee system is 'at least a necessary condition for effective parliamentary influence in the policy-making process' (Mattson and Strøm 1995: 250, see also Longley and Davidson 1998).

I have argued here that transaction costs act as a barrier to the utilisation of the formal powers of a legislature. However, a legislature can organise itself so as to lower or accommodate transaction costs, through a generously timed budget process, institutionalised provision of relevant information, and a well-designed committee system that facilitates scrutiny and oversight.

Conclusions

This chapter demonstrates the impact of essential decision-making rules on the ability of a legislature to shape budget policy, and helps to assess their impact on the total level of public spending. The analysis shows that constraints on the

power of the legislature to amend the budget proposed by the executive reduce the size of the feasible set. Second, the size of the feasible set also depends on the distance between the executive's ideal budget and the reversionary outcome. In most realistic scenarios, reversion to zero spending will imply a larger feasible set than reversion to last year's spending, and all incentive to accommodate legislative preferences is lost when the executive proposal is implemented in case of non-approval. Third, executive vetoes reduce the feasible set, and a line item veto is more constraining than a package veto. Finally, executive powers to vire, impound, or initiate fresh spending without legislative approval also negatively affect the size of the feasible set.

However, the fact that these arrangements constrain the legislature does not mean that they contain public spending. Restrictions on amendment powers are very effective in constraining the legislature in such a way so as to safeguard fiscal discipline. On the other hand, the fiscal impact of reversionary arrangements is ambiguous, as it is conditional on the nature of the reversionary outcome and the exact constellation of preferences in relation to it. Contrary to the speculation by Alesina and colleagues (1996, 1999a and 1999b), a reversionary outcome that is unfavourable to the executive does not always induce it to propose budgets that are higher than it prefers. Rather, depending on the exact constellation of preferences, the possibility of reversion may even induce lower total spending than preferred by the executive. Similarly, both package and line item vetoes can be relatively blunt instruments for containing the overall level of public spending, in particular when the reversionary outcome is far from the executive's preferred

budget. Executive reallocation powers do not affect the overall level of public spending. Impoundment powers can be used to contain public spending, but decree powers undermine fiscal discipline when the executive is profligate. Some of these predictions are tested empirically in chapter six.

In short, this chapter demonstrates that a range of institutions affect the ability of a legislature to impact on budget policy, but few unambiguously contain the overall level of public spending. Moreover, the use of any formal budgetary powers is likely to involve transaction costs, which I have argued can be accommodated or lowered through effective legislative organisation. The analytical perspective developed here complements and contrasts with the historical account in the previous chapter. While the historical approach furthers detailed understanding of how and why a particular country's set of institutions evolve over time, the analytical perspective enables a strong theoretical basis for cross-national research on legislative budgeting, which is the purpose of this research. The next challenge is to operationalise the institutional variables discussed in this chapter.

4 A cross-national assessment of ‘the power of the purse’

This power over the purse may, in fact, be regarded as the most complete and effectual weapon with which any constitution can arm the immediate representatives of the people, for obtaining a redress of every grievance, and for carrying into effect every just and salutary measure.

Publius, Federalist 58

The requirement for legislative approval of financial measures is a democratic foundation stone that is enshrined in constitutions around the world.³⁰ Despite this widespread formal recognition, the actual budgetary role of national legislatures apparently differs sharply across countries. Members of the US Congress ‘have long seen themselves as the bulwark against [executive] oppression’ and their ‘major weapon’ is the constitutional requirement for congressional approval of appropriations (Wildavsky and Caiden 2001: 10). Scholars and practitioners agree that the US Congress is a powerful actor that can have decisive influence on budget policy (Wildavsky 1964, Schick 2000, Meyers 2001). On the other hand, the budgetary influence of legislatures is said to be marginal in several other industrialised countries including France and the UK (Chinaud 1993, Schick 2002). Existing comparative work on legislative budgeting contributes selected country studies (Coombes 1976, LeLoup 2004), but lacks systematic analysis on the basis of a common framework. Moreover, while the literature on the US

³⁰ Refer to the International Constitutional Law website, which includes references to the financial provisions of various constitutions: <http://www.oefre.unibe.ch/law/icl/> [last accessed May 2005].

Congress is extensive, legislative budgeting in parliamentary systems and developing countries in particular remains understudied (Oppenheimer 1983). As a basis for more systematic comparative work, this chapter proposes and applies an index of legislative budget institutions that can be used to assess and compare the budgetary power of national legislatures.

A number of authors refer to the cross-national distribution of legislative power over the purse (Coombes 1976, Meyers 2001, Schick 2002), but few have constructed quantitative measures. Although some previous studies present indices of budget institutions, these pay only limited attention to legislative variables. Fiscal institutionalists are concerned with explaining fiscal performance, typically public debt and deficits, with the design of the budget process (Kirchgässner 2001). Most of this literature does not exclusively focus on the role of the legislature, but a broader selection of variables that are said to promote fiscal discipline in budgetary decision-making. Von Hagen's (1992: 70) pioneering index includes one composite item on the structure of the parliamentary process that considers notably the amendment powers of a legislature. Alesina *et al.* (1996, 1999a and 1999b) construct an index of budgetary procedures with two out of ten variables as indicators of the relative position of the government vis-à-vis the legislature, namely amendment powers and the nature of the reversionary budget (see also Hallerberg and Marier 2004). Other studies focus exclusively on the fiscal effect of specific legislative institutions (e.g. Crain and Muris 1995, Heller 1997 and 2001). Finally, from a legislative studies perspective, Fish (2006: 8) presents a parliamentary powers

index, but only two out of 32 items relate explicitly to budgetary matters: one item on impoundment and another on legislative control of resources for the operation of the legislature itself.³¹ These contributions are important but of limited use for the present purpose.

Lienert (2005) offers a broader consideration of legislative budget institutions. His index of legislative budget powers covers five variables, namely parliament's role in approving medium-term expenditure parameters, amendment powers, time available for the approval of the budget, technical support to the legislature, and restrictions on executive flexibility during budget execution. This provides a basis for more systematic comparative analysis of legislative budgeting, but also raises some methodological issues. For example, there is hardly any variation on the first variable, the legislature's role in approving medium-term spending plans. Only one out of 28 legislatures in the sample formally passes a law on the medium-term strategy (Lienert 2005: 22). This lack of variation calls into question the usefulness of this item as a comparative indicator. In addition, the differential weighting of variables is not explicitly motivated. In short, what is missing so far is a broader measure of legislative budget institutions that is based on a thorough discussion of relevant indicators and methodological issues.

The aim of this chapter is to present a comparative framework to assess legislative budget capacity that can be applied, potentially, to any national legislature in a

³¹ In addition, but without specific reference to budgetary matters, the index also considers whether the executive has gatekeeping powers over some types of legislation.

modern democracy. I suggest a series of variables that are combined into an index to measure cross-country variation in legislative budgeting and deliver an empirical application based on survey work by the OECD and the World Bank. More specifically, the chapter asks which institutional arrangements facilitate legislative control over budgets. A crucial assumption is thus that institutional arrangements reflect the budgetary power of a legislature. 'Control' is here defined as the power to scrutinise and influence budget policy and to ensure its implementation. As Wildavsky and Caiden (2001: 18) remind us: 'Who has power over the budget does not tell us whether or not the budget is under control.' The controversial question of whether legislative power over the budget is fiscally desirable is explicitly excluded from this chapter. I will return to this issue in chapters five and six, which consider in some depth the fiscal effects of legislative budget institutions. This chapter primarily aims at operationalising the theoretical framework in chapter three, but it also provides the empirical basis for engaging with the issue of fiscal performance later on. Moreover, the measurement carried out here directly engages with the hypothesis that a strong legislature, including in budgetary terms, is a necessary condition for democracy (Fish 2006).

I proceed as follows. In the first section I outline and explain the selection of the variables included in the index, and section two gives an overview of the data used. Section three discusses issues related to index construction and selects a method for use in this chapter. I conduct a number of experiments to check the robustness of the index. Section four presents an overview of the results in the form of a ranking of legislatures. I use two approaches to validate the index. The

first is to compare the resulting ranking with findings from case study literature and the second is to test the association of the index with an indicator of legislative amendment activity. The conclusion summarises the main results and highlights implications.

4.1 Variables

The construction of an index for the purpose of cross-national comparison requires the identification of essential differences. Invariably, some of the richness of qualitative analysis has to be forfeited to gain a tractable tool for comparative research, which is necessary to venture beyond particular cases in order to discover broader patterns. No single variable can be considered sufficient on its own and I make no claim to cover every potentially relevant variable. Based on the analysis in the previous chapter, I adopt an approach based on assessing the *institutional capacity* for legislative control (Meyers 2001: 7). I argue that the presence of a critical number of institutional prerequisites, including formal authority and organisational characteristics, is necessary to facilitate budgetary control.

Amendment powers. As illustrated in Figure 1 the nature of formal powers to amend the budget determines the potential for legislative changes to the budget

policy proposed by the executive (Inter-Parliamentary Union 1986: Table 38A).³²

Most constraining are arrangements that disallow any amendments to the executive's proposal and merely give a legislature the choice between approval and rejection of the budget in its entirety. Also severely restrictive are 'cuts only' arrangements that only allow amendments that reduce existing items but not those that shift funds around, increase items, or introduce new ones. This precludes a creative budgetary role for the legislature. More permissive are powers that allow some amendments to the budget as long as the aggregate totals or the deficit in the draft budget are maintained. This enables engagement with budget priorities while protecting executive fiscal policy. Finally, most permissive are unfettered powers of amendment. Here, a legislature has full authority to cut, increase, and reallocate.

Reversionary budgets. The reversionary budget defines the cost of non-approval by spelling out what happens should legislative authorisation be delayed beyond the commencement of the fiscal year. Alesina *et al.* (1999b: 258) use the reversionary budget in conjunction with legislative amendment powers to assess the relative position of the government vis-à-vis the legislature (see also Cheibub 2006). If the reversionary outcome is far from the executive's preferred budget, and under certain conditions explored in Figure 2, the legislature may be able to

³² In virtually all countries the executive prepares a draft budget that is then submitted to the legislature for approval (Schick 2002). The US Congress held out longest compared with other legislatures before establishing an executive budget process, until in 1921 the Budget and Accounting Act required the President to co-ordinate the drafting of a budget proposal to be submitted to Congress (Webber and Wildavsky 1986: 411-416).

extract concessions in return for approval. In the extreme case of reversion to zero spending, the executive is likely to prefer a compromise to the possibility of no supply and hence government shutdown. Conversely, when the executive budget proposal takes effect, the executive has no incentive to avert non-approval. Reversion to last year's budget typically constitutes an intermediate case.

Executive flexibility during implementation. Chapter three also demonstrated how three types of flexibility during budget execution enable the executive to alter spending choices following the approval of the budget by the legislature. One mechanism is virement, i.e. the ability of the executive to reallocate or transfer funds between budget items during the execution of the budget (see Figure 4). Another is impoundment, which allows the withholding of particular funds that have been appropriated by the legislature (see Figure 5). Finally, some executives can introduce new spending without legislative approval (Carey and Shugart 1998). If the executive can withhold funds, transfer between items, and initiate fresh funding without the consent of the legislature, it has significant leeway to unilaterally alter the approved budget, which diminishes legislative control over implementation. In effect, such powers constitute amendment authority in reverse, and in extreme cases allow the executive to undo legislative choices during implementation (Santiso 2004).

Time for scrutiny. Time is a precious resource given a typically tight and crowded legislative calendar (Döring 1995b). Budgets take many months to put together and a couple of weeks are insufficient to make sense of such complex sets of

information. International experience suggests that the budget should be tabled at least three months in advance of the fiscal year to enable meaningful legislative scrutiny (OECD 2002a). The timing of scrutiny partly depends on how effectively a legislature can control its own timetable and the legislative agenda, but it may also reflect constitutional prescriptions.

Committee capacity. The importance of legislative committees is widely recognised, although their primary function is disputed between proponents of distributive, informational, and partisan explanations (Shepsle 1979, Krehbiel 1990, Cox and McCubbins 1993). Chapter three highlighted several benefits of committee structures as crucial in the budgetary context. Committee structures establish a division of labour that facilitates specialisation and the development of ‘legislative expertise’ (Mezey 1979: 64). Since committees allow parliaments to deal with various matters simultaneously, they increase productivity. Moreover, committees can play an important role in monitoring implementation. Legislative approval only matters when budgets are meaningful. Otherwise, budgetary drift allows the government to get what it wants irrespective of what the legislature approved. Committees with a monitoring function, such as audit committees, help to detect implementation failures and improve compliance (McGee 2002).

Access to budgetary information. Finally, budgetary decision-making requires access to comprehensive, accurate and timely information. Crucial for this is the breadth and depth of supporting documentation that accompanies the budget figures submitted to the legislature. In addition, in-year revenue and expenditure

updates as well as high quality audit reports, including performance audits (Pollitt 2003), are crucial types of information for legislative oversight of budget implementation. Key standards for budget reporting are set out in the OECD Best Practices for Budget Transparency (OECD 2002a). Still, an executive monopoly on budgetary information can put the legislature at a severe disadvantage, as it is easy to manipulate budget figures and limit disclosure (Wildavsky and Caiden 2001: 78). The benefits of an independent legislative budget office include that it can help to simplify complexity and make the budget accessible for legislators, enhance accountability through its scrutiny of executive information, and promote transparency by discouraging 'budgetary legerdemain' (Anderson 2005: 2; see also Engstrom and Kernell 1999).

There are, of course, other variables that might possibly be included. For instance, Von Hagen (1992) considers the confidence convention. Notwithstanding a legislature's formal constitutional powers to amend the budget, in some parliamentary systems any change to the executive's draft budget is by convention considered a vote of no confidence in the government (e.g. Blöndal 2001: 53). In effect, the confidence convention reduces legislative authority to a stark choice between accepting the budget unchanged or forcing the resignation of the government and fresh elections. I exclude this variable on grounds of parsimony. The confidence convention is most common in Westminster type systems that in any case restrict legislative powers to amend the budget, such as Australia, Canada, New Zealand, and the UK (OECD 2002b: 159). As amendment powers

are already included in the index, this variable suffices to signal restrictions on legislative policy-making.

Also, some presidential systems counterbalance legislative powers over the budget with executive veto authority that typically can only be overridden with a heightened legislative majority. Package vetoes allow the executive to veto entire bills passed by the legislature, while a line item or partial veto allows the president to reject individual items in a bill. Some authors give great importance to veto authority in assessing executive power over policy (e.g. Shugart and Haggard 2001: 75-77). However, the theoretical analysis revealed that the power a package veto gives to the executive critically depends on the nature of the reversionary budget (see Figure 3), which is already part of the index. For instance, if spending is discontinued without an approved budget in place, then to veto the budget would be a very extreme measure that the executive is likely to use only in extraordinary circumstances (Williams and Jubb 1996). Moreover, as pointed out in the second chapter, line item vetoes may be further limited in their effectiveness if the legislature retains authority to define what exactly constitutes a line in the budget, allowing it to strategically merge lines into packages that are less likely to be vetoed by the executive. This may explain the fact that empirical studies have found little support that a line item veto affects levels of public spending (Carter and Schap 1990, Holtz-Eakin 1988). In any case, line item vetoes are exceptionally rare at the national level. Shugart and Haggard (2001: 80) find that only two out of 23 countries with pure presidential systems use a version

of the line item veto, namely Argentina and the Philippines.³³ For these reasons, I exclude executive vetoes from the index.

4.2 Data

During 2003 the OECD in collaboration with the World Bank conducted the Survey on Budget Practices and Procedures, which was administered to specially identified budget officials in each participating country. The dataset for this chapter draws heavily on the results of this survey, which are available online. The survey covers 27 OECD members as well as 14 other countries. Some of the non-OECD countries have limited democratic credentials and are excluded from the scope of this chapter.³⁴ In other words, I consider legislatures in non-democratic countries outside the 'scope conditions' (Mahoney and Goertz 2004: 655). The data are unique in that a similarly comprehensive budget system survey had not been previously carried out for such a large number of countries. On the

³³ The US also had a short-lived experiment with presidential line item veto authority. In 1996 Congress passed legislation that gave the US President a form of item veto, the Line Item Veto Act. President Clinton claimed it would 'prevent Congress from enacting special interest provisions under the cloak of a 500 or 1000-page bill' (quoted from Schick 2000: 94-95). This veto was ruled unconstitutional in 1998, by which time Clinton had used it 82 times with 38 overrides. Clinton claimed that his use of the veto had resulted in savings of \$2 billion. This amounts to 0.12 per cent of federal outlays in the 1997 fiscal year (\$1.6 trillion).

³⁴ Several countries included in the survey have low scores on the 2003 Freedom House combined average ratings. I use 3.5 as a somewhat arbitrary cut-off point and exclude Cambodia, Colombia, Jordan, Kenya and Morocco (Freedom House 2006).

other hand, responses were not always rigorously checked and in certain cases the quality of the data is questionable. I double-checked the data used here as extensively as possible against information from online sources, such as finance ministry and parliamentary websites, as well as previous survey results (OECD 2002b). Where necessary, clarification was sought from country experts who are identified in the acknowledgements.³⁵ In the following paragraphs, I discuss the specific data used for the construction of the index. The full dataset is reproduced in Table 3 at the end of this chapter. Table 4 details the construction of two composite variables. I also document any adjustments to the original OECD data in these two tables.

Following Alesina *et al.* (1999b: 257-258), all variables are coded on a range between zero (the least favourable from a legislative perspective) and ten (the

³⁵ The dataset was published in Wehner (2006). Here, I make one correction to the published version. Slovakia indicated in the 2003 OECD and World Bank survey that the National Council has limited powers to amend the budget. However, Gleich (2003) and Yläoutinen (2004) both present recent survey data indicating that the formal powers of the legislature in this case are not limited. I followed up this inconsistency with both the Ministry of Finance and the National Council of the Slovak Republic. The latter confirmed that there are no restrictions, in the constitution or other legislation, on the powers of the National Council to amend the budget. However, Slovakia is preparing for the introduction of the Euro. The current Convergence Programme includes a medium-term fiscal target to reduce the general government deficit to 3 per cent of GDP in 2007 and to 0.9 per cent by 2010. Since the constitution or national legislation do not contain any formal restrictions, I recode the Slovakia score on the amendment powers variable from 6.7 to 10. In the remainder of the thesis, I work with this revised score for Slovakia. This does not affect the substantive results reported in chapters four and five.

most favourable). The maximum figure is divided equally between the categories. Later on, in the next section, I conduct some robustness checks to see whether this coding procedure significantly affects the ranking of legislatures compared with alternative methods. In the following, I indicate the score I give for each response option in square brackets.

The OECD (questions 2.7.d and 2.7.e) asked respondents to indicate whether legislative powers of amendment are restricted, and if so, which form the restrictions take. I code the answers in four categories, i.e. the legislature may only accept or reject the budget as tabled [0], it may cut existing items only [3.3], it may shift funds as long as a specified aggregate constraint is met [6.7], or it has unfettered powers [10].

The survey (question 2.7.c) also asked about the consequences should the budget not be approved at the start of the fiscal year. I group the responses into four categories: the executive budget [0], vote on account [3.3], last year's budget [6.7], or no spending [10]. The second category requires elaboration. Historically, the English Parliament devised the tactic of voting appropriations near the end of the session to force economies on the Crown and to extract concessions (Schick 2002: 18). This historical rationale is now obsolete, but delayed approval nonetheless remains the norm. Formally, supply would cease without an approved budget in place. In practice, the parliaments of the OECD Commonwealth countries routinely approve interim spending, which is referred to as a 'vote on

account' in the UK.³⁶ Some might argue that this system preserves the threat of reversion to zero spending, but my judgment is that this practice is so standardised and predictable that it would be misleading to assign a score of ten.

Executive flexibility is tested by combining three items. The OECD asked whether there is scope for appropriations to be reallocated from one programme to another without parliamentary approval (question 3.2.a.4), whether the executive may withhold funds that are appropriated, but not available on a legal or entitlement basis, without legislative consent (question 3.1.c), and whether the annual budget includes any central reserve funds to meet unforeseen expenditures (question 3.2.c.1). I assign each answer a score of 3.3 if it is negative, as a positive answer implies executive flexibility to vire, impound, and authorise fresh funds respectively. The sum of the scores for each case can range between zero and ten and is interpreted as an indicator of executive flexibility during budget execution. Table 4 provides full details.

The OECD also asked (question 2.7.b): 'How far in advance of the beginning of the fiscal year does the executive present its budget to the legislature?' and provided four response options, i.e. up to two months [0], two to four months [3.3], four to six months [6.7], and more than six months [10].

³⁶ This practice is referred to as 'interim supply' in Canada, 'supply' in Australia, and 'imprest supply' in New Zealand.

Data on the role of parliamentary committees in budget approval are available in the OECD survey (question 2.10.a). The survey also asked whether audit results are circulated and discussed in Parliament (question 4.5.m), but the answer categories are ambiguous with regard to the nature of committee engagement with audit findings. Therefore, data on parliamentary audit committees were gathered in a separate survey of parliamentary websites that was conducted during January 2004. I distinguish the involvement of three sets of specialised committees and give equal scores [3.3] to each category, i.e. a budget or finance committee, sectoral or departmental committees, and an ex post audit committee. For instance, if a parliament uses a finance committee and sectoral committees for budget approval, as well as an audit committee for ex post scrutiny of audit findings, it gets the highest possible score of ten, and without any committee involvement a score of zero. Involvement of sectoral committees gets a score of 3.3 only if they have actual authority over departmental budgets, but not if they are merely consulted or submit non-binding recommendations while a finance or budget committee retains full authority. Also, if a legislature uses an audit-subcommittee of the budget committee for the purpose of parliamentary audit, I assign half the available score for this item [1.7]. Refer to Table 4 for full details.

Legislative access to budgetary information is very difficult to assess. It was not possible to use the survey results to construct a reliable and fine-grained measure of the quality of budgetary information supplied by the executive. However, most of the countries included in this analysis are OECD members and hence subscribe to the Best Practices for Budget Transparency (OECD 2002a). In addition, studies

confirm that several non-OECD countries in the sample provide high quality budgetary information, for instance Chile (Blöndal and Curristine 2004), Slovenia (Kraan and Wehner, 2005) and South Africa (Fölscher, 2002). Therefore, it is reasonable to assume adherence to a common minimum standard for budgetary documentation in most cases. However, one of the key differences between countries is the level of legislative budget research capacity (question 2.10.e). I distinguish legislatures without such research capacity [0] from those with a budget office of up to ten professional staff [2.5], 11 to 25 [5], 26 to 50 [7.5], and more than 50 [10]. The last category acknowledges the uniqueness of the US Congressional Budget Office, which has about 230 staff (Anderson 2005).

4.3 Constructing the index

The task of index construction raises in particular theoretical questions about the substitutability of components. In this section, I first discuss various possible methods for index construction and then compare the results in order to check the robustness of the index. The starting point for this discussion is the additive index. This frequently used method consists of summing up all scores for a given case in order to derive the index score for that case (e.g. Lienert 2005, Von Hagen 1992). The simple sum index can be represented as a special case of the following formula (Alesina *et al.* 1999b: 260):

$$I_j = \sum_{i=1}^6 c_i^j$$

The term c_i captures the value of component i and j is a power term that can be adjusted to reflect different assumptions about substitutability. If $j = 1$, then we get the simple sum index. If $0 < j < 1$, this favours those with consistently intermediate scores over those with a mixture of high and low scores, i.e. this approach assumes a limited degree of substitutability. Conversely, with $j > 1$, a greater degree of substitutability is assumed, since high scores are rewarded. In addition, it would be possible to allow differential weights for each of the components. However, this is not implied by the theoretical approach, so I do not pursue this possibility here.

To assume complete non-substitutability, the components can also be multiplied. This typically generates highly skewed distributions, because a single low score substantially drags down the index. Since the majority of legislatures included in this study have scores of zero on at least one of the components, this method does not yield useful results. Nor does it appear theoretically plausible to assume complete non-substitutability for all components. In addition, this method is highly sensitive to small mistakes in the data, which can lead to severe misrepresentation of the affected legislatures. These are strong reasons for rejecting the purely multiplicative approach for this analysis.

I propose a third method, which is based on sub-indices:

$$I_s = \prod_{k=1}^2 s_k, \text{ where } s_1 = \sum_{i=1}^3 c_i \text{ and } s_2 = \sum_{i=4}^6 c_i$$

Here, s_k represents two sub-indices, each consisting of the sum of three different components, which are then multiplied. It is possible to again incorporate a power term into the formulas for the sub-indices, but most essential is the underlying approach. The rationale for this index is as follows. Variables one to three (amendment powers, reversionary budgets and executive flexibility) can be interpreted as formal legislative authority vis-à-vis the executive. Amendment powers and reversionary budgets are frequently stipulated in constitutions, and organic budget laws typically regulate flexibility during implementation (Lienert and Jung 2004). In contrast, variables four to six (time, committees and research capacity) are taken to represent the organisational capacity of the legislature. Assuming that both formal powers as well as organisational capacity are necessary for effective scrutiny, this calls for multiplication of the two sub-indices. However, within each sub-index at least a degree of substitutability is plausible. For instance, if committees are weakly developed, then this lack in division of labour might be compensated by using a lot of time to scrutinise the budget or by delegating scrutiny to a well-resourced parliamentary budget office. Similarly, even when amendment powers are limited, the legislature may still be effective in extracting concessions from the executive if spending reverts to zero in the case of non-approval.

I proceed to check the robustness of results. Table 1 contains the Spearman rank correlations between four alternative indices, which are labelled according to their subscripts in the above formulas. I use the simple sum index with $j = 1$ computed

with the first formula and two other arbitrary numbers for the power term, i.e. $j = 0.5$ (half the value of the simple sum version) and $j = 2$ (double the value), to consider the impact of different substitutability assumptions. The fourth index labelled s is calculated using the second formula based on the two sub-indices. All of the correlations between these four versions of the index are positive and very strong. The lowest coefficient is .87 between the two indices that use extreme values for j , which is expected. Overall, the results are very robust. For this reason, I use the simple sum index in the remainder of the chapter.

Table 1: Spearman correlations between indices

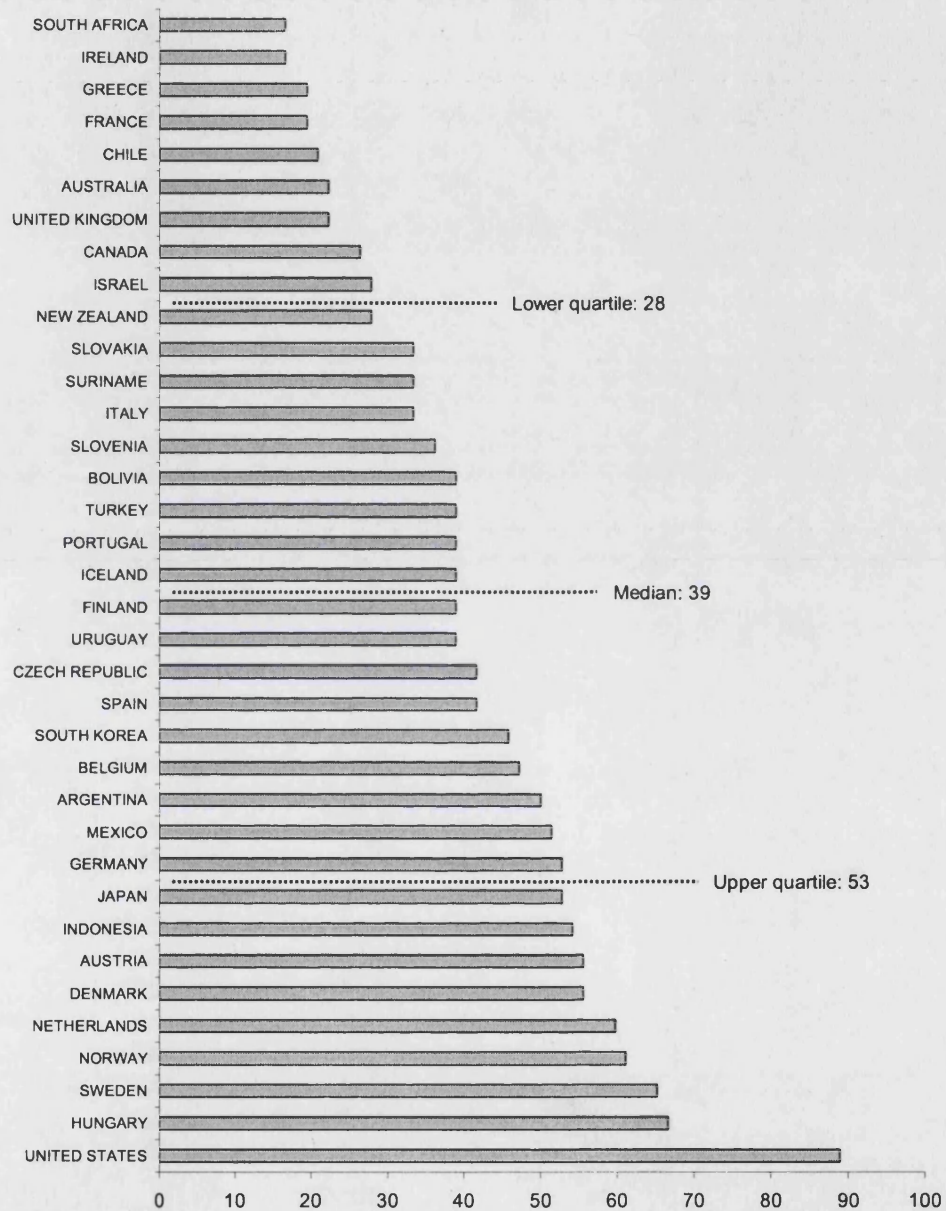
	$j = 1$	$j = .5$	$j = 2$
$j = .5$	.97	...	...
$j = 2$	.95	.87	...
s	.99	.97	.94

Note: $N = 36$.

4.4 Discussion and analysis

This section presents the index of legislative budget institutions and discusses main results. For presentational purposes, I rescale the index to range between zero and 100. The resulting ranking is presented in Figure 6. To evaluate the index, I pursue two approaches. First, I briefly consider whether the results are broadly in line with case study literature. Second, I check the validity of the index by testing its association with a simple indicator of legislative amendment activity.

Figure 6: The index of legislative budget institutions



The US Congress emerges as an outlier by a substantial margin. Its score is more than three times as great as those for the bottom nine legislatures, predominantly Westminster systems. According to the index the US Congress is the only legislature with the institutional foundation to exercise very strong influence over public finances. The importance of Congress in the US budget process is widely acknowledged. Aaron Wildavsky's seminal work on the politics of the budget process is, in essence, a study of congressional policy-making (Wildavsky 1964, Wildavsky and Caiden 2001). Although the US President submits a draft budget this does not bind Congress in any way (Schick 2000: 74-104). Oppenheimer (1983: 585) concludes a wide-ranging literature review with the observation that Congress is 'the most influential legislature' in policy-making. The index is in line with this judgment.

On the other extreme, the UK case is often said to epitomise the decline of parliaments (Einzig 1959, Reid 1966, Adonis 1993). In a recent paper, Allen Schick (2002: 27) goes as far as to claim: 'Nowhere is the budgetary decline of parliament more noticeable than in Britain... [The] House of Commons, the cradle of budgetary democracy, [has] lost all formal influence over revenues and expenditures.' In 1998-99 the Procedure Committee of the House of Commons bluntly referred to its power over expenditure as 'if not a constitutional myth, very close to one' (quoted in Walters and Rogers 2004: 257). While we have no time series data to test the decline thesis, the index confirms that current capacity in the UK Parliament is extremely limited. The rankings of other parliaments with a Westminster heritage are very similar, which again is supported by case study

evidence. For instance, in Canada members characterise legislative scrutiny of the budget as a 'cursory review', 'a total waste of time', and 'futile attempts to bring about change' (quoted in Blöndal 2001: 54). Another example is the paper by Krafchik and Wehner (1998), which highlights the great difficulty of the South African Parliament in transcending its Westminster heritage in the post-apartheid environment.

Few national legislatures have been as extensively studied as the US Congress and the UK Parliament, but nonetheless we can assess some other rankings against the literature. Notably, the Danish, Norwegian and Swedish parliaments achieve relatively high scores on the index. This corresponds with literature that has pointed out the distinctiveness and relative strength of these parliaments (Arter 1984, Esaiasson and Heidar 2000, see also chapter seven) and confirms that there is substantial variation within parliamentary systems (Siaroff 2003a). In addition, a large number of legislatures fall in between the extremes of the US Congress and Westminster type parliaments. Notably, continental European parliaments make up much of the middle mass on the index. Qualitative studies show that in a number of these countries, parliaments retain a limited level of influence on budgets.³⁷ It is beyond the scope of this chapter to present a full literature review. Still, this brief comparison with some of the case study literature suggests that the index generates plausible scores.

³⁷ For examples, refer to the work by Coombes (1976), Eickenboom (1989), Chinaud (1993) and Leston-Bandeira (1999).

The validity of the index can also be tested statistically. Given that the index captures institutional preconditions for legislative control, it should be associated with a measure of policy influence. One such indicator is amendment activity. The OECD asked (question 2.7.i): 'In practice, does the legislature generally approve the budget as presented by the executive?' Eleven out of 36 respondents in this sample indicated that it 'generally approves the budget with no changes.' More finely grained measures of amendment activity would be preferable, such as the number of amendments and their magnitude, but comprehensive data are not available. Also, it is true that a legislature may not have to amend the budget to impact on policy. Hidden actions such as a short phone call from a powerful committee chair to an executive official can be important means of legislative influence (Meyers 2001: 7). Moreover, the executive may anticipate legislative reactions and fashion the draft budget accordingly, thereby reducing the likelihood of amendments. However, it would be naive to conclude that the absence of amendments indicates that the legislature is getting its way. An executive has no reason to be responsive to legislative preferences unless the absence of such consideration has consequences. For example, in the UK the last government defeats over estimates date back more than 80 years.³⁸ I argue that legislative actors need to maintain a modicum of amendment activity in order to signal to the

³⁸ In 1919 the Commons, in what the Chancellor criticised as a 'virtuous outburst of economy', denied the Lord Chancellor funding for a second bathroom and other amenities, and in response Lord Birkenhead refused to move into his official residence. The last government defeat over estimates was in 1921, when members' travelling expenses were the objects of criticism (Einzig, 1959, pp.274-5).

executive their capacity for substantial revision should the draft budget not take sufficient account of their preferences.

Table 2: Budget-amending and non-amending legislatures

	Amending	Non-amending
Observations	25	11
Mean index score	45.2	31.8
Standard deviation	15.1	16.3

Accepting the above premise, one would expect budget-amending legislatures to have more developed institutional capacity. I use a *t*-test to assess whether index scores are higher for budget-amending legislatures compared with those that do not amend the budget (Bohrnstedt and Knoke 1994: 139). Setting $\alpha = .05$ for 34 degrees of freedom gives a critical value of 1.7 for a one-tailed test to reject the null. Based on the data in Table 2 we obtain a value of 2.4, which falls within the rejection region. This supports the prediction that budget-amending legislatures maintain higher levels of institutional capacity for financial scrutiny.

The evidence in this section is mutually reinforcing and confirms that the index is a useful summary indicator of legislative capacity to influence budget policy. The ranking is broadly in line with case study literature and the index is positively associated with a simple measure of legislative impact on public finances. Not too much should be read into small score differences between national legislatures, as the index makes no qualitative statements on the margin. Nonetheless, whether a legislature ranks towards the top, middle, or bottom of the index conveys an overall perspective on the state of legislative budgeting in a particular country. Indeed, if the power of the purse is a *sine qua non* for legislative control in

general, then the results also reflect the overall status of the legislature in the political system of a country.

Conclusions

This chapter has expanded the methodological toolkit for cross-national research on the legislative power of the purse. Previous efforts to construct quantitative measures of legislative budget power were either extremely limited in their coverage of relevant variables or neglected detailed discussion of related methodological issues. The index constructed here is robust and delivers results that can be checked against case study evidence and using statistical tests. It provides a sound basis for further investigating cross-national patterns in legislative budgeting, in particular their causes and consequences, which I investigate in chapters four and five respectively. However, I do not suggest that quantitative analysis should be a substitute for the detailed study of particular cases. Rather, there is an emerging debate on comparative research methods that argues strongly in favour of a carefully designed combined use of statistical and small-N approaches (Lieberman 2005). For instance, large-N analysis can provide the basis for a more deliberate choice of case studies, which in turn may deepen understanding and add important contextual variables. I return to this important point in chapter seven of the thesis.

The empirical results of this analysis raise questions about the prerequisites for democratic governance. Despite widespread constitutional recognition of the importance of legislative control over the purse, this chapter reveals substantial variation in the level of financial scrutiny of government by the legislature among contemporary liberal democracies. The US Congress has an index score that is more than three times as great as those for the bottom nine legislatures, predominantly Westminster systems. Even allowing for US exceptionalism, the top quartile legislatures score twice as high on this index as the bottom quartile. In between the extremes of Westminster and the US Congress, continental European parliaments make up much of the middle mass of the ranking. The ranking produced in this chapter suggests that for some countries the power of the purse is a key safeguard against executive overreach, while others maintain a constitutional myth. This finding contradicts the assertion that a strong legislature, at least in budgetary terms, is a necessary condition for democracy (Einzig 1959, Fish 2006). Given that the authorisation of taxes and public expenditures is a primary function of the legislature in any democratic system, such an amount of variation amongst modern liberal democracies is perplexing. This begs the question why some legislatures maintain elaborate institutional arrangements for financial scrutiny while others essentially leave budgeting to the executive.

Table 3: Data for the index and amendment dummy

Legislature	(1) Powers	(2) Reversion	(3) Flexibility	(4) Time	(5) Committees	(6) Research	$\Sigma / .6$ Index	(7) Amendments
Argentina	6.7	6.7	6.7	3.3	6.7	0	50.0	1
Australia	3.3 ^a	3.3 ^g	0	0	6.7	0	22.2	0
Austria	10	6.7	6.7	3.3	6.7	0	55.6	1
Belgium	10	10	0	0	8.3	0	47.2	0
Bolivia	10	0	6.7	3.3	3.3	0	38.9	1
Canada	3.3	3.3 ^g	0	0	6.7	2.5	26.4	0
Chile	3.3	0	0	3.3	3.3	2.5	20.8	1
Czech Republic	10	6.7	0	3.3	5	0	41.7	1
Denmark	10	6.7	3.3	6.7	6.7	0	55.6	1
Finland	10	0 ^h	6.7	3.3	3.3	0	38.9	1
France	3.3 ^b	0 ⁱ	0	3.3	5	0	19.4	1
Germany	10	6.7 ^j	3.3	6.7	5	0	52.8	1
Greece	0	6.7 ^k	0	0	5	0 ^r	19.4	0
Hungary	10	10	6.7	3.3	10	0	66.7	1
Iceland	10	0 ⁱ	6.7	3.3	3.3	0	38.9	1
Indonesia	6.7	6.7	3.3	6.7	6.7	2.5	54.2	1
Ireland	0	0	3.3	0	6.7	0	16.7	0
Israel	0	6.7	0	3.3	6.7	0	27.8	1
Italy	10	0	3.3	3.3	3.3	0	33.3	1
Japan	0	10	6.7	3.3	6.7	5	52.8	0
Mexico	6.7	10 ^m	0	0	6.7	7.5	51.4	1
Netherlands	10	6.7	6.7	6.7	3.3	2.5	59.7	1
New Zealand	3.3 ^c	3.3 ^g	6.7	0	3.3	0	27.8	0
Norway	10	10 ⁿ	6.7	3.3	6.7	0	61.1	1
Portugal	10	6.7	0	3.3	3.3	0	38.9	1
Slovakia	10 ^d	0	3.3	3.3	3.3	0	33.3	1
Slovenia	6.7	6.7	0	3.3	5	0	36.1	1
South Africa	0	0 ^o	0	0	10	0	16.7	0
South Korea	3.3	6.7 ^p	3.3	3.3	3.3	7.5	45.8	1
Spain	6.7	6.7	3.3	3.3	5	0	41.7	1
Suriname	10	0	0	3.3	6.7	0	33.3	0
Sweden	10	10	6.7	3.3	6.7	2.5	65.3	0
Turkey	6.7	10	0	3.3	3.3	0	38.9	1
United Kingdom	3.3 ^e	3.3 ^q	3.3	0	3.3	0 ^r	22.2	0
United States	10	10	6.7	10	6.7	10 ^s	88.9	1
Uruguay	6.7 ^f	6.7	3.3	3.3 ^a	3.3	0	38.9	1

Notes: Data from OECD and World Bank (2003) except certain committee data (see text and Table 4). Additional comments where responses were missing or ambiguous: a) Members of the House of Representatives may reduce existing items only. The Senate can only propose amendments to parts of the budget other than the ordinary annual services of government. b) Constitution article 40. c) Standing Orders 312-316 give the Crown a financial veto over amendments with more than a minor impact. d) Based on Gleich (2003), Yläoutinen (2004) and personal correspondence from the Chancellery of the National Council of the Slovak Republic. e) Standing Order 48 of the House of Commons allows only cuts to existing items. f) Constitution article 215. g) Vote on account or other regularised interim supply measure. h) Constitution section 83. i) Constitution article 47(3). j) Article 111 of the Basic Law. k) Constitution article 79. l) The executive would resign and new elections would be held. m) There are no provisions. n) There are no clear formal rules describing the consequences. o) The executive budget takes effect subject to restrictions related to previous year's expenditure limits, according to section 29 of the Public Finance Management Act. p) Constitution article 54(3). q) Based on Santiso (2004). r) Based on OECD (2002b). s) The Congressional Budget Office has about 230 staff.

Table 4: Construction of composite variables

Legislature	(1) Withhold	(2) Virement	(3) Reserve	Σ Flexibility	(4) Budget	(5) Sectoral	(6) Audit	Σ Committees
Argentina	3.3	0	3.3	6.7	3.3	0	3.3	6.7
Australia	0	0	0	0	0	3.3 ^g	3.3	6.7
Austria	3.3	3.3	0	6.7	3.3	0	3.3	6.7
Belgium	0	0	0	0	3.3	3.3	1.7 ^k	8.3
Bolivia	3.3	0	3.3	6.7	3.3	0	0	3.3
Canada	0	0	0	0	0	3.3	3.3	6.7
Chile	0	0	0	0	3.3	0	0	3.3
Czech Republic	0	0	0	0	3.3	0	1.7 ^k	5
Denmark	3.3	0 ^c	0	3.3	3.3	0	3.3	6.7
Finland	3.3	3.3	0	6.7	3.3	0	0	3.3
France	0	0	0	0	3.3	0	1.7 ^l	5
Germany	0	0	3.3	3.3	3.3	0	1.7 ^k	5
Greece	0	0 ^d	0	0	3.3	0	1.7 ^m	5
Hungary	3.3	3.3	0	6.7	3.3	3.3	3.3	10
Iceland	3.3	3.3	0	6.7	3.3	0	0	3.3
Indonesia	0	3.3	0	3.3	3.3	3.3	0	6.7
Ireland	0 ^a	0	3.3	3.3	3.3	0	3.3	6.7
Israel	0	0	0	0	3.3	0	3.3	6.7
Italy	3.3	0	0	3.3	3.3	0	0	3.3
Japan	3.3 ^b	3.3	0	6.7	3.3	0	3.3	6.7
Mexico	0	0	0	0	3.3	0	3.3	6.7
Netherlands	3.3	0	3.3	6.7	0	3.3	0	3.3
New Zealand	3.3	3.3	0	6.7	3.3	0 ^h	0 ⁿ	3.3
Norway	3.3	3.3	0	6.7	3.3	3.3	0	6.7
Portugal	0	0	0	0	3.3	0	0	3.3
Slovakia	0	0	3.3	3.3	3.3	0	0	3.3
Slovenia	0	0	0	0	3.3	0	1.7 ^o	5
South Africa	0	0	0	0	3.3	3.3	3.3	10
South Korea	3.3	0 ^e	0	3.3	3.3	0	0	3.3
Spain	3.3	0	0	3.3	3.3	0	1.7 ^p	5
Suriname	0	0	0	0	3.3	3.3	0	6.7
Sweden	3.3	3.3	0	6.7	3.3	3.3	0	6.7
Turkey	0	0	0	0	3.3	0	0	3.3
United Kingdom	0	3.3	0	3.3	0	0 ⁱ	3.3	3.3
United States	3.3	3.3 ^f	0	6.7	3.3	3.3 ^j	0	6.7
Uruguay	3.3	0	0	3.3	3.3	0	0	3.3

Notes: Data from OECD and World Bank (2003) except data on audit committees, which were gathered through a survey of parliamentary websites in January 2004. Additional comments where responses were missing or ambiguous: a) Provision in an estimate passed by the Dail does not convey authority to spend without sanction of the Minister for Finance. b) Author's research. c) Reallocations between operating appropriations are allowed. d) Reallocations are allowed for the Public Investment Programme and with the approval of the Ministry of Economy and Finance. e) There can be transfers with the approval of the central budget authority or the legislature depending on budgetary classification. f) Most transfers require approval by the legislature, some only notification. g) Sectoral committees in the Senate examine and report on relevant areas of the budget. h) The Finance and Expenditure Committee scrutinises the Budget Policy Statement and Estimates. Other committees may debate the estimates and policy for specific departments. i) Based on Walters and Rogers (2004). j) The Appropriations Committees in both houses operate elaborate subcommittee structures. k) Budget committee with an audit subcommittee. l) The Evaluation and Control Delegation of the Finance Commission in the National Assembly has tried to improve interaction with the Court of Audit. m) Standing Order 31A establishes a Special Standing Committee on Financial Statement and General Balance Sheet of the State. n) The Public Accounts Committee was abolished in 1962. o) The Commission for Budgetary and other Public Finance Control receives audit reports, but in the past it has dealt with very few of them (Kraan and Wehner 2005). p) There is a Commission for Relations with the Tribunal of Accounts, but its role is limited.

5 The determinants of legislative budget institutions

Existing literature is a poor guide for understanding why the role of legislatures in budgeting differs so fundamentally across countries. A number of quantitative cross-national studies use institutions as explanatory variables, which is the topic of the following chapter. However, scant attention has been given to legislative arrangements as dependent variables. With regard to legislative budget institutions more specifically, there are some interesting historical accounts of the evolution of financial scrutiny in particular countries, but with at most weakly developed attempts to review broader patterns (e.g. Stourm 1917, Coombes 1976, Schick 2002). Moreover, one danger with the case study approach is the temptation to use a small number of studies in order to derive general conclusions. For example, a comparison between the US Congress and the UK Parliament might be used to infer that the choice between presidential and parliamentary regime affects legislative control of budgets. For a long time, one serious obstacle to the study of cross-national differences in legislative budget institutions was the unavailability of comprehensive comparative data on this topic, but this is no longer the case. Hence, there is no excuse to neglect this issue any longer.

In this chapter I use the index of legislative budget institutions introduced in the previous chapter to explore why these arrangements differ substantially. This analysis is important in itself, but it also provides a useful background for the analysis of the effects of institutional arrangements, since it helps to identify other

possibly relevant variables that have to be considered. The chapter proceeds in three main steps. Section one outlines four propositions about cross-national differences in financial scrutiny arrangements and defines the relevant variables. Section two tests these propositions using multiple regression and considers several models of legislative budget institutions. Finally, in the third section I consider broader implications for comparative research.

5.1 Explanatory variables

This section considers possible explanatory variables to explain the cross-sectional variation in institutional arrangements. The nature of this chapter is exploratory and somewhat more modest than that of the following chapters, which connect with the theory developed earlier. Hence, in the following paragraphs I speak of propositions rather than hypotheses. I consider four sets of possible explanations. These are based on very different assumptions about the durability of institutions and the power of individual political agents to shape political structures. The first is the institutional replication proposition, which emphasises the durability and path dependence of institutions once they are established. Second, the separation of powers proposition is that legislative arrangements are a function of broader systemic parameters, i.e. the horizontal and vertical division of powers. Both of these neglect the influence of contemporary political actors. In contrast, the partisan proposition assumes an ability of legislative actors to adjust institutional settings in their favour. Finally, I consider the proposition that

legislative institutions evolve within the broader development context of a country, which implies institutional convergence of countries with similar levels of democratic and economic development. For each proposition, I also outline the construction of relevant variables for the regression analysis in section two.

The nature of institutions as ‘enduring entities’ has been widely observed by different approaches in political science (Rothstein 1996: 152). Given this potential for institutional durability, a look at history might reveal common homogenising factors among groups of countries. In particular, cross-national commonalities may be due to the transfer of institutional features from a colonial power to its colonies, and once in place this heritage may prove resistant to change (Acemoglu 2001). This applies not only to fundamental constitutional distinctions, such as the choice between parliamentary versus presidential government or the type of electoral system, but also the budgetary structures of a country. For example, Wehner (2002) surveys fiscal constitutions in African countries and finds that they are strongly influenced by colonial rule, and Lienert (2003) observes significant differences between public expenditure management systems in anglophone and francophone African countries. Hence, the replication proposition is that institutional arrangements in former colonies reflect those of the former colonial power.

To test this proposition I construct a dummy variable to indicate former colonies of the UK. Given the UK Parliament’s low score on the index of legislative budget institutions and its widely recognised marginalisation in financial matters

(Schick 2002, Reid 1966, Einzig 1959) I predict a negative coefficient. I only include former colonies with independence in the past 150 years because important aspects of legislative arrangements for financial scrutiny in the UK were still evolving until at least the Gladstonian reforms in the 1860s (Einzig 1959).³⁹ The observations in the sample do not allow us to construct a similar variable to test the influence of French colonial rule. Also, the sample contains a number of former Spanish colonies, but Spain lost most of her colonies too long ago to suggest relevant replication effects.

The role of a legislature in policy-making might also be shaped by the separation of power in a political system. A core institutional debate in political science, and more recently economics (Persson and Tabellini 2003), relates to the choice between presidential and parliamentary regimes and its implications (Rothstein 1996, Weaver and Rockman 1993, Lijphart 1992). A presidential system separates power horizontally. It is broadly characterised by 'a single individual ... popularly elected for a fixed term who plays the, or at least a, central role in the political system' (Siaroff 2003b: 289). If legislative-executive relations are more conflict-prone under presidentialism, as Linz (1990) has argued, one would expect higher

³⁹ Effectively, this excludes the US, which already during colonial times developed a distinct style of legislative financial control (Wildavsky and Caiden 2001: 26-30). Similarly, Persson and Tabellini (2003: 41) use indicators of colonial history that are weighted by 'the amount of time that has elapsed since... independence as a fraction of the last 250 years, giving more weight to colonial history in young independent states.' In short, they give a weight of zero to colonial history that dates back more than 250 years, as in the US case. Since the sample here is small, I stick to the simpler variable.

levels of financial scrutiny (see also Lienert 2005). To test this proposition, I construct a dummy variable for pure presidential systems (based on Haggard and McCubbins 2001, also see Persson and Tabellini 2003), for which I predict a positive coefficient.

The vertical division of power between the centre and the regions, too, may affect legislative dynamics. There is anecdotal evidence to suggest that federalism divides the loyalties of legislators between regions and the centre and provides incentives for them to extract benefits for regional constituencies (Morgenstern 2002b: 425). In federal countries a bicameral legislature may therefore function as a forum for intergovernmental bargaining. It is important to note that federalism is closely linked to bicameralism (Patterson and Mughan 2001: 45). All parliaments in federal countries are bicameral, but only about one third of unitary states have bicameral parliaments. In other words, federalism is a sufficient but not a necessary condition for bicameralism. Bicameral legislatures require systems for the settlement of disputes between the chambers (Tsebelis and Money 1997). Hence, I expect federal countries to have more complex legislative structures. To test this proposition, I construct a federalism dummy to capture the vertical separation of power (based on Griffiths 2002), which is again expected to have a positive coefficient.

Both of the preceding propositions neglect the possibility that political actors may purposefully shape institutions (Goodin 1996, March and Olsen 1984: 740). However, there may be factors that motivate legislators to enhance financial

scrutiny, notably party political dynamics. In the UK the emergence of organised political parties towards the end of the nineteenth century coincided with a decline in parliamentary influence (Adonis 1993, Norton 1993). The need to vote the party line constrains the independence of individual members, also with regard to budget policy (Schick 2002: 23). When party discipline is strong, an executive that commands a legislative majority is unlikely to face a fundamental challenge to its budgetary proposals during the parliamentary stage. However, under conditions of divided government disagreements over policy between the legislative majority and the executive are likely to be more pronounced than under unified government. Divided government can be defined as 'the absence of simultaneous same-party majorities in the executive and legislative branches of government' (Elgie 2001: 2).⁴⁰ According to this definition, divided government in parliamentary regimes takes the form of minority government. Since legislative distrust of the executive is likely to be higher in the absence of a unifying partisan connection, I expect divided government to affect legislative financial scrutiny.

To test this proposition I construct a simple divided government index, which is the ratio of years in which the government did not command a legislative majority in the lower house of the legislature. It covers the ten-year period immediately before the OECD and World Bank data on budget systems were collected (1993-2002). Until 2000 data are taken from Beck *et al.* (2001) and for the years

⁴⁰ Elgie distinguishes this arithmetical definition from a behavioural definition where divided government refers to 'divisiveness' or 'the situation where there is conflict between the executive and legislative branches of government whatever the support for the executive in the legislature' (Elgie 2001: 7). I use the arithmetical definition.

thereafter from Europa Publications (2002 and 2003).⁴¹ I considered whether legislators from the party or parties in government held more than 50 per cent of seats in a unicameral parliament or in the lower house of parliament in the case of bicameral systems. If so I gave a score of one for that year, otherwise zero, and compiled the index by summing across the ten years for each country and dividing by ten. Possible index values therefore range between zero (never minority government) and one (always minority government). In systems that experience protracted spells of divided government, the legislative majority has an incentive to strengthen scrutiny capacity, so I expect this variable to have a positive coefficient.

I considered other possible indicators of partisan fragmentation. First, I compiled an alternative specification of the divided government index, which counts the years in which the government did not command a legislative majority *in either the lower or upper house of the legislature, if the latter is co-equal in budgetary matters*. In other words, where the consent of the upper house is required to pass financial measures (e.g. Chile and Italy) unified budgetary government was counted when the executive had a majority in both houses simultaneously. Where

⁴¹ I used the margin of majority (MAJ) variable in the *Database of Political Institutions* to score countries. This variable is not to be confused with the electoral system dummy by Persson and Tabellini (2003), which has the same name. Some years were not covered in the initial version of the World Bank dataset and I coded scores for these years by hand. Moreover, where I discovered inconsistencies between the World Bank data and that from the *Europa World Yearbook*, I gave preference to the latter. The *Database of Political Institutions* has since been updated and can be accessed via the internet at <http://econ.worldbank.org/> [last accessed August 2006].

the consent of the upper house is not required (e.g. France and Belgium) I considered only the lower house majority. Both specifications of the divided government index yielded substantively similar results and in the following I use the first version. In addition, I include a measure of partisan fragmentation, the 'effective number of parties' (Laakso and Taagepera 1979). I also experimented with one of its variants (Dunleavy and Boucek 2003), but the results were very similar and are not reported here. I conjecture that partisan fragmentation would engender a greater degree of scrutiny. Moreover, I also considered electoral systems as one possible factor affecting partisan fragmentation, using a dummy for plurality rule electoral systems (Persson and Tabellini 2003). Since plurality rule is correlated with less partisan fragmentation, I expect a negative sign for this coefficient.⁴²

Finally, institutions are also embedded in the broader development context of a country and reflect an evolutionary process (Goodin 1996). This may suggest convergence between countries with similar levels of development. In political terms, for instance, the capacity of legislative bodies to act as a check on the executive is likely to be less developed where habits of executive authoritarianism still linger and democracy is not yet fully entrenched (O'Donnell 1998). To test whether democratic maturity affects legislative budget institutions I use the 1999 to 2003 average of the combined ratings produced by Freedom House, an

⁴² New Zealand and Japan had electoral reforms in the mid-1990s. I experimented with two versions of the dummy variable for plurality rule electoral systems, one where these two countries are scored zero (version one) and another where they are coded as one. Again, the results were very similar and I only report the results for version one in the following.

organisation that monitors political rights and civil liberties (Karatnycky *et al* 2003). Because Freedom House gives low scores to ‘free’ countries, the coefficient is expected to be negative. Alternatively, financial scrutiny may be a function of the maturity of the economic system, with developed economies being more transparent and allowing greater scrutiny. Here, I use the 1999 to 2003 average of Gross Domestic Product (GDP) per capita in constant 1995 US\$ as an indicator of economic development (logged; data from World Bank 2005). This variable is expected to have a positive coefficient.

The overall statistical model can thus be summarised as follows:

$$\begin{aligned} \text{Transformed index} = & \beta_1 (\text{Former UK colony})^- + \beta_2 (\text{President})^+ \\ & + \beta_3 (\text{Federalism})^+ + \beta_4 (\text{Divided government})^+ \\ & + \beta_5 (\text{Plurality rule})^- + \beta_6 (\text{Effective number of parties})^+ \\ & + \beta_7 (\text{Freedom})^- + \beta_8 (\text{Log of GDP per capita})^+ \end{aligned}$$

Table 5 reports the pairwise Pearson correlations between the independent variables. The correlation between Freedom House scores and the logarithm of GDP per capita is -.71, which indicates a degree of linear dependence. There is no quick fix for collinearity (Fox 1991: 21-31). The deletion of one of the variables would amount to model misspecification (Berry and Feldman 1985: 48). A more reasonable course is to acknowledge a degree of collinearity and to exercise caution in interpreting the results. Overall, with this single exception, the explanatory variables are not highly correlated.

Table 5: Pearson correlations between the independent variables

	Former UK colony	President	Federalism	Divided government	Plurality rule	Effective number of parties	Freedom
President	-.22	..	..	..	..	..	..
Federalism	.22	.17	..	..	..	..	..
Divided government	-.06	.12	-.12	..	..	..	..
Plurality rule	.20	.16	.22	-.22	..	..	..
Effective number of parties	-.03	-.18	-.16	-.03	-.28	..	..
Freedom	-.18	.23	-.08	.04	-.19	.07	..
Log of GDP per capita	.10	-.31	.12	.22	.22	.00	-.71

Notes: Correlations are pairwise. Data for Suriname is missing for some variables.

5.2 Analysis

In this section, I test these propositions using simple (OLS) regression. However, before proceeding to the cross-sectional regression results, one methodological note and one caveat are in order. First, OLS regression assumes a quantitative, continuous and unbounded dependent variable (Berry 1993: 45-49). I treat the index like a continuous variable, but its boundedness is a problem because it may produce nonsensical predictions. For this reason, I use the logistic transformation to convert the dependent variable into an unbounded one (for an example of this approach in a different context, see Demsetz and Lehn 1985: 1163):⁴³

$$\ln \frac{\text{index}}{100 - \text{index}}$$

Second, a number of 36 observations is relatively small in statistical terms, although the sample represents a sizeable proportion of national legislatures in contemporary liberal democracies. One of the dangers of small samples is that outliers skew the results. In this case, the US Congress is an upper outlier, and the robustness of the results has to be considered. I will consider whether and in what way the exclusion of certain observations affects the results.

⁴³ The results are substantively similar with the untransformed scores.

Table 6: OLS estimates of the transformed index

	(1)	(2)	(3)	(4)	(5)
Former UK colony	-1.09 (0.27)***	-1.08 (0.26)***	-1.11 (0.23)***	-1.00 (0.19)***	-1.15 (0.34)***
President	0.16 (0.32)	-0.11 (0.46)			
Federalism	0.56 (0.25)**	0.46 (0.24)*	0.56 (0.27)**	0.34 (0.16)**	0.94 (0.39)**
Divided government	0.81 (0.34)**	0.70 (0.34)*	0.88 (0.30)***	0.70 (0.25)***	1.28 (0.42)***
Plurality rule	-0.17 (0.43)	-0.13 (0.44)			
Effective number of parties	0.06 (0.06)	0.08 (0.06)			
Freedom	-0.10 (0.16)	-0.18 (0.22)			
Log of GDP per capita	0.04 (0.16)	-0.02 (0.20)			
President*divided government		0.80 (1.18)			
Constant	-1.00 (1.64)	-0.32 (2.10)	-0.61 (0.17)***	-0.56 (0.17)***	-0.82 (0.28)***
Observations	35 ^a	35 ^a	36	35 ^b	21 ^c
Adjusted R-squared	0.35	0.34	0.43	0.40	0.52

Notes: * $p < .1$ ** $p < .05$ *** $p < .01$. Robust standard errors in parentheses. ^a Data for Suriname are not available for some variables. ^b Excluding the US Congress. ^c Sample restricted to OECD members before 1993 except Turkey.

The results are reported in Table 6, which contains three different statistical models.

The first model contains all of the explanatory variables discussed in the previous section (column 1). All of the coefficients have the predicted sign, but only three of them are statistically significant at the 10 per cent level or higher, i.e. the coefficients for the former UK colony and federalism dummies and for the divided government index. To check for collinearity problems, I calculate the variance inflation factors (VIF) for each of the explanatory variables (see Table 7). The VIF indicate the extent to which collinearity inflates the variance of an estimator. None of the VIF reported in Table 7 come close to exceeding 10, which would indicate a highly collinear variable and is often used as an arbitrary rule of thumb (Gujarati 2003: 362). Similarly, none of the tolerance values, which are computed simply as the inverse of the VIF, approach

zero. The mean VIF is low. Hence, by reasonable standards we can conclude that collinearity is not a problematic issue in this analysis.

Table 7: Variance inflation factors

Variable	VIF	1 / VIF
Log of GDP per capita	3.12	0.32
Freedom	2.41	0.41
President	1.50	0.67
Divided government	1.49	0.67
Plurality rule	1.49	0.67
Former UK colony	1.24	0.81
Federalism	1.23	0.81
Effective number of parties	1.16	0.86
Mean VIF	1.70	

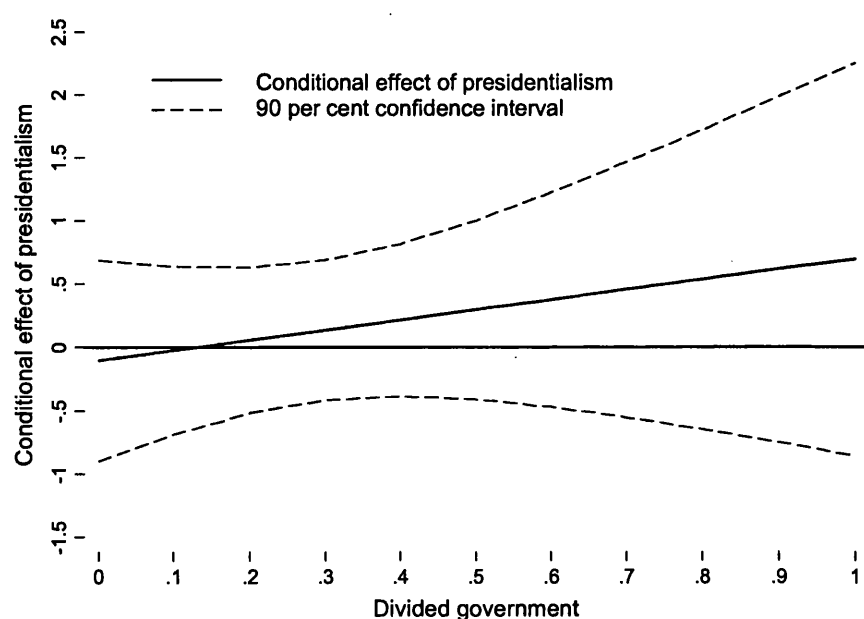
Note: Calculated on the basis of model one in Table 6.

The following model in Table 6 expands the baseline model and adds an interaction term (column 2). Haggard and McCubbins (2001) argue that the impact of the separation of powers depends on the ‘separation of purpose’, and to account for this possibility I introduce an interaction term between presidentialism and divided government. The coefficients for the federalism and UK colony dummies are not substantively affected, but the multiplicative term and its components have to be reinterpreted (Friedrich 1982, Brambor *et al.* 2006). The coefficient for divided government in the interaction model now captures the effect of switching from no divided government to always divided government *in non-presidential systems*; the effect is positive and significant. Similarly, the coefficient for presidentialism captures the effect of switching from a non-presidential to a presidential system *in the absence of divided government*; the effect is negative and far from significant.

However, it is possible that presidentialism has a significant effect for some range of values on the divided government index (Brambor *et al.* 2006: 73-77). To investigate this possibility requires calculating the conditional effect and standard errors. Figure 7

plots the effect of presidentialism for each level of the conditioning variable, i.e. divided government. In this dataset, there is at least one case for each value of divided government, and all values are substantively meaningful, so the entire range of this variable is relevant. I treat the conditioning variable as continuous, which is theoretically plausible and would be empirically feasible with more fine-grained data. Figure 7 shows that for most values of divided government, presidentialism has a positive effect. However, using a 90 per cent confidence interval, the effect of presidentialism is not significant at any value of divided government. In sum, there is no evidence that presidentialism has a systematic effect on legislative institutional arrangements for financial scrutiny.

Figure 7: The effect of presidentialism as divided government increases



Note: Calculations based on the results in column (2) of Table 6 using an adapted version of the Stata code provided by Brambor *et al.* (2006).

I experimented with various combinations of the explanatory variables and used a manual backward selection procedure to derive a more parsimonious model. The

resulting model contains three variables, i.e. the former UK colony and federalism dummies as well as the divided government index (column 3). All of the coefficients in model three have the predicted sign. Overall, this model accounts for more than one third of the variation on the transformed index. Given the relatively small number of observations, the results might be distorted by outliers. To see if US exceptionalism affects the results, I drop this case (column 4). The inclusion of a country dummy would have the same effect on the coefficients and standard errors as dropping the relevant case, but in contrast to the dropping procedure the inclusion of such dummies also inflates the adjusted R-squared. When the US Congress is dropped from the dataset, all of the coefficients weaken somewhat. The size of the coefficient for the federalism dummy is most affected by the exclusion of the US case. As another check, I restrict the sample to the advanced industrialised countries, i.e. members of the OECD prior to 1993 but excluding Turkey (column 5). Compared with the full sample, this increases the size of the coefficients for the federalism dummy and the divided government index. The size of the coefficient for the former UK colony dummy remains stable. Moreover, with this restricted sample of the core group of OECD members, these three explanatory variables account for more than half of the variation on the dependent variable. Overall, this suggests that the results are robust, but also that the model is most applicable to the advanced industrialised democracies.

In order make the results interpretable, the predicted logits have to be translated back into values measured on the index of legislative budget institutions by calculating:

$$\left[\frac{e^{\text{logit}}}{1 + e^{\text{logit}}} \right] \times 100$$

I apply this to all logits predicted by model three, using the full sample. Table 8 compares the actual scores on the index of legislative budget institutions against the index scores predicted by the model. The shading divides the sample into quartiles. The first column contains the predicted logit based on model three, using the full sample of 36 legislatures. Based on the above formula, the second column translates these predicted logits into predicted index scores, which can be compared against the actual index scores in column three. The final column contains the difference between predicted and actual scores, which shows that the index scores for the legislatures of Hungary, the Netherlands and the US are under-predicted by 24 points or more compared against their actual values. Over-prediction is somewhat less of a problem, although the predicted scores for the legislatures of Greece, Argentina and France exceed their actual scores by more than 15 points, and the scores for four other legislatures are over-predicted by more than 10 points. Still, most predictions are reasonably accurate.

Table 8: Predicted and actual index scores sorted by difference

Legislature	Predicted logit	Predicted index score	Actual index score	Difference
Hungary	-.61	35.26	66.67	-31.40
United States	.48	61.86	88.89	-27.02
Netherlands	-.61	35.26	59.72	-24.46
Indonesia	-.43	39.40	54.17	-14.76
New Zealand	-1.54	17.59	27.78	-10.19
Sweden	.28	56.89	65.28	-8.39
Japan	-.17	45.88	52.78	-6.89
Austria	-.05	48.82	55.56	-6.73
Israel	-1.28	21.77	27.78	-6.00
Norway	.28	56.89	61.11	-4.22
Germany	-.05	48.82	52.78	-3.96
Bolivia	-.61	35.26	38.89	-3.62
Finland	-.61	35.26	38.89	-3.62
Iceland	-.61	35.26	38.89	-3.62
Uruguay	-.61	35.26	38.89	-3.62
Canada	-1.16	23.85	26.39	-2.54
Slovenia	-.61	35.26	36.11	-.85
Denmark	.19	54.71	55.56	-.85
Belgium	-.05	48.82	47.22	1.60
Australia	-1.16	23.85	22.22	1.63
Suriname	-.61	35.26	33.33	1.93
South Korea	-.08	48.09	45.83	2.25
Turkey	-.25	43.70	38.89	4.81
Slovakia	-.43	39.40	33.33	6.07
Czech Republic	-.08	48.09	41.67	6.42
South Africa	-1.16	23.85	16.67	7.18
Ireland	-1.10	24.94	16.67	8.27
Mexico	.40	59.76	51.39	8.37
Portugal	-.08	48.09	38.89	9.20
Italy	-.25	43.70	33.33	10.36
United Kingdom	-.61	35.26	22.22	13.04
Spain	.22	55.44	41.67	13.77
Chile	-.61	35.26	20.83	14.43
Greece	-.61	35.26	19.44	15.82
Argentina	.66	65.94	50.00	15.94
France	-.52	37.31	19.44	17.87

Note: Based on model three in Table 6 and the full sample (N = 36).

To explore the impact of the explanatory variables on different components of the index of legislative budget institutions, and as a further check on the robustness of the results, I also regressed transformed versions of the two sub-indices developed in the previous chapter on the explanatory variables in model three. For this purpose, I first rescaled the two sub-indices to range between zero and 100 and again applied the logistic transformation to meet the unboundedness assumption of OLS regression with regard to the dependent variable. As discussed in the preceding chapter, the 'powers' sub-index contains the amendment powers, reversionary budget and executive flexibility variables and is taken to represent the formal authority of the legislature. The logistic transformation is not defined for the South African case, which has a score of zero on the powers sub-index, so this case is omitted in this instance. The second sub-index sums the scores for the time, committee and research capacity variables and is interpreted as a measure of the organisational capacity of the legislature for financial scrutiny. Here, all transformations are defined.

The OLS results for the sub-indices are presented in Table 9. All coefficients retain their predicted signs and are significant predictors of the two transformed sub-indices. Overall, these results confirm those obtained with the transformed overall index, but there is one noteworthy distinction: the size of the coefficient for the former UK colony dummy is substantially larger for the transformed powers sub-index (column 1) than for the transformed organisation sub-index (column 2). This result suggests that the impact of colonial heritage on the legal framework for legislative budgeting is about three times greater than its impact on legislative organisation.

Table 9: OLS estimates of the transformed sub-indices

	(1)	(2)
Former UK colony	-1.59 (0.42)***	-0.53 (0.24)**
Federalism	0.65 (0.31)**	0.63 (0.33)*
Divided government	1.12 (0.52)**	0.78 (0.32)**
Constant	-0.20 (0.29)	-1.10 (0.15)***
Dependent variable	Powers	Organisation
Observations	35*	36
Adjusted R-squared	0.32	0.23

Notes: * $p < .1$ ** $p < .05$ *** $p < .01$. Robust standard errors in parentheses.

* The logistic transformation of the South African score is not defined.

Table 10 summarises the results. Substantively, this analysis confirms the institutional replication proposition for former UK colonies. This is strong evidence of the durability of legislative budget institutions for this group of countries. On the other hand, the results also confirm the partisan proposition, which suggests that political actors can to some extent shape legislative arrangements in a purposeful fashion in order to increase parliamentary control. This seemingly contradictory conclusion that institutional arrangements are both durable and malleable is discussed in more detail in the following section. The divided government index is probably the most straightforward indicator of legislative-executive partisan divisions (Edin and Ohlsson 1991). The federalism dummy is also statistically significant, although this result is sensitive to the inclusion of the US case. Further theoretical and empirical work is needed to investigate the impact of federalism on legislative financial scrutiny. On the other hand, this analysis finds no evidence for either the development or the horizontal separation of powers proposition. Plurality rule and the effective number of parties also appear to have no impact on institutional arrangements for legislative financial scrutiny. Perhaps most surprising is the non-impact of presidentialism on legislative budget institutions across all models, and I expand on this finding in the

following section. While the models presented here account for a substantial proportion of cross-national institutional variation, it is to be expected that part of the differences be due to country specific factors that are difficult to quantify, such as historical contingencies and differences in political culture.

Table 10: Summary of findings

Proposition	Variable	Expected sign	Confirmed?
Institutional replication	Former UK colony	-	Yes
Separation of powers: horizontal	President	+	No
Separation of powers: vertical	Federalism	+	Yes
Partisan dynamics	Divided government	+	Yes
Partisan dynamics	Effective number of parties	+	No
Partisan dynamics	Plurality rule	-	No
Development context: political	Freedom	-	No
Development context: economic	Log of GDP per capita	+	No

Note: In the last column, 'yes' implies that the coefficient has the expected sign and is significant at least at the 10 per cent level ($p < .1$). Here, only statistically significant variables are indicated with grey shading.

5.3 Some implications

This section elaborates two important implications that flow from the above analysis and which warrant further discussion. First, the fact that presidentialism is not a significant explanatory variable serves as a reminder that the experience of the US Congress cannot be generalised across all presidential systems. Admittedly, only seven out of 36 legislatures in the sample are from presidential systems as defined in section two (Argentina, Bolivia, Chile, Mexico, South Korea, the US and Uruguay). A larger sample is desirable to draw firmer conclusions. Nonetheless, this finding represents a challenge to the view that institutions in presidential and parliamentary systems are inherently different. Rather, the results of this analysis support the argument that it is more fruitful to focus attention on the specific differences in the

design of institutional aspects as well as their cumulative effect. Cheibub and Limongi (2002: 152-153) make this point succinctly:⁴⁴

Parliamentary and presidential regimes are indeed founded on different constitutional principles, and this is a central choice in any democratic constitution. However, the operation of the political system cannot be entirely derived from the mode of government formation. Other provisions, constitutional and otherwise, also affect the way parliamentary and presidential democracies operate, and these provisions may counteract some of the tendencies that we would expect to observe if we derived the regime's entire performance from its basic constitutional principles.

There are at least two reasons why it is easy for the casual observer to misjudge the effect of presidentialism. One is the combination of US exceptionalism with the fact that the US Congress for a long time received massively disproportionate attention in the legislative studies literature (Oppenheimer 1983). Until fairly recently, far less was known about legislative dynamics in other presidential systems. The emerging comparative literature on legislative bodies in contemporary presidential systems has revealed substantial variation in legislative influence among this group of countries (Morgenstern and Nacif 2002, Haggard and McCubbins 2001). Still, there are many examples where researchers generalise the experience of the US Congress across presidential systems. For example, Persson and Tabellini (2006: 92) claim:

[M]any presidential regimes have a strong separation of powers – between the president and Congress but also between congressional committees holding important proposal powers in different spheres of policy. In parliamentary regimes, instead, the government concentrates all the executive prerogatives as well as important powers of initiating legislation. Checks and balances are thus stronger under presidential government.

⁴⁴ On more recent work, Cheibub (2006) expands on this point in his consideration of the effect of presidentialism on central government financial balances. Here, he argues that the effect depends on the ability of the president to control the budget process.

When the US Congress is compared with the UK Parliament, where incidentally the decline in parliamentary influence is said to have been extreme compared to other parliamentary systems (Schick 2002), it may indeed seem as if there is a systemic difference between presidential and parliamentary systems. However, a comparison beyond these two usual suspects reveals that the importance of the presidential-parliamentary divide for explaining differences in legislative influence may not always be as fundamental as is sometimes assumed.

A second reason why presidentialism is possibly overrated as a causal factor is that it is easy to misinterpret political dynamics as effects of the system of government when comparative analysis focuses on only a handful of countries. For a long time, the study of divided government was largely confined to the US (Elgie 2001: 1). Here, shifting majorities among the branches of government and the different houses of Congress have given rise to instances of severe gridlock over policy and budgets (Williams and Jubb 1996). Again it is tempting to extrapolate this experience to other presidential systems. However, more recent and thorough comparative work has revealed that the 'separation of purpose' is far less pronounced in a number of other presidential regimes than in the US (Haggard and McCubbins 2001). Moreover, some authors have argued strongly that divided government is a noteworthy feature of a number of non-presidential systems (Elgie 2001, Laver and Shepsle 1991). Several studies with different samples of parliamentary regimes have found that minority administrations account for about one third of governments (Strøm 1990: 8). This suggests that divided government may be more important for explaining legislative

influence than the distinction between presidential and parliamentary systems of government.

In addition, although this analysis is of a cross-sectional nature, the causal variables raise interesting issues relating to institutional change over time. Some of the institutional arrangements can typically be adjusted more easily than others. For instance, constitutional features, several of which are captured in the powers sub-index, usually cannot be amended without supermajority support in the legislature. Because this requires a high degree of consensus that would be unusual in many contexts, fundamental constitutional reforms are extremely rare (Persson and Tabellini 2003: 219). Other institutional features are perhaps more variable in the short-run. For instance, some aspects of legislative organisation are often an internal question that is for the legislature to decide, and most standing orders can usually be amended with more ease than constitutional provisions.⁴⁵ This makes variable features potentially more responsive to shifting political dynamics such as diverging party majorities across the legislative and executive branches of government.

Some anecdotal evidence illustrates that legislatures seeking to strengthen their budgetary role may attempt to do so by adjusting variable institutional features in their favour. The perhaps best-known example is the overhaul of the US budget process with the Congressional Budget and Impoundment Control Act of 1974. Among other changes, the reform created CBO in order to end the executive's monopoly on budgetary information, reformed the legislative committee structure to facilitate fiscal decision-making, severely curtailed executive impoundment authority by regulating

⁴⁵ One exception is the Swedish case, which I discuss in a later chapter.

rescissions and deferrals, and shifted the beginning of the fiscal year from July to October to give Congress an extra three months to decide the budget (Wildavsky and Caiden 2001: 77-82). The acrimonious nature of legislative-executive relations during the Nixon administration, a period of divided government, gave impetus to the reforms, which also sought to counter a longer term shift towards executive dominance since the introduction of the executive budget process with the Budget and Accounting Act in 1921 (Schick 2000: 8-22).

There are other attempts of legislative reorganisation that perhaps illustrate the point. In Mexico, for many years commentators regarded Congress as 'the epitome of weakness' (Morgenstern 2002a: 9) despite comparatively strong constitutional powers (Haggard and McCubbins 2001: 81). Since the re-emergence of competitive party politics and divided government in the 1990s the Mexican Congress has started to make amendments to the presidential budget proposal.⁴⁶ In the wake of these political changes Congress has also made certain institutional adjustments with the aim to increase legislative control. For instance, the 2000 Federal Audit Law⁴⁷ established a new congressional audit committee.⁴⁸ Congress also put in place the Centre for the Study of Public Finance,⁴⁹ modelled along the lines of CBO, to supply it with independent analyses of taxation and spending issues. As Santiso (2006: 85) remarks, 'the surge of legislative activism in the budget process in Mexico is partly the result of the emergence of an assertive opposition since the long-time ruling party, the

⁴⁶ *The Economist* recently reported on 'Mexico's Budget Wrangles' (11 December 2004: 54).

⁴⁷ Refer to article 67 of the *Ley de Fiscalización Superior de la Federación*.

⁴⁸ *Comisión de Vigilancia de la Auditoría Superior de la Federación*.

⁴⁹ *Centro de Estudios de las Finanzas Públicas*.

Institutional Revolutionary Party, lost its parliamentary majority in 1997. It is probably not a coincidence that the Mexican legislative budget office emerged in 1998.⁹ In this case, too, changes in the political environment prompted a redesign of variable institutional features.

Not all such institutional adjustments are necessarily successful in that they unambiguously strengthen legislative control (Wildavsky and Caiden 2001: 81-82). Rather, the essential point in the context of this discussion is that a distinction between fixed and variable institutional features provides a useful framework for understanding the scope for institutional adjustments in response to changes in the political environment, such as the emergence of divided government. This helps to shed light on the extent to which legislative actors have scope to act as agents that can purposefully shape institutional arrangements. Whether specific institutional features are fixed or variable in the short-run does of course differ between countries, but features relating to legislative organisation are frequently variable and hence may respond to the prevalence of divided government. The distinction between fixed and variable institutions reconciles the seemingly contradictory assumptions of the institutional replication and partisan propositions in terms of the durability versus malleability of institutions.

In sum, this analysis challenges the proposition that the presidential-parliamentary distinction is of fundamental importance for explaining cross-national differences in legislative scrutiny of the budget. Presidentialism should not be confounded with divided government, which does appear to affect legislative scrutiny, nor should the US experience be generalised across presidential regimes elsewhere. Furthermore, the

distinction between fixed and variable institutional features helps to explain why some causal variables suggest that legislative institutions are highly durable whilst others imply that they adapt to shifting political dynamics.

Conclusions

There are a number of plausible explanations of why legislative scrutiny arrangements might differ between countries. This chapter considered four sets of propositions, relating respectively to institutional replication, the separation of powers, partisan dynamics and the development context of a country. I investigated these using a transformed version of the index of legislative budget institutions as the dependent variable, as well as transformed versions of the powers and organisation sub-indices. The results suggest that colonial heritage and divided government affect legislative institutions, as might federalism. While the latter is an interesting finding, further theoretical and empirical work is necessary before drawing firmer conclusions about the impact of federalism on legislative budgeting.

More specifically, former UK colonies have lower index scores, whereas countries with a high incidence of divided government achieve higher scores. The impact of the UK colonial heritage is strongest on the component of the index that capture the formal powers of the legislature in budgetary matters, some of which may have a constitutional basis that is typically very durable over time. Federalism is also associated with higher scores on the index. However, there is no evidence that levels of political or economic development, the type of electoral system or the effective

number of parties have any systematic effect on legislative budget structures. Perhaps most surprising might be the absence of evidence that presidentialism is associated with higher levels of financial scrutiny as measured by the index. The fact that colonial heritage and divided government respectively imply very long term and more immediate effects suggests that it is useful to make a distinction between institutional arrangements that are variable in the short-term and those that are not, such as constitutionally prescribed powers.

6 The effect of legislative institutions on fiscal policy

If the legislative budget process has a pro-spending bias, what is the empirical evidence that carefully designed institutional arrangements can help to contain this tendency? Since the 1990s, a number of studies, using different variables and datasets, have claimed that certain institutional features are conducive to maintaining fiscal discipline during the budget approval process in the legislature. This chapter provides an overview and assessment of two quantitative measures of the power of parliaments in budgetary matters, taken from arguably the two most influential studies of budget institutions and fiscal performance (Von Hagen 1992, Alesina *et al.* 1996). I also include other variables that some authors claim to be institutional determinants of fiscal outcomes. The comparison and assessment of alternative measures is complicated by the fact that empirical studies typically use different datasets that may not always allow the reconstruction of other existing measures. This chapter assesses alternative measures of parliamentary power over budgets on the basis of a single dataset, with emphasis on the importance for quantitative cross-national research of carefully constructing the variables of interest. Moreover, the cross-sectional analysis in this chapter is complemented with results using a new method for estimating coefficients of time-invariant variables in panel data, which addresses a frequent methodological problem in the empirical literature.

From the start, it is important to acknowledge that perfect measures do not exist in comparative politics. Nonetheless, there is much to learn from how multiple measures purportedly of the same underlying concept relate to one another. Political scientists

and economists increasingly invest in the development of comparative tools for the cross-national study of political institutions and their performance (Congleton and Swedenborg 2006), which is also the purpose of this thesis. Rigorously constructed quantitative measures are useful for testing theories with larger samples of countries than the case study approach allows, and to broaden our perspective beyond a handful of frequently studied countries. However, the development of such comparative tools also entails pitfalls. New measures may quickly gain widespread acceptance despite possible refinements or alternatives. Moreover, aggregate indices can sometimes obfuscate the impact of individual component variables. In short, while the development of quantitative measures is crucial for advancing the comparative study of institutional effects on policy, careful and continuous reassessment must ensure the quality of measures in use. Replication is increasingly acknowledged as essential for the credibility of research in political science (King 1995) and economics (Dewald *et al.* 1986).⁵⁰ It provides a check whether results ‘travel’ through time and space, and supports the search for underlying general results. At the same time, replication is badly neglected and in a ‘sad state’ (Hamermesh 2007: 15). The results in this chapter demonstrate its value and contribution.

The chapter is organised in three parts. The first provides a brief review of the institutionalist hypotheses in the literature. The second part discusses data and

⁵⁰ Conceptual distinctions vary. Herrnson (1995: 452) refers to *reanalysis* as the broader category, which entails a study of the same problem investigated by the initial investigator, using either the same database (*verification*) or independently collected data (*replication*). In contrast, Hamermesh (2007: 1) distinguishes *pure replication*, which involves checking the results in published papers using their data and models, from *scientific replication*, using a ‘different sample, different population and perhaps similar, but not identical model.’

methodological issues. In the third part I present empirical results on the impact of legislative institutions on fiscal policy outcomes, using cross-sectional and panel data. The conclusion considers the implications of these findings for further research.

6.1 Institutional hypotheses

As discussed in the introduction, the literature on the fiscal effect of budget institutions builds on the basic insight that spending will be higher when decision-makers do not internalise the full costs of their actions (Weingast *et al.* 1981, Von Hagen and Harden 1995). This suggests that the spending bias in a legislative setting is potentially very substantial. The fiscal institutionalist response to this problem is to design the budget process so as to centralise budgetary decision-making. In the following, I review the hypotheses about the fiscal impact of legislative institutions put forward in the literature.

In a groundbreaking and widely cited paper prepared for the European Commission, Von Hagen (1992) argues that institutions that weaken the role of special interests in the budget process affect fiscal stability. He develops three different versions of a 'structural index' that consist of up to four different items (pp. 43-44). Based on fiscal data for European Community countries in the 1980s, his empirical analysis finds support for the 'structural hypothesis' that a budget process with a dominating role of the finance minister vis-à-vis spending ministers, restricted powers of amendment for parliament, and limiting adjustments to the budget during implementation is strongly conducive to fiscal discipline (p. 53).

Item two of the structural index combines several components to assess the ‘structure of the parliamentary process’ (p. 70). In the discussion below, the respective scores assigned by Von Hagen are indicated in square brackets. Components one and two relate to the amendment powers of the legislature. They indicate whether amendment powers are limited [4] or unlimited [0] and whether changes are required to be offsetting [4] or not [0].⁵¹ The third considers whether amendments can cause the fall of the government [4] or not [0]. Component four indicates whether all expenditures are passed in one vote [0] or chapter-by-chapter [4], with an intermediate score [2] for what Von Hagen classifies as ‘mixed’ cases. The fifth component looks at whether the process commences with a global vote on the size of the total budget [4] or whether totals are voted only at the conclusion of the process [0]. The individual scores are summed to derive the total score for item two. Accordingly, the scores on this item can range between zero and a maximum of 20, with the latter indicating a more centralised parliamentary budget process that, according to Von Hagen, should be more conducive to fiscal discipline.

⁵¹ It is not entirely clear how Von Hagen scored this item in his 1992 paper when legislatures can only accept or reject the budget. Notably, his Table A6 reports that the Irish Parliament has no powers to amend expenditure proposals. Scoring Ireland on his item two, he gives four points because amendments are limited, but zero points for the offsetting component. In the 2001 update (Hallerberg *et al.* 2001: Table 2b) the authors count the offsetting item as not relevant for Ireland and accordingly assign a score of zero, which is more consistent. In reconstructing Von Hagen’s item two, I assigned a score of four for the offsetting component when a legislature can either (i) only accept or reject the budget, or (ii) when amendment powers impose an aggregate constraint.

The effect of some of the components of item two is contested. Notably, Von Hagen (1992: 36) argues that a global vote on the budget prior to allocative decisions contains total spending. However, Ferejohn and Krehbiel (1987) demonstrate that such a two-step process may result in relatively large budgets. Empirically, Alesina and colleagues (1999b: 270) find evidence that such a process imposes an effective constraint, but Helland (1999: 130-132) does not. Von Hagen later revised his initial view (Hallerberg and Von Hagen 1997, Ehrhart *et al.* 2001). Moreover, Von Hagen (1992: 36) merely offers a 'conjecture' that voting the budget chapter-by-chapter is more constraining than authorisation in a single vote. The findings presented in the following section add to the empirical debate about the effect of these institutional features.

The paper by Alesina and colleagues (1996) extends the geographical application of this approach. It establishes a parsimonious measure of the budgetary power of the legislature vis-à-vis the government as part of a ten-item index of budget institutions that the authors use to classify budget systems as 'hierarchical' or 'collegial.' Using a sample of 20 Latin American and Caribbean countries, they present evidence that more hierarchical budget institutions were associated with greater fiscal discipline in the 1980s and early 1990s. They sum components five and six to construct their subindex three, which they argue measures the relative position of the government vis-à-vis the legislature in the approval stage, and find that it is a significant determinant of fiscal performance (p. 23). In later versions of their paper they use a different disaggregation of their main index (Alesina *et al.* 1999a and 1999b). However, only the 1996 subindex three focuses exclusively on the legislature and it is this original measure that I refer to in the following. Hallerberg and Marier (2004:

578-579) use a rescaled version of this subindex for their analysis of the interaction of budget institutions and electoral incentives. Cheibub (2006: 364) also draws heavily on these variables and finds evidence that the effect of presidentialism on budget balances is conditional upon the powers of the president in the budget process.

Subindex three combines variables on amendment powers and the reversionary budget (Alesina *et al.* 1999a: 34-35). With regard to amendment powers, it distinguishes countries where amendments cannot increase the size of the budget or its size and the deficit [10], from those where the legislature can do so only with government approval [7.5], where it can only propose changes that may not increase the deficit [5], and where there are no constraints [0]. With regard to the reversionary budget, the extreme case is that the government proposal is implemented even if the legislature explicitly rejects or fails to approve it [10]. In some instances a distinction is made according to which the lack of timely approval results in the enactment of the government proposal, while rejection triggers reversion to last year's budget [8]. Alesina and colleagues argue that reversion to the previous budget is more favourable for the government than a requirement for tabling a new budget as long as it can redistribute spending between items [6], but not when this is disallowed [2]. Where a new budget has to be presented, they give higher scores where the government has discretion to reallocate until the adoption of the new budget [4] than to those where there is no reallocation [2] or where the legislature reallocates expenditures [0].

A few scores are not covered in this account, but can be deduced from Table A6 in Alesina *et al.* (1999a) or the 1996 version of their paper. First, they assign the middle possible score [5] to cases where the government resigns in case of non-approval,

arguing that ‘this drastic possibility could go either way’ since on the one hand the legislature may want to avoid a situation that is costly to the country while the government may be induced to present a ‘more palatable’ budget in order to avoid loss of office (Alesina *et al.* 1996: 13). This intermediate score is only assigned once in their dataset; this was to the Bahamas. Second, when no funds may be expended in case of non-approval, Alesina and colleagues (1999a: Table A6) give eight points, which according to their dataset is the case only in Mexico. They add the scores for these two variables, so that a maximum of 20 on subindex three indicates a high degree of executive control of the parliamentary agenda, which they predict to have a positive effect on fiscal discipline. This is confirmed in their empirical analysis, which finds a negative association of subindex three with primary deficits in Latin American countries in the 1980s and early 1990s (Alesina *et al.* 1996: Table 6).

There are legislative features other than those covered in the above indices that might impact on fiscal aggregates. Heller (1997: 486) argues that the existence of second chambers with budgetary powers increases the number of actors who can veto or modify legislation and this ‘forces the government to include more spending in the budget than it would need to if the budget had to pass in only one legislative chamber.’ Using a sample of 17 industrialised countries, he finds that deficits are higher in parliamentary systems with bicameral than those with unicameral legislatures. However, with budget deficits rather than expenditures as the dependent variable, it is impossible to distinguish his proposition that budgetary bicameralism leads to higher spending from the rival hypothesis that bicameralism can increase gridlock (e.g. Alt and Lowry 1994). There are also problems with the empirical analysis. The results are to a substantial extent driven by the Italian case (Heller 1997:

502-503), and the classification of countries can be challenged.⁵² Moreover, the use of pooled time-series cross-section regression is problematic, since the time-invariant nature of the variable of interest calls for cross-sectional analysis (Kittel 1999). Bicameralism is also discussed by Gleich (2003: 18), who argues on the basis of the common pool perspective that it adds to the fragmentation of the legislature, and hence contributes to a spending and deficit bias. Gilligan and Matsusaka (2001: 79) test the 'law of 1/n' with subnational government data from the US and find that the size of the upper house, but not of the lower house, has a consistent effect on fiscal policy (see also Diaz-Cayeros *et al.* 2002). On the other hand, Bradbury and Crain (2001: 322) conclude that 'splitting the legislative branch into two chambers mitigates the fiscal commons problem.' In short, the impact of bicameralism remains unclear.

Other authors have explored how the fragmentation of spending authority across different legislative committees affects fiscal policy. Crain and Muris (1995) consider the impact of committee structures on fiscal policy at the subnational level in the US. Cogan (1994) provides an interesting historical account of the evolution of committee spending authority in the US Congress, while Dharmapala (2003 and 2004) develops a formalised treatment of this topic. One proposition is that the consolidation of financial decision-making in a single committee is an institutional remedy for the common pool resource problem and helps to contain spending pressures. In a balkanised committee setting partial spending decisions are distributed across different committees and no single committee is responsible for the overall level of expenditure, which encourages free-riding. Using state-level data from the US, Crain and Muris (1995) find that the centralisation of spending decisions in a single

⁵² For instance, Canada is classified as budgetary bicameral.

committee indeed restrains expenditures compared with balkanised systems. The empirical work on the fiscal effects of committee structures focuses almost exclusively on US legislatures; this chapter adds cross-national results.

6.2 Data and methods

One of the major drawbacks of the institutionalist literature on fiscal policy is that its empirical work uses different datasets and variable definitions. To enable a more systematic review I use data from a 2003 survey of budget practices by the Organisation for Economic Co-operation and Development (OECD) and the World Bank to reconstruct the measures discussed above. The survey asked more than 370 questions and was administered to senior budget officials in each participating country.⁵³ I use data from this survey to reconstruct Von Hagen's (1992) item two and subindex three by Alesina and colleagues (1996), as documented in Table 11. It is convenient to standardise the various indices by rescaling them so that a maximum score of one can be interpreted as most constrained from a legislative perspective and a score of zero as least constrained. This rescaling is also helpful for the multiple regression analysis in the third section. In the following, I work with the rescaled indices. Moreover, any components from these indices are also standardised for the regression analysis, so that all institutional variables of interest are either dummy

⁵³ The survey was completed by 41 countries, including most OECD countries. I focus on the latter group, since these data are more reliable. Moreover, as noted in chapter four, several other countries included in the survey, such as Cambodia and Jordan, are not democracies.

variables or range between zero and one, with the latter always indicating an institutional feature that is predicted to reduce the level of public spending.

In addition, I reconsider whether bicameralism affects public spending, as Heller's (1997) original hypothesis suggests. I use a simple dummy to indicate budgetary unicameralism, where 1 = the second chamber has lesser budgetary powers than the lower chamber or parliament is unicameral and 0 = otherwise. To explore the fiscal impact of committee structure I use another dummy variable, where 1 = a budget or finance committee plays a central role in the approval process and 0 = otherwise. Unfortunately, cross-national data for OECD countries are not very useful for testing these two hypotheses, due to lack of variation. Most OECD countries are either unicameral or have second chambers with lesser budgetary powers, and most involve a finance or budget committee in decisions on public expenditures (OECD 2002b, OECD and World Bank 2003). Hence, the results for these variables should be treated with caution.

Table 11: Reconstruction of the Alesina and Von Hagen indices

	(1)	(2)	(3)	(4)	(5)	Σ	(6)	(7)	Σ
Legislature	Amendments limited	Amendments offsetting	Amendments cause fall	One vote on expenditure	Global vote	Von Hagen item two ^a	Amendment restrictions	Reversionary budget	Alesina subindex three ^b
Argentina	4	4	0	0	0	8	5	6	11
Australia	4	0	0	2	0	6	10	8	18
Austria	0	0	0	0	0	0	0	2	2
Belgium	0	0	4	0	0	4	0	8	8
Bolivia	0	0	0	2	0	2	0	10	10
Canada	4	0	4	2	0	10	10	8	18
Chile	4	0	0	0	0	4	10	10	20
Czech Republic	0	0	0	0	4	4	0	6	6
Denmark	0	0	4	0	0	4	0	6	6
Finland	0	0	0	0	0	0	0	10	10
France	4	0	0	2	4	10	10	10	20
Germany	0	0	0	0	4	4	0	6	6
Greece	4	4	4	0	0	12	10	6	16
Hungary	0	0	0	0	0	0	0	8	8
Iceland	0	0	0	0	0	0	0	5	5
Indonesia	4	4	0	0	0	8	5	2	7
Ireland	4	4	0	0	0	8	10	10	20
Israel	4	4	0	0	0	8	10	6	16
Italy	0	0	0	0	0	0	0	10	10
Japan	4	4	0	0	0	8	10	8	18
Mexico	4	4	0	0	0	8	5	8	13
Netherlands	0	0	0	4	0	4	0	6	6
New Zealand	4	0	4	2	0	10	10	8	18
Norway	0	0	0	0	4	4	0	8	8

Portugal	0	0	0	0	4	4	0	6	6
Slovakia	0	0	0	0	0	0	0	10	10
Slovenia	4	4	0	0	0	8	5	6	11
South Africa	4	4	0	2	0	10	10	10	20
South Korea	4	0	0	0	0	4	10	6	16
Spain	4	4	0	0	4	12	5	6	11
Suriname	0	0	0	4	0	4	0	10	10
Sweden	0	0	0	4	4	8	0	8	8
Turkey	4	4	0	0	0	8	5	8	13
United Kingdom	4	0	4	0	0	8	10	8	18
United States	0	0	0	4	4	8	0	8	8
Uruguay	4	4	0	0	0	8	7.5	6	13.5

Notes: Where the OECD data were inconsistent with those reported by Wehner (2006a) the latter are preferred. In addition, Slovakia is scored as having unfettered amendment powers during the sample period (see Gleich 2003: 25, Yläoutinen 2004: 71), since there are no constitutional limitations, although the EU convergence programme contains deficit targets (personal correspondence received from the Chancellery of the National Council of the Slovak Republic).

^a Reconstruction based on responses to questions 2.7.d (amendments limited), 2.7.e (amendments offsetting), 2.7.h (amendments cause fall), 2.8.a (one vote on expenditure), and 2.7.j (global vote) in OECD (2003). ^b Reconstruction based on responses to questions 2.7.e (amendment restrictions), as well as 2.7.c and 3.2.a.4 (reversionary budget) in OECD (2003).

An assessment of the impact of legislative institutions on the size of government requires appropriate left hand side fiscal variables and data. One important choice relates to coverage, i.e. whether to use data for central or general government. Moreover, databases differ in their inclusion of extra-budgetary entities, for instance social security funds (see also Hogwood 1992: 34-37). Of the studies reviewed above, Von Hagen (1992) uses general government data, whilst Alesina and colleagues (1999b) use central government data. Elsewhere, Woo (2003: 390-391) points out that central government data can be misleading when other parts of the public sector contribute substantially to fiscal outcomes. Perotti and Kontopoulos (2002: 196) also note that central government data do not capture spending at the subnational level that is mandated by the centre, which can distort the analysis. To the contrary, Volkerink and De Haan (2001: 222) prefer central government data, arguing that most theories relate to central government. Persson and Tabellini (2003: 38) add data availability as a practical reason in favour of central government data, and further claim that these data are more reliable. Evidently, many justifications are plausible, but there is no consensus on this issue.

A range of sources for fiscal data are available. The OECD (2005a and 2005b) publishes comprehensive central and general government figures for (most) member countries. The *Government Finance Statistics* (GFS) of the International Monetary Fund (IMF) include central and general government data for a large number of countries (IMF 2005a). However, while countries increasingly report GFS data on an accrual basis, cash based reporting is still common. These two

types of data are not strictly comparable, which restricts sample size and introduces analytical breaks into time series. The IMF also publishes the *International Financial Statistics* (IFS) that include some central government fiscal data (IMF 2005b). For European Union (EU) members and accession candidates, Eurostat (2006) publishes fiscal data based on the 1995 European System of National and Regional Accounts. Hence, the choice of data source has implications for sample characteristics and the exact nature of fiscal variables.

To fully appreciate the implications, it is useful to consider the variation in central government data in particular. A detailed look at the data for each country, contained in Table 12, reveals some striking variations. For instance, the 1999 to 2003 average for central government spending in Belgium is 29.7 per cent of GDP according to the OECD *National Accounts*, while GFS indicate a share of 43 per cent and IFS a mere 17.7 per cent. These are massive differences in public finance terms that would suggest fundamentally different roles of central government in the economy, and which will impact on results from cross-sectional analysis. Hence, central government data can be highly problematic, since different classifications and reporting bases are in use to define the central government sector and to underpin fiscal reporting. Without an explicit theoretical basis as to why a certain definition of central government should be preferred this raises the prospect that an arbitrary or poorly informed choice of data source affects empirical results.

Table 12: The available expenditure data by country

Source	Eurostat	OECD	GFS	IFS	OECD	GFS
Coverage	GG	GG	GG	CG	CG	CG
Argentina	-	-	29.0	16.5	-	19.8
Australia	-	36.3	34.4	22.8	-	25.2
Austria	51.3	51.3	51.2	-	29.4	40.3
Belgium	50.0	49.1	49.1	17.7	29.7	43.0
Bolivia	-	-	28.5	30.9	-	28.4
Canada	-	41.6	-	19.9	17.1	-
Chile	-	-	21.5	22.0	-	19.8
Czech Republic	46.0	46.1	40.3	30.1	36.7	36.4
Denmark	55.8	54.9	55.1	35.8	35.7	35.6
Finland	50.0	50.0	49.4	26.5	26.3	36.0
France	52.9	52.4	51.8	-	24.1	46.6
Germany	47.2	47.4	48.0	-	14.0	31.9
Greece	50.4	50.3	-	35.2	41.2	-
Hungary	49.8	49.6	45.5	43.5	34.4	40.9
Iceland	43.2	44.6	41.7	30.9	35.5	31.9
Indonesia	-	-	-	18.6	-	-
Ireland	33.6	33.1	-	26.6	28.0	-
Israel	-	-	52.9	45.7	-	50.1
Italy	48.5	48.6	47.2	30.1	28.7	39.9
Japan	-	38.0	35.2	-	-	-
Mexico	-	-	-	15.7	-	-
Netherlands	47.1	45.4	45.5	27.7	27.6	40.6
New Zealand	-	38.3	35.4	30.6	34.8	32.7
Norway	46.2	46.3	44.9	34.8	35.4	35.8
Portugal	46.1	44.6	43.9	-	32.7	41.2
Slovakia	51.7	45.1	39.3	37.9	32.9	36.8
Slovenia	48.1	-	-	39.0	-	-
South Africa	-	-	32.0	25.3	-	27.8
South Korea	-	25.7	-	-	-	-
Spain	38.9	38.7	36.7	17.6	18.4	29.2
Suriname	-	-	-	-	-	-
Sweden	58.4	58.3	57.2	30.4	34.0	36.9
Turkey	-	-	-	42.4	-	-
United Kingdom	41.0	40.6	40.5	35.8	38.7	37.5
United States	-	35.4	34.5	19.0	20.7	20.4
Uruguay	-	-	-	31.6	-	-

Notes: A dash indicates that data are not available for that particular case. The abbreviations CG and GG indicate central and general government data respectively. Figures are average available expenditure to GDP for the years 1999-2003 multiplied by 100. OECD data for the central government sector are from the national accounts (OECD 2005a) and were downloaded in March 2006. OECD data on general government total outlays are from the Economic Outlook database (OECD 2005b) and were downloaded in February 2006. IMF IFS data use item 82 and are for the budgetary central government or the consolidated central government and were downloaded in February 2006. IMF GFS data are for consolidated central government and consolidated general government respectively, reported on an accrual basis, and were downloaded in April 2006. Eurostat data are for total general government and were downloaded from the New Cronos database in April 2006. See data appendix for further details.

Moreover, the quality of data can vary greatly between different sources. For instance, there are some erratic movements in the IFS data due to breaks in analytic comparability. Again using Belgium, the expenditure to GDP figure calculated from IFS data is 45.7 per cent for 1998, which drops to 18.2 per cent in the following year. The notes for the IFS government finance items acknowledge that these data are not consistently reported.⁵⁴ While this data source is very popular with some researchers (e.g. Persson and Tabellini 2003, Alt and Lassen 2006) because it contains data for a relatively large number of countries, the extent of inconsistency is highly problematic.

Table 13: Pearson correlations between different expenditure data

	GG Eurostat	GG OECD	GG GFS	CG IFS	CG OECD
GG OECD	.96	..	..	..	..
GG GFS	.85	.97	..	..	..
CG IFS	.31	.43	.47	..	..
CG OECD	.18	.27	.04	.79	..
CG GFS	.43	.67	.80	.67	.32

Notes: Based on data in Table 12.

In contrast to data on central government, general government data from different sources are highly correlated. Table 13 indicates correlation coefficients of around .9 for available general government spending data in this sample. The impact of different reporting standards is by far not as substantial compared with central government data, which makes it less likely that the choice of data source will

⁵⁴ For some countries, the IFS data cover the budgetary central government and for others the consolidated central government, but the latter 'may not necessarily include all existing extrabudgetary units.' Moreover, while some countries report specifically for IFS, data for others are as reported for GFS or from 'unpublished worksheets and are therefore not attributed to a specific source' (IMF 2005b: XX).

affect empirical results. Moreover, there is a theoretical reason for preferring general to central government data. Because revenue raising powers tend to be more centralised than expenditure responsibilities, decentralised systems to varying degrees suffer from a vertical fiscal imbalance or 'fiscal gap' that has to be filled with intergovernmental transfers and grants, usually from the central government (Ter-Minassian 1997, Shah 1994). Therefore, even when spending is *accounted* for at the subnational level, it is likely that at least a share of it flows via the central government budget and is *voted* by the national parliament (Perotti and Kontopoulos 2002: 211). As a result, central and subnational budgets cannot be neatly separated, and they are intimately connected in producing fiscal outcomes (Quigley and Rubinfeld 1996, Gilligan and Matsusaka 2001: 78). It is questionable to what extent a simple federalism dummy can account for the complexities of intergovernmental fiscal relations when using central government data (Pierson 1995: 473).

I dwell on this seemingly simple issue, because it is so fundamentally neglected in most of the literature in the common pool tradition. The choice of data coverage is often brushed aside in a sentence or two, and few empirical analyses explicitly test whether their results hold with both central and general government data. One noteworthy and laudable exception is the work by Perotti and Kontopoulos (2002: 211) on the effects of political fragmentation on fiscal policy, in which the authors succinctly summarise the case for general government data:

[S]everal types of spending, like certain transfers to households or certain purchases of goods and services, are often mandated by the central government although they are formally recorded as local government spending. In addition, what is formally recorded as local revenues is often really only shared central government revenues. Finally, grants and revenues transferred from the central government can determine the level of local spending if local governments cannot run high fiscal imbalances.

Overall, this discussion provides strong reasons for using general government data, even if this means a loss in degrees of freedom due to lower data availability.

A related issue is the choice of appropriate indicators of 'fiscal discipline' or 'fiscal performance.' As with the choice of data coverage, the literature offers a variety of possibilities. Von Hagen (1992) considers gross debt, net lending (i.e. the negative of the conventional deficit) and net lending excluding interest payments (i.e. the negative of the primary deficit). Alesina and colleagues (1999b: 263) use only the primary deficit as the dependent variable, arguing that it is less sensitive to inflation-induced increases in interest payments than the conventional deficit, and that it is a better indicator of the fiscal stance of the current government, whose interest payments are largely determined by previously accumulated debt. Stein *et al.* (1998: 129-131) use the institutional data from Alesina and colleagues (1999b), but test the effect on several variables. Interestingly, they find no association between budget institutions and government size, but report the quantitatively strongest and most significant impact when using the primary balance. Of the other papers reviewed in the first section, Heller (1997) uses conventional deficits, while Crain and Muris (1995) use the logarithm

of state revenues and expenditures per capita. Apparently, there is no agreement on what constitutes the most appropriate indicator of fiscal discipline.

The disagreement about appropriate fiscal variables for empirical testing cannot be explained with reference to differences in the underlying theoretical approaches. Formal models in the common pool tradition generate in the first instance predictions about relative levels of public spending (e.g. Von Hagen and Harden 1995, Hallerberg 2004: 22-28), whilst much of the empirical testing uses different fiscal indicators. Von Hagen (1992: 32) justifies the use of the deficit as the dependent variable by assuming at least partly non-Ricardian tax payers who shift some of the cost of today's consumption to future generations. Still, the most direct test of the model presented by Von Hagen and Harden (1995) is to consider the impact of institutional arrangements on levels of public spending. Similarly inconsistent, Heller's (1997) model makes predictions about spending levels, yet he uses deficits as the dependent variable for his empirical test. The study by Perotti and Kontopoulos (2002: 193) again represents a rare exception by pointing out that 'often there is no theoretically compelling reason why political and procedural variables should affect the deficit, but certainly there are always reasons to expect them to affect expenditure.' To align the empirical analysis with the underlying theory, the common pool resource problem, this chapter investigates the effect of institutional arrangements on general government expenditures as a percentage of GDP (multiplied by 100).

In terms of control variables, I draw on Persson and Tabellini (2003: 39), who review a range of country characteristics that on the basis of theoretical or empirical work can be expected to influence the size of the public sector. Following Wagner's Law, which suggests that the demand for government services is income elastic, I control for levels of economic development with the natural log of per capita income (in constant 2000 US\$). The demographic structure of the population has implications for public spending and is accounted for with two variables: the share of the population between age 15 and 64, and the share of the population age 65 or above (multiplied by 100). Finally, Rodrik (1998) argues that demand for social protection increases with trade openness, which is measured as the share of GDP of imports plus exports of goods and services (multiplied by 100).⁵⁵ These data are from the *World Development Indicators* (World Bank 2005).

⁵⁵ I omit several controls that Persson and Tabellini (2003) include in their basic model. First, they use central government data and control for fiscal decentralisation with a federalism dummy. Here, the dependent variable relates to general government. Second, they include a dummy to indicate OECD membership prior to 1993, excluding Turkey. I drop this dummy, since all except four countries in this sample (the Czech Republic, Hungary, Slovakia and South Korea) are traditional OECD members. Its inclusion does not substantively affect the results. Finally, there is no need to control for the quality of democracy, as fiscal data for Turkey and Mexico are not available and the Freedom House scores for the remaining countries in this sample are very similar. Other control variables are possible, of course. For instance, Mueller and Stratmann (2003) explore the effect of electoral participation on the size of government. However, the work by Persson and Tabellini (2003) has established a new baseline standard against which further work on the fiscal effects of institutions has to be measured (Acemoglu 2005).

The question of how legislative institutions affect public spending levels calls for cross-sectional analysis. However, the small sample size restricts degrees of freedom. Moreover, it is possible that a relationship between variables is not stable across time. In the empirical analysis that follows, I rely mainly on cross-sectional data, but complement this with time-series cross-section analysis. Since institutional data are often time-invariant or rarely changing, such variables raise methodological issues in the context of fixed effects panel models. Unit fixed effects are collinear with time-invariant variables and ‘soak up most of the explanatory power’ of rarely changing variables (Beck 2001: 285). Random effects models on the other hand assume that unobserved effects are a random sample drawn from a large population (Baltagi 2005: 35). This is not tenable in macro-comparative research. Faced with this issue, one option is to discard unit fixed effects when investigating the impact of time-invariant institutional variables (e.g. Hallerberg and Marier 2004, Cheibub 2006). However, this introduces substantial omitted variable bias and forfeits the advantage of accounting for unit heterogeneity.

Plümper and Troeger (2007) suggest a three-step process that they call ‘fixed effects vector decomposition’ (FEVD) to estimate time-invariant as well as rarely changing variables in models with unit fixed effects, which performs better than other alternatives (Hausman-Taylor model, pooled OLS, and the random effects model).⁵⁶ The first stage is to estimate the unit fixed effects with a model

⁵⁶ For examples of applications, see Alonso and Ruiz-Rufino (2007), Buckley and Schneider (2006), Goodliffe and Hawkins (2006), as well as Hansen and Hansen (2006).

excluding the completely time-invariant explanatory variables. The second stage decomposes the unit fixed effect by regressing them onto the time-invariant variables excluded from stage one plus any rarely changing variables included in stage one, using OLS. The third stage estimates a pooled model with all explanatory variables as well as the unexplained part of the unit fixed effects, and calculates standard errors with adjusted degrees of freedom that account for the number of estimated unit effects in the first stage. This represents a refinement on previous two-step regression approaches to this problem, involving a panel regression of the fiscal indicator on the time-varying control variables plus country fixed effects as the first stage, and a second stage using cross-section regression in which the estimated country dummies are regressed onto the time-invariant explanatory variables of interest (e.g. Alesina *et al.* 1999b: 266, Perotti and Kontopoulos 2002: 215). The following section turns to the empirical analysis and reports results using these approaches.

6.3 Cross-sectional analysis

In this part, I systematically test subindex three by Alesina *et al.* (1996) and Von Hagen's (1992) item two. My approach is index decomposition, as used for instance by Edin and Ohlsson (1991) to qualify Roubini and Sachs' (1989) study of the effect of partisan variables on fiscal adjustment. This entails taking apart the indices to test the impact of each component separately. I start with a basic model for the 25 OECD countries for which there are data on both general

government spending as well as the institutional variables of interest. This includes the controls for demographic structure, level of economic development, and trade openness. I use averages of the data over the 1999 to 2003 period.⁵⁷ Together, the socio-economic variables account for about half of the variation in general government expenditures in this sample (see column 1 in Table 14).

Table 14 reports the results with Von Hagen's legislative variables. The coefficient for the standardised version of item two is large and significant at the 5 per cent level (column 2). I proceed to test the effect of each component. The coefficients for the two variables associated with limitations on amendment powers are significant at the 5 per cent level or higher (columns 3 and 4), but not those of any other component variable (columns 5 to 7). Moreover, the coefficients for the last two components have the wrong sign. Component four (column 6) considers whether all expenditures are passed chapter-by-chapter, and the fifth component (column 7) looks at whether the process commences with a global vote on the size of the total budget. When each separate component is included simultaneously, none of them is significant (column 8). However, the amendment limits and offsetting dummies are jointly significant ($F = 7.70$, $p = .005$). This provides evidence that the results for item two are driven by one particular institutional feature, namely differences in the legislative powers to amend the budget proposed by the executive.

⁵⁷ I also used alternative 1994 to 2003 averages, which did not affect the substantive results.

Table 14: OLS estimates of Von Hagen's variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Von Hagen item two		-12.20 (5.13)**						
Amendments limited			-5.79 (2.33)**					-3.91 (4.74)
Amendments offsetting				-8.17 (2.17)***				-4.82 (4.73)
Amendments cause fall					-0.48 (3.01)			0.90 (3.75)
One vote on expenditure						2.38 (2.90)		1.30 (2.87)
Global vote							0.27 (2.11)	-1.06 (1.79)
Log of GDP per capita	-2.63 (2.21)	-2.75 (1.91)	-2.62 (1.68)	-1.76 (1.68)	-2.65 (2.30)	-2.74 (2.27)	-2.59 (2.20)	-2.29 (1.68)
Working age population share	-1.56 (0.75)**	-1.81 (0.72)**	-1.44 (0.63)**	-0.99 (0.58)	-1.59 (0.77)*	-1.39 (0.74)*	-1.55 (0.76)*	-1.04 (0.62)
Old age population share	1.72 (0.36)***	1.72 (0.29)***	1.48 (0.33)***	2.11 (0.30)***	1.73 (0.36)***	1.82 (0.40)***	1.72 (0.37)***	1.87 (0.53)***
Trade as share of GDP	0.05 (0.04)	0.03 (0.03)	0.02 (0.03)	0.05 (0.02)**	0.05 (0.04)	0.05 (0.03)	0.05 (0.04)	0.03 (0.03)
Constant	145.99 (67.32)**	168.79 (63.84)**	145.84 (56.24)**	94.88 (53.86)*	148.57 (70.05)**	133.48 (65.00)*	144.65 (67.82)**	109.18 (53.79)*
Observations	25	25	25	25	25	25	25	25
Adjusted R-squared	0.51	0.59	0.64	0.67	0.48	0.49	0.48	0.63

Notes: * p < .1, ** p < .05, *** p < .01. Robust standard errors in parentheses. The dependent variable for all models is general government total outlays as a percentage of GDP multiplied by 100 (OECD 2005b). The dependent variable and all economic control variables are averaged over the 1999 to 2003 period. All institutional variables are standardised to range between zero and one. See text and data appendix for further details.

Table 15 repeats this exercise with the standardised version of Alesina *et al.*'s (1996) subindex three. The coefficient for subindex three is large and significant at the 5 per cent level, and it has the predicted sign (column 1). Tested separately, the coefficient for the amendment powers variable has the predicted sign and is significant at the 5 per cent level (column 2). In contrast, the coefficient for the reversionary budget variable is not significant, although it has the predicted sign (column 3). When both components are included simultaneously, only the coefficient for amendment powers achieves statistical significance at the 10 per cent level (column 4). Here again, there is evidence that one particular component drives the results. Moreover, as in the reanalysis of Von Hagen's item two, it is the variable associated with the amendment powers of the legislature that is significant, and the coefficient also has a similar size. This provides reassurance that the result that this variable affects levels of public spending is not due simply to a particular operationalisation. This finding is of interest in the light of recent contributions that attribute significant importance to both variables, but fail to distinguish their impact in empirical analyses (Hallerberg and Marier 2004, Cheibub 2006).

Table 15: OLS estimates of Alesina's variables

	(1)	(2)	(3)	(4)
Alesina subindex three	-9.29 (4.03)**			
Amendment restrictions		-5.38 (2.44)**		-5.03 (2.42)*
Reversionary budget			-6.41 (5.40)	-3.15 (4.45)
Log of GDP per capita	-2.87 (1.67)	-2.56 (1.73)	-3.04 (2.21)	-2.77 (1.75)
Working age population share	-1.72 (0.64)**	-1.51 (0.65)**	-1.84 (0.73)**	-1.65 (0.63)**
Old age population share	1.45 (0.31)***	1.44 (0.35)***	1.67 (0.32)***	1.44 (0.34)***
Trade as share of GDP	0.03 (0.03)	0.03 (0.03)	0.05 (0.03)	0.03 (0.03)
Constant	169.86 (56.08)***	150.12 (56.82)**	174.04 (67.81)**	163.63 (55.60)***
Observations	25	25	25	25
Adjusted R-squared	0.62	0.61	0.51	0.60

Notes: * $p < .1$, ** $p < .05$, *** $p < .01$. Robust standard errors in parentheses. The dependent variable for all models is general government total outlays as a percentage of GDP multiplied by 100 (OECD 2005b). The dependent variable and all economic control variables are averaged over the 1999 to 2003 period. All institutional variables are standardised to range between zero and one. See text and data appendix for further details.

I proceed to assess specific components of the standardised index of legislative budget institutions. The results are reported in Table 16. I only test the variables where I have a theoretical reason to predict an effect, or for which other authors predict an effect. More specifically, I test the powers and reversion variables. I also use components of the two composite items measuring executive flexibility and committee structure, which are predicted to affect the level of public spending: a dummy indicating that the executive can withhold non-entitlement funds as well as a dummy indicating that a legislature uses a budget committee to scrutinise spending.

The overall index has no significant effect, but this is hardly surprising, given that only a few of its variables are predicted to affect public spending (column 1).

Disaggregation again confirms the findings from the previous two sets of regressions. The results indicate a negative effect of restrictions on the powers of the legislature to amend the budget proposed by the executive (column 2), but none of the other institutional hypotheses are confirmed (columns 3 to 5). Of particular interest is the reversionary budget, which is included in the index by Alesina and colleagues (1996) and has recently been discussed in several important contributions to the field (Hallerberg and Marier 2004, Cheibub 2006). I find that this variable has no significant effect on public spending, as my theory suggests (column 3). Moreover, this finding does not appear to be an artefact of a particular coding scheme, since the different operationalisation proposed by Alesina *et al.* (1996) yielded a similar result.

Table 16 also reports results for the committee hypothesis by Crain and Muris (1995) and Heller's (1997) claim about the fiscal effect of bicameralism. The coefficient for the budget committee dummy has the wrong sign and is not significant (column 5). However, only four legislatures in this sample (Australia, Canada, Netherlands, and the UK) do not use a specialised budget committee during the approval stage of the budget, and all of these except in the Netherlands have severely restricted powers of amendment. Hence, these data provide a poor test for the committee hypothesis, and the result should not be over-interpreted. With regard to the budgetary unicameralism dummy, the coefficient has the wrong sign and is far from significant (column 6). I also used a more permissive version of this variable, where systems with second chambers that have powers over taxation but not expenditure (Germany) are also counted as bicameral, but

this did not substantively affect the result. There is no evidence in these data to support Heller's (1997) theory about the pro-spending bias of bicameralism. However, the limited occurrence of budgetary bicameralism in the sample (Australia, Italy, the Netherlands, and the US) again cautions against reading too much into this finding.

Finally, Table 16 estimates the effect of all of the five separate institutional features at the same time (column 7). The coefficient for the powers variable becomes even larger and is highly significant. Interestingly, the reversion and budgetary unicameralism variables come relatively close to significance at the 10 per cent level, but with the wrong sign, although the caveat above applies here, too. The coefficient for the withhold dummy retains the correct sign, but it is far from significant. Overall, these results provide further evidence that what really matters for fiscal performance are the amendment powers of the legislature.

Table 16: OLS estimates of other variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wehner index	-7.24 (6.67)						
Powers		-6.84 (2.60)**					-8.31 (2.77)***
Reversion			0.76 (2.72)				2.77 (1.93)
Withhold				-2.27 (2.16)			-0.85 (2.07)
Budget committee					1.43 (2.80)		-1.85 (3.61)
Budgetary unicameralism						1.11 (1.85)	4.26 (2.72)
Log of GDP per capita	-3.27 (2.22)	-2.28 (1.67)	-2.54 (2.37)	-3.13 (2.34)	-2.41 (2.52)	-2.50 (2.38)	-1.87 (1.81)
Working age population share	-1.72 (0.76)**	-1.42 (0.61)**	-1.51 (0.76)*	-1.62 (0.80)*	-1.53 (0.78)*	-1.53 (0.78)*	-1.17 (0.66)*
Old age population share	1.67 (0.37)***	1.55 (0.32)***	1.76 (0.32)***	1.76 (0.40)***	1.69 (0.38)***	1.71 (0.36)***	1.65 (0.36)***
Trade as share of GDP	0.05 (0.03)	0.03 (0.03)	0.05 (0.04)	0.06 (0.03)*	0.05 (0.04)	0.05 (0.04)	0.02 (0.02)
Constant	168.05 (70.91)**	138.84 (53.20)**	141.18 (70.45)*	154.82 (72.77)**	141.14 (73.02)*	142.32 (71.94)*	115.36 (56.51)*
Observations	25	25	25	25	25	25	25
Adjusted R-squared	0.52	0.63	0.48	0.51	0.49	0.49	0.59

Notes: * p < .1, ** p < .05, *** p < .01. Robust standard errors in parentheses. The dependent variable for all models is general government total outlays as a percentage of GDP multiplied by 100 (OECD 2005b). The dependent variable and all economic control variables are averaged over the 1999 to 2003 period. All institutional variables are standardised to range between zero and one. See text and data appendix for further details.

The results so far consistently indicate that variously defined indicators of legislative powers of amendment are the only legislative variable with a significant impact on public spending. I conduct some robustness checks with the simplest indicator, Von Hagen's (1992) dummy for limits on amendment powers. Table 17 confirms that the results are very robust. In the first column I add two additional institutional variables identified by Persson and Tabellini (2003) as significant determinants of the size of government, i.e. presidentialism and a plurality rule electoral system.⁵⁸ I then make the sample more homogenous, first by excluding the two presidential systems, i.e. the US and South Korea (column 2), and second by restricting the sample to OECD members that joined the organisation prior to 1993, which means dropping the Czech Republic, Hungary, Slovakia and South Korea (column 3). The results in column 4 are for an alternative indicator of the size of government, i.e. total revenues as a percentage of GDP (multiplied by 100). The coefficient for the amendment powers dummy remains significant throughout.

One of the most serious criticisms levelled at institutionalist research relates to the possibility of reverse causality. In other words, fiscal policy outcomes might affect a country's choice of budget institutions. While this problem is acknowledged in the literature, Fabrizio and Mody (2006: 14) highlight that the econometric challenge of 'identifying the exogenous component of fiscal

⁵⁸ Japan and New Zealand carried out reforms in 1994 and 1996 respectively that entailed a move from a majoritarian to a mixed electoral system (Persson and Tabellini 2003: 83) and are coded as majoritarian to account for the long term effect of the previous electoral system. Changing the coding for these two countries to reflect the new system does not substantively affect the results.

institutions is hard' and 'a hurdle that no one has yet crossed.' As an additional robustness check, I draw on the analysis in chapter five and use a dummy variable indicating former UK colonies (with independence in the past 150 years; see footnote 39) as an instrument, which assumes that this variable does not influence fiscal policy except through its effect on institutional arrangements.⁵⁹ With instrumental-variables estimation, the significance of the coefficient for limits on amendment powers is exactly at the 10 per cent level (column 5).

In the final three columns of Table 17, I use alternative data sources for the dependent variable, which also affects the sample characteristics (see Table 12). With Eurostat data, the sample is reduced to 20 cases, all of them parliamentary systems. With these data, the size of the coefficient for limits on amendment powers is very similar to the previous estimates, and it is significant at the 10 per cent level (column 6). When switching to GFS data supplied by the IMF, the coefficient retains the correct sign, but its size drops and it is no longer significant (column 7). This reflects the increasing heterogeneity of the sample, which now includes several Latin American countries (Argentina, Bolivia and Chile) as well as Israel, but excludes several cases for which the OECD supplies data (Canada, Greece, Ireland and South Korea). Once I account for increased sample heterogeneity by controlling for different levels of democracy with the Freedom House scores and by reintroducing the presidentialism dummy, the coefficient of interest is again very similar to the previous estimates and significant at the 5 per

⁵⁹ See Acemoglu (2005) for a detailed discussion of problems associated with instrumental variables in the comparative political economy literature.

cent level. These results provide assurance that the significance of amendment powers for fiscal policy is not dependent on a particular data source.

Overall, these cross-sectional results are very robust and suggest that, in the advanced industrialised democracies, restrictions on parliamentary powers to amend budgets constrain the size of the overall public sector relative to GDP by about 5 percentage points compared with systems that do not limit these powers.

Table 17: Robustness checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Amendments limited	-6.96 (2.20)***	-7.24 (2.20)***	-5.63 (2.53)**	-6.13 (3.02)*	-5.53 (3.20)	-5.72 (2.99)*	-2.53 (3.05)	-5.91 (2.78)**
President	-6.76 (4.51)							-12.45 (3.75)***
Plurality rule	1.51 (2.84)							
Freedom								4.10 (4.82)
Log of GDP per capita	-2.15 (1.79)	-2.38 (1.82)	-2.08 (2.94)	0.56 (2.27)	-2.62 (1.69)	-3.00 (2.43)	3.85 (1.83)**	4.15 (2.40)
Working age population share	-1.02 (0.73)	-1.56 (0.87)*	-1.65 (0.98)	-2.08 (0.93)**	-1.44 (0.60)**	-0.96 (1.20)	-1.45 (0.67)**	-1.36 (0.58)**
Old age population share	1.12 (0.37)***	1.18 (0.37)***	1.61 (0.47)***	0.82 (0.55)	1.49 (0.33)***	1.07 (0.54)*	1.27 (0.54)**	0.69 (0.61)
Trade as share of GDP	0.01 (0.02)	0.00 (0.02)	0.03 (0.03)	0.03 (0.04)	0.03 (0.03)	0.00 (0.03)	0.12 (0.06)*	0.06 (0.04)
Constant	120.64 (59.67)*	158.84 (70.76)**	152.15 (75.02)*	166.21 (82.93)*	145.84 (56.20)**	127.25 (100.28)	76.52 (33.20)**	77.11 (44.45)*
Method	OLS	OLS	OLS	OLS	IV	OLS	OLS	OLS
Dependent variable	Exp.	Exp.	Exp.	Rev.	Exp.	Exp.	Exp.	Exp.
Source of fiscal data	OECD	OECD	OECD	OECD	OECD	Eurostat	GFS	GFS
Observations	25	23 ^a	21 ^b	25	25	20	26	26
Adjusted R-squared	0.65	0.53	0.47	0.49	0.64	0.18	0.61	0.71

Notes: * $p < .1$, ** $p < .05$, *** $p < .01$. Robust standard errors in parentheses. The dependent variable is general government expenditure (Exp.) as a percentage of GDP multiplied by 100, except in column 4, where it is revenues (Rev.). See Table 12 for full details on the sources of fiscal data and the countries for which these are available. The dependent variable and all economic control variables are averaged over the 1999 to 2003 period. All institutional variables are dummies. See text and data appendix for further details. The instrumented variable in column 5 is Von Hagen's amendment limits dummy; in addition to the four standard controls for the second stage the first stage also includes the UK colony dummy. ^a Sample restricted to countries with parliamentary systems of government. ^b Sample restricted to OECD members before 1993.

6.4 Time-series cross-section analysis

Unfortunately, there is no comprehensive dataset that documents how all of the legislative institutions of interest have evolved over a longer period of time. On the other hand, parliamentary powers of amendment over the budget are highly time-invariant. Some countries did reform provisions governing amendment powers, such as France in 2001 (Chabert 2001) and New Zealand in 1996 (Lienert and Jung 2005: 330), but a fundamental switch from restricted to unrestricted powers of amendment or vice versa is very rare.⁶⁰ I do not address the possibility of reverse causality here. However, since constitutional provisions on amendment powers are costly to change, it is reasonable to argue that they can be treated as ‘exogenous’ in the short to medium run (Alesina and Perotti 1996: 4). In the following chapter, I use a case study approach to investigate the dynamics of reform and reconsider the endogeneity challenge.

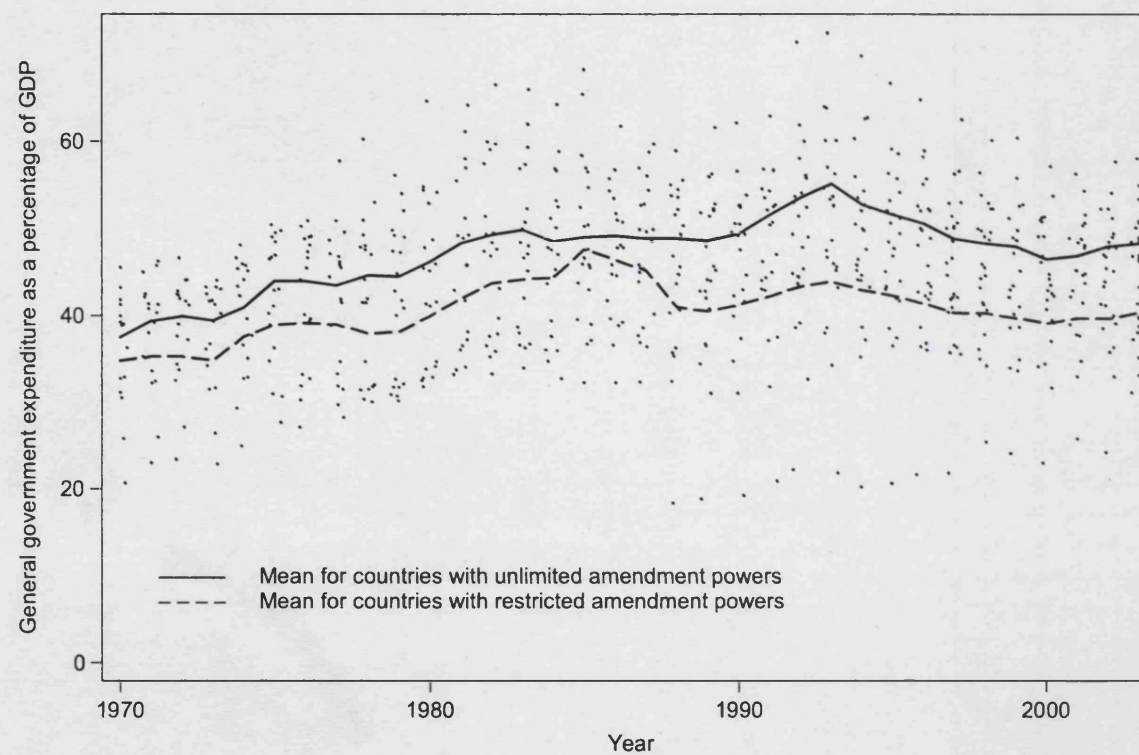
To exploit the variation of the non-institutional variables in the time dimension, I construct a panel dataset covering the period 1970 to 2003, for which the OECD publishes fiscal data (OECD 2005b). As in the cross-sectional analysis, there are

⁶⁰ In their comprehensive survey of budget reform in Latin American countries, Filc and Scartascini (2006: 14) find that legislative powers ‘are practically unchanged since the return of democracy.’ However, fundamental changes to parliamentary powers have occurred in some countries outside the sample used in this thesis. For instance, there were no restrictions in Poland until 1998, but article 220(1) of the constitution now prohibits amendments that result in a higher deficit than in the executive draft budget. Romania introduced similar restrictions with article 17(3) of the 2002 Law on Public Finance (Yläoutinen 2004).

no data for Mexico or Turkey, and a further three countries are omitted because they did not respond to the 2003 survey of budget procedures (Luxembourg, Poland and Switzerland). I thus maintain the sample of 25 cases used for the cross-sectional analysis. The resulting panel is unbalanced. Fiscal data for New Zealand are only available as from 1985. I exclude years prior to democratisation for countries that made a transition from authoritarian rule during the sample period, i.e. South Korea (1988), Portugal (1977), Greece (1975), and Spain (1978). The data series for the transition countries in the sample start later, i.e. for Hungary in 1991 and for the successor states of Czechoslovakia, the Czech Republic and Slovakia, in 1993 and 1994 respectively. The socio-economic data are readily available for the entire period (World Bank 2005). The variable of interest is the time-invariant dummy indicating limits on amendment powers. Several other institutional variables may affect spending levels and are either time-invariant or rarely changing. The sample contains no case that switched from pure presidentialism to other forms of government or vice versa. Only three countries implemented relevant reforms of their electoral systems during the sample period. Japan (1994) and New Zealand (1996) moved away from plurality rule and introduced mixed systems, while France briefly abandoned plurality rule during 1985 and 1986 (Persson and Tabellini 2003: 83-88).⁶¹

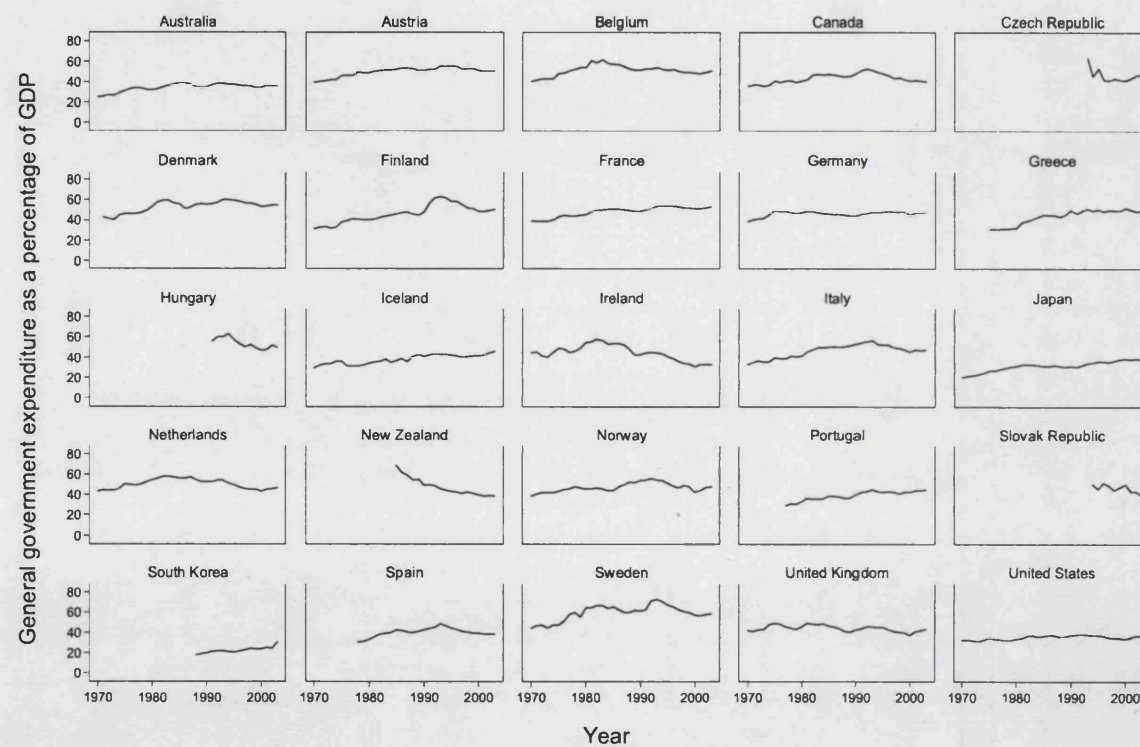
⁶¹ There were, of course, other reforms of electoral systems. For instance, Italy used proportional representation in the post-war period until changes triggered by a 1993 referendum introduced a mixed system combining proportionality and plurality. Proportional representation was reintroduced in 2005. The plurality rule dummy is not sensitive to such changes.

Figure 8: Public spending in 25 OECD countries, 1970 to 2003



Source: OECD (2005b).

Figure 9: Public spending in 25 OECD countries, 1970 to 2003, by country



Source: OECD (2005b).

Figure 8 provides a first impression of the overall shape of the data. It depicts the trend in general government spending against GDP over the sample period. Figure 8 includes separate means for countries with and without restrictions on legislative powers to amend the budget, which show that countries with restrictions have lower spending ratios throughout the sample period.⁶² Until the mid-1980s, there is an overall upward trend in spending, but from the mid-1980s, there is more erratic movement in these data. Figure 9 plots the development of the expenditure to GDP ratio over the sample period for each country separately. The country plots confirm the impression from the pooled scatter plot. Most countries' expenditure ratios increase in the first half of the sample period, but then the patterns become more diverse. For instance, between 1982 and 2000 Ireland drastically cut its expenditure ratio from almost 58 to less than 32 per cent of GDP. Iceland, on the other hand, added 5 percentage points over the same period, increasing its ratio from about 37 to 42 per cent of GDP. Other countries stabilised their ratios from the 1980s onwards, for instance Austria.

I first estimate the effect of limiting parliamentary amendment powers with a model that excludes unit fixed effects.⁶³ To mitigate omitted variable bias, I

⁶² The dip in mean spending in the late 1980s for countries with restrictions is emphasised by the inclusion of South Korea, which has a very low expenditure ratio, but not entirely attributable to it.

⁶³ The Hausman specification test can be used to test the null hypothesis that the fixed and random effects estimators do not differ substantially (Gujarati 2003: 651, Baltagi 2005: 19). Using the basic model, i.e. including only the four socio-economic controls and the lagged dependent variable, this yields a test statistic of 54.53 with $p < .0001$, so I reject the null hypothesis. Random effects are not appropriate.

include various time-invariant or hardly changing variables, in particular the dummies for OECD membership prior to 1993, former UK colonies, presidentialism and plurality rule. I also control for a possible Maastricht effect in the run-up and during monetary union by including a dummy variable (coded 1 = 1992 or later, 0 = otherwise) for the twelve members of the Euro area, the so-called EU12.⁶⁴ Since the prospect of EU membership in Eastern Europe may have induced fiscal tightening to meet convergence criteria, I also include a dummy to indicate former communist countries or their successor entities. Here, I adopt the Beck and Katz (1995) standard, viz. a lagged dependent variable on the right hand side to mitigate autocorrelation and panel corrected standard errors. In substantive terms, the lagged dependent variable accounts for the stickiness of spending by capturing the influence of past expenditures on annual levels (Davis *et al.* 1966).

Table 18 presents the results. I start with estimates for the entire sample period (1971 to 2003) using OLS with year dummies and a lagged dependent variable (column 1). The coefficient for the amendment dummy has the predicted sign and is significant at the 5 per cent level. I then estimate the same model using only the

⁶⁴ The EU12 are Austria, Belgium, Finland, France, Germany, Greece (since 2001), Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. I experimented with different versions of this variable. First, I used a dummy for the EU15, i.e. the EU12 plus Denmark, Sweden and the UK. Second, following Volkerink and De Haan (2001: 236), I used different years from which onwards the EU12 dummy is set equal to one. Only with a start date of 1997 or 1998 is the coefficient both negative and significant. However, since this did not substantively affect the coefficients for the variable of interest, I do not report these results here.

data for the second half of the sample period (1988 to 2003).⁶⁵ The coefficient of interest is large, has the predicted sign, and is significant at the 1 per cent level (column 2). The FEVD specification suggests that limitations on amendment powers account for a difference in general government expenditure of about 3 per cent of GDP over the entire sample period (column 3). In the final column, I again restrict the sample period to the second half of the sample. The effect on general government expenditure is estimated to represent more than 5 per cent of GDP (column 4), which is similar to the results obtained in the cross-sectional analysis. The evidence is mutually reinforcing.

⁶⁵ Restricting the time period to the first half of the full sample (1971-1987) results in the loss of four cases. Moreover, three of the explanatory variables turn into constants, i.e. the dummies for the EU12, former communist countries, and OECD members prior to 1993. This limits comparability, so these estimates are not reported.

Table 18: Time-series cross-section analysis, 1971 to 2003

	(1)	(2)	(3)	(4)
Amendments limited	-0.39 (0.19)**	-0.84 (0.30)***	-2.96 (0.19)***	-5.62 (0.24)***
EU12	-0.10 (0.15)	0.08 (0.16)	0.19 (0.79)	-0.02 (0.30)
President	-0.83 (0.24)***	-1.59 (0.37)***	-3.65 (0.75)***	-6.15 (0.29)***
Plurality rule	-0.24 (0.18)	-0.03 (0.21)	-0.07 (0.71)	0.37 (0.30)
Former UK colony	-0.01 (0.25)	-0.25 (0.42)	1.16 (0.69)*	3.09 (0.30)***
Former communist country	-1.61 (1.01)	-1.82 (1.13)	-3.64 (0.67)***	-5.35 (0.29)***
OECD member before 1993	-1.13 (0.85)	-1.78 (1.21)	-0.59 (0.57)	-1.82 (0.31)***
Log of GDP per capita	-0.02 (0.21)	0.07 (0.31)	-2.53 (1.06)**	-3.32 (1.37)**
Working age population share	-0.01 (0.03)	-0.07 (0.06)	0.05 (0.06)	0.39 (0.11)***
Old age population share	0.15 (0.05)***	0.14 (0.08)*	0.14 (0.07)**	0.60 (0.13)***
Trade as share of GDP	-0.00 (0.00)*	-0.01 (0.00)***	-0.05 (0.01)***	-0.07 (0.01)***
Lagged dependent variable	0.92 (0.01)***	0.90 (0.02)***	0.82 (0.02)***	0.63 (0.04)***
Constant	4.38 (2.59)*	9.57 (4.25)**	33.85 (0.74)***	23.67 (0.86)***
Method	OLS	OLS	FEVD	FEVD
Country dummies	No	No	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Countries	25	25	25	25
Years	1971-2003	1988-2003	1971-2003	1988-2003
Observations	703	382	703	382

Notes: * $p < .1$, ** $p < .05$, *** $p < .01$. Panel corrected standard errors in parentheses. The dependent variable is general government expenditure as a percentage of GDP multiplied by 100 (OECD 2005b). The second stage of FEVD includes the dummies for amendment limits, presidentialism, plurality rule, former UK colony, former communist country and OECD membership prior to 1993.

Conclusions

There is a growing interest in the fiscal effects of institutional variables. Several findings in this chapter add to this research. In terms of variables and data, the chapter serves as a reminder that this research agenda would benefit from paying more careful attention to the dependent variable. The choice of fiscal indicator should be closely linked to theoretical work. Similarly, the choice of data source should consider the implications of different classifications and reporting standards. In terms of methods, fixed effects vector decomposition appears to be a useful complement to standard cross-section and panel analysis in a context where the variables of interest are rarely changing or time-invariant, which is common in institutionalist research.

In substantive terms, this analysis suggests that we should not rush to accept the superiority of complex composite indices over more simple and transparent variables when investigating institutional determinants of fiscal policy. This chapter is the first to directly compare different indices of legislative budget power on the basis of a common dataset. The conclusion is that the empirical performance of composite measures of legislative power is driven by one particular variable, i.e. the power of the legislature to amend the budget (see Table 19). Other budget institutions that are often combined into indices in the fiscal institutionalist literature do not appear to significantly affect the size of the public sector. A larger sample of countries would allow for more fine-grained assessment

of the fiscal impact of various institutional features. However, the finding that amendment powers have the most explanatory power amongst a range of legislative institutions discussed in the literature is very robust and unlikely to be affected. These findings confirm the analysis in chapter three with regard to the impact of amendment powers on fiscal policy. The withholding variable has the expected sign, but the coefficient falls short of conventional levels of statistical significance. This could be due to the crudeness of this variable, in the sense that it does not measure the extent to which impoundment is allowed, or the quality of the data. This deserves further attention in follow-up research, and highlights the desirability of more fine-grained and high quality data. The overall conclusion of chapter three is confirmed that many variables affect the budgetary power of the legislature, but only very few have a clear-cut impact on fiscal policy. It is, however, important not to prematurely reject the possibility that institutional features other than amendment limits can enhance fiscal discipline in legislative decision-making, which is one reason why chapter seven revisits several of the mechanisms discussed here and presents a more detailed assessment of them.

Finally, these results offer some intriguing possibilities for further research, for example in connection with work on constitutional economics. The design of the power of the purse is a basic constitutional choice that fundamentally affects the role of the legislature in public finance. Data for this variable can be collected relatively easily for a large number of countries from existing surveys and constitutional documents, thus making it a strong candidate for inclusion in further work on the economic effects of constitutions. Recent work by Cheibub

(2006) goes into this direction, and qualifies regime effects of public spending with a more fine-grained understanding of executive control over fiscal policy. Another possibility for taking this research forward is to consider possible interactions of amendment powers with time-varying measures of political fragmentation in the legislature, which other research suggests impacts on fiscal policy outcomes (e.g. Perotti and Kontopoulos 2002, Volkerink and De Haan 2001). Follow-up research should explore these interactions more comprehensively, which is beyond the scope of this thesis.

Table 19: Summary of findings relating to institutional hypotheses

Variable	Expected sign	Actual sign	Significant
Von Hagen index	-	-	Yes
Amendments limited	-	-	Yes
Amendments offsetting	-	-	Yes
Amendments cause fall	-	+/-	No
One vote on expenditure	?	+	No
Global vote	?	+/-	No
Alesina index	-	-	Yes
Amendment powers	-	-	Yes
Reversionary budget	?	-	No
Wehner index	?	-	No
Powers	-	-	Yes
Reversion	?	+	No
Withhold	-	-	No
Budget committee	-	+/-	No
Budgetary unicameralism	-	+	No

Notes: Expected signs for the Wehner index and its components refer to standardised versions. See text and Data Appendix for further details. Here, only statistically significant variables are indicated with grey shading.

7 Budget reform and legislative control in Sweden

As highlighted at several points in this thesis, legislatures have a poor reputation in much of the literature on public finance. In Niskanen's (1971) classic public choice model the legislative sponsor is too powerless to act as an effective check on budget-maximising bureaucrats, while the literature on budget institutions regards constitutionally unfettered legislatures as fiscally dangerous (Kirchgässner 2001). In the case of Sweden prior to its budget reforms in the mid-1990s the *Riksdag*, the country's unicameral Parliament, was widely blamed for contributing to poor fiscal performance. Commentators describe the role of the *Riksdag* in the old system as 'undisciplined' (Blöndal 2001: 37). At the time, the need for change was strongly felt among parliamentarians and executive officials. Ensuing reform efforts culminated in the introduction of a new budget process in 1996 that also fundamentally reorganised the way the *Riksdag* deals with the state budget (Molander 1999 and 2001).

The Swedish budget reforms are now approaching a ten-year anniversary and hence can be subject to an interim assessment. While there are good overviews of the Swedish reforms (Molander 1999, Blöndal 2001, Hallerberg 2004: 153-168), this study is the first to provide a more detailed assessment of the impact of the reforms on the budgetary role of the *Riksdag*. It focuses in particular on whether there is a trade-off between legislative control and fiscal discipline, i.e. the ability to contain public spending within affordable totals. This chapter further makes a

contribution to a neglected area of inquiry, namely the impact of legislative organisation on fiscal policy. Fiscal institutionalists typically consider the effects of only a limited set of legislative variables, notably powers to amend the budget. They argue that restrictions on parliamentary amendment powers are conducive to fiscal discipline (Von Hagen 1992, Alesina *et al.* 1999). On the other hand, the effect of legislative organisation has not been widely studied. An exception is the work of Crain and Muris (1995) on committee structures and fiscal policy. The Swedish reforms did not alter Parliament's formal powers over the budget, which remain unconstrained, but they reengineered the process by which the *Riksdag* makes budgetary choices. This allows us to study the impact of a change in institutional arrangements on legislative budgeting while holding constant a number of other factors, including the main institutional determinant of fiscal performance identified in the previous chapter.

The case study approach has advantages and disadvantages. Cross-national quantitative research is often better suited to produce results that can be generalised.⁶⁶ However, in this context the case study approach has several strong advantages. First, Sweden stands out among Western European countries in the extent to which it has reengineered the budget process and improved its public finances in the past decade (Hallerberg 2004). The reforms resemble a natural experiment 'where a single unit undergoes unmanipulated change through time

⁶⁶ I deliberately eschew referring to 'the case study method', since it is possible to distinguish several distinct methods using case studies. Notably, Gerring (2005: 343) distinguishes three case study methods, each combining temporal and spatial variation in a distinct way to assess covariational evidence.

that approximates a true experiment' (Gerring 2004: 350, see also Gerring 2007: 245). This makes Sweden a particularly suitable country for studying how institutional engineering may improve fiscal performance. Second, the empirical efforts of fiscal institutionalists focus on quantitative comparative research, where institutions are largely treated as exogenous (Alesina and Perotti 1996: 4). This applies more broadly to the empirical research on the policy effect of political institutions (Congleton and Swedenborg 2006b: 17, Acemoglu 2005: 1033, March and Olsen 1984: 740). Case studies are better suited to explore exact causal mechanisms and to tackle the problem of institutional endogeneity that bedevils the fiscal institutionalist research programme (Poterba 1996: 10). Third, case studies can complement quantitative comparative research when they use more precise data than are available for larger samples of countries (Lieberman 2005: 440-441), as in part three of this chapter. Moreover, in this chapter we reconsider the issues of sequencing and committee centralisation during the legislative stage, which could not be fully investigated with the quantitative data available for the analysis in the previous chapter. Finally, the case study method is far better suited for exploring the tension between fiscal discipline and legislative control, since an assessment of the latter requires a more fine-grained, qualitative approach. Hence, this chapter complements the cross-national and quantitative analysis carried out thus far with an in-depth study of a particularly relevant case.

It is worth expanding on the issue of case selection, beyond the point that the extent of reform makes Sweden a prime candidate. The key here is how case studies in conjunction with cross-case evidence can yield a superior research

design than either stand-alone case studies, which are open to accusations of sample bias, and large-N evidence, which often insufficiently elucidates exact causal mechanisms (Gerring 2007). To reap the benefits of combining methods, Lieberman (2005) outlines a ‘nested analysis’ approach in which small-N analysis follows large-N, typically but not necessarily quantitative, analysis. In this framework, small-N analysis in the form of case study research can help to confirm theory through additional evidence, or to build new theory through an inductive process. The theory-building approach is suitable when model-testing with large-N analysis yielded unconvincing results, whereas the model-testing approach is used when the large-N analysis yielded results that are deemed satisfactory. Lieberman posits that this distinction should inform case selection. Lieberman recommends ‘on-the-line’ selection for model-testing, which entails picking cases based on different scores on the central hypothesised explanatory variables. In contrast, theory-building small-N analysis should use a sample of ‘off-the-line’ cases, with different initial scores on the dependent variable.⁶⁷ This study of the Swedish reforms and their impact can be thought of as a version of the latter. The previous chapter identified a single legislative variable as a central determinant of fiscal performance, i.e. parliamentary powers to amend the budget, while failing to reject the null hypothesis for a range of other variables. Sweden’s fiscal performance improved markedly following its institutional reforms, whilst the formal powers of its Parliament to increase, decrease or otherwise change the

⁶⁷ The concept of ‘on’ and ‘off-the-line’ cases makes reference to a graph that plots predicted against actual scores of the dependent variables. On-the-line cases are those that fall onto or are close to the 45-degree line, which represents perfect prediction, whereas off-the-line cases are those that stray more substantively from the line (see Lieberman 2005: 445).

budget were not affected. Holding this central variable constant, we can explore whether, which and how exactly institutional changes might have contributed towards Sweden's fiscal turnaround.

Because case studies are both extensively used in social science research and at the same time often poorly defined, this concept has multiple meanings depending on author and approach. Gerring (2004: 342) defines a case study as 'an intensive study of a single unit for the purpose of understanding a larger class of (similar) units.' With this definition, the study of a 'unit' at discrete points in time yields different 'cases.' This goes against the grain of the typical casual interpretation, which may refer to this chapter as presenting a single case study. However, Gerring (2004: 344) correctly points out that the $N = 1$ research design is 'not logically feasible', since it offers no covariation whatsoever with which to study causal relationships. In the absence of both spatial and temporal variation, causal inferences are impossible. More accurately, the before-and-after design in this chapter couples temporal variation with spatial non-variation to further explore the effects of legislative institutions on fiscal policy. The unit here is 'Sweden' and there are two cases that might be labelled 'pre-reform' and 'post-reform.'

In terms of data, this analysis draws on official documents and a set of interviews conducted with senior budget officials in Stockholm during May 2005, who are cited under condition of anonymity. In addition, the chapter evaluates primary data on legislative amendment activity and its impact on public spending prior to and after the reforms, covering the period 1985 to 2005. I proceed as follows. In

section one I consider sources of a legislative pro-spending bias in budgeting. Section two reviews Sweden's pre-reform setting and the main elements of the reforms. The impact of the reforms on the budgetary role of the *Riksdag* is assessed in the third part. In the final section, I briefly discuss whether the reforms have been accompanied by a broader shift in parliamentary emphasis from ex ante influence to ex post scrutiny and accountability for performance. While this is to some extent a separate discussion, a comprehensive assessment of the state of legislative control of public finance has to go beyond the approval stage. The conclusion draws together broader implications.

7.1 Sources of a legislative pro-spending bias

This section considers sources of a pro-spending bias in legislative decision-making and looks at suggested institutional solutions. The debate on the common pool resource problem in budgeting draws on the collective action literature (Olson 1965). Ostrom (1990) uses the term 'common pool resources' to refer to natural resources that are jointly used by a number of individuals. Such shared resources are threatened by overuse that would lead to their eventual destruction (Hardin 1968). The common pool resource problem can be understood as an n-person prisoners' dilemma game. Although each individual acts rationally, the outcome is sub-optimal in social terms. This result can be improved by co-operation that may emerge if the game is repeated.

This basic idea has also been applied to budgetary decision-making (e.g. Strauch and Von Hagen 1999, Poterba and Von Hagen 1999). Here, public revenues constitute the common pool of resources. When the benefits of spending can be targeted at particular constituencies and costs distributed across a broader spectrum of taxpayers, this creates a bias away from economically efficient outcomes (Weingast *et al.* 1981). As a result, public spending is likely to be higher than when decision-makers internalise the full cost of their actions. The literature suggests that centralised or hierarchical procedures can mitigate tendencies to increase public spending (Von Hagen and Harden 1995). Notably, several studies conclude that limitations on legislative powers to amend the budget help to safeguard fiscal discipline (e.g. Von Hagen 1992, Alesina *et al.* 1999). As will be discussed in section two, the Swedish reforms did not affect the formal powers of the *Riksdag* to amend the budget, but they included a number of other institutional adjustments. Some of these are also discussed in the literature.

Another institutionalist hypothesis is that the size of budgets is influenced by the way the voting process is sequenced. Von Hagen (1992) initially suggested that fiscal discipline is enhanced when a vote on aggregate spending precedes allocational decisions. However, this is contradicted by the work of Ferejohn and Krehbiel (1987) who show that such a process may sometimes result in relatively large budgets. They assume, however, that the same group of legislators makes both the aggregate as well as allocational decisions. Subsequently, Von Hagen revised his initial claim and argued that it is not a reordering of the voting sequence that is decisive, as it has no impact on the share of the tax burden that

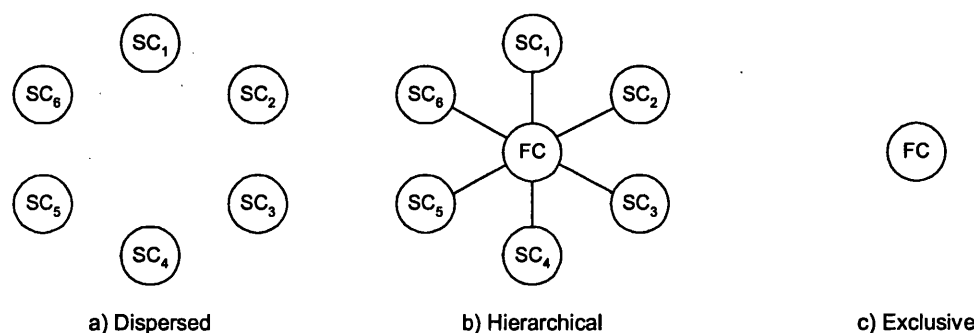
actors consider, but rather the centralisation of decision-making (Hallerberg and Von Hagen 1997). Thus, the benefit of the two-step process depends crucially on who makes the first decision on aggregates. If this decision is delegated to a group of actors who are more likely to consider total costs than the legislature as a whole, fiscal discipline will be strengthened. However, Perotti and Kontopoulos (2002: 196) summarise, 'if the same agents decide at both stages, by backward induction they will take into account the likely allocations in the second stage when setting the total budget first.' Hence, delegation of the aggregate decision to a finance or budget committee, which can impose a hard budget constraint on various sectoral committees, should help to contain overall spending.

Despite Ferejohn and Krehbiel's (1987) challenge to the conventional wisdom, many practitioners strongly believe in the effectiveness of a 'top-down' process, arguing that it forces politicians to acknowledge the implications of their decisions by making trade-offs more explicit (Molander 2001: 42). The empirical evidence is mixed. Helland (1999) presents tentative results for European countries that challenge Von Hagen's initial intuition. However, based on data for Latin American countries, Alesina and colleagues (1999: 270) conclude that 'a voting procedure in which the level of deficits and in some cases the size of spending come first leads to more fiscal discipline than the alternative procedure in which the budget balance is determined at the same time or after the discussion on composition.' This debate is set to continue. What is often missing from empirical investigations into this issue, including the analysis in the preceding chapter, is a consideration of whether the two-step process is combined with a delegation of

the aggregate decision to a group of actors with strong incentives to consider overall costs. In this chapter particular attention is paid to this issue.

Less well-known work has investigated the impact of legislative committee structures on fiscal policy. Crain and Muris (1995: 319) argue that ‘consolidating control within one committee is an institutional means to overcome the common pool problem; it establishes a mechanism to contain spending pressures.’ With a balkanised committee setting, where partial spending decisions are distributed across a number of different committees, no one committee is responsible for the overall level of expenditure, which encourages free-riding. Using state-level data from the US they present empirical evidence that the centralisation of spending decisions in a single committee restrains expenditures compared with systems where decisions are balkanised across different committees.

Figure 10: Committee structures for budgetary decision-making



To illustrate the argument put forward by Crain and Muris, Figure 10 presents stylised versions of the three main types of committee structures that parliaments in the industrialised democracies use for the budget approval process (see

Organisation for Economic Co-operation and Development [OECD] 2002: 164). In what I call the 'dispersed' model, depicted on the left hand side of Figure 10, the different sectoral committees (labelled SC) make separate spending decisions over the parts of the budget that fall under their jurisdiction. With sectoral committees I refer to legislative committees that have responsibility for a specific sector of government activity, such as health, education or defence. This is in contrast to some types of committees that have a government-wide remit, such as budget committees. In the absence of binding constraints, such as hard expenditure ceilings imposed by law or limitations on parliamentary amendment powers, the work by Crain and Muris suggests that the dispersed committee structure encourages spending increases.

Figure 10 also illustrates two possible institutional fixes for the common pool resource problem in the form of centralisation. The 'hierarchical' model imposes a finance committee (labelled FC) at the centre of decision-making that has the power to determine a total expenditure ceiling as well as sectoral ceilings, which are binding for the sectoral committees. The latter still play a role in legislative budgeting, but in considering allocations within each sector they are forced to adhere to the ceilings established by the finance committee. A second solution is the 'exclusive' model, in which a finance committee is the sole budgetary decision-maker, and sectoral committees are excluded from the process. Following Crain and Muris, the latter two models introduce centralisation and therefore would be expected to contain the common pool resource problem in the legislative arena.

The main alternative to the fiscal institutionalist approach emphasises partisan dynamics. Notably, several studies present evidence that minority government impacts on fiscal performance by delaying adjustment to economic shocks (Roubini and Sachs 1989, Edin and Ohlsson 1991, Alt and Lowry 1994). Other authors find that the design of the electoral system influences fiscal outcomes (Milesi-Ferretti *et al.* 2002, Persson and Tabellini 2003, Hallerberg and Marier 2004). These contributions are important, but they are not particularly relevant for the present study, since these variables can essentially be treated as constants over the period under investigation, i.e. 1985 to 2005. Governments consisted of Social Democratic minority administrations, with the exception of the interval between 1991 and 1994, when the party briefly lost power to a centre-right minority coalition. Similarly, the electoral system has been based on proportional representation, although there were some modifications (Bergman 2004: 205-206). Therefore, the focus of this study is firmly on the effect of the redesign of the budget process.

To conclude, the common pool resource problem in legislatures is potentially large and gives rise to a pro-spending bias in decision-making. The literature on budget institutions suggests that institutional devices can help to protect fiscal discipline, notably limitations on legislative powers to amend the budget. Another suggested solution is to sequence the legislative voting process so that a vote on aggregates precedes allocational decisions, but the effectiveness of this device for containing public spending is disputed. A third suggested solution is to centralise

the committee structure for budget approval. In practice, as will be shown, the latter two may go hand in hand, which makes their separate effects impossible to disentangle. These last two mechanisms were important ingredients of the Swedish reforms, to which we now turn.

7.2 Reforming the Swedish budget process

This section reviews the institutional arrangements for legislative approval of the budget both prior to and after the reforms in the mid-1990s. The pre-reform arrangements were highly fragmented and lacked co-ordinating mechanisms. The government introduced parts of the budget in January. Over the following months, it would introduce further appropriations, sometimes comprising about a third of the overall budget, as they were being finalised. Appropriations were parcelled out to various sectoral committees of the *Riksdag* for consideration. The government typically tabled a supplementary budget to update its budget proposal at the end of April, based on revised macroeconomic forecasts. This kicked off a second round of scrutiny that again involved various sectoral committees with no overall co-ordination. Parliamentary approval proceeded on an item-by-item basis and was typically concluded in June, before the beginning of the fiscal year in July. As a result, aggregate spending and the deficit were unpredictable until the very end of this process.

The piecemeal structure of the pre-reform process was also reflected in balkanised committee authority. The various committees of the *Riksdag* have responsibility for both legislation as well as appropriations relating to their particular jurisdiction. A Finance Committee existed under the old system, but it had no special responsibility apart from scrutinising broad guidelines for budget policy. However, these did not contain any detailed expenditure targets. No single committee had responsibility for fiscal aggregates. Rather, sectoral committees deliberated without a hard budget constraint and consistently generated proposals to increase appropriations under their jurisdiction. As one official interviewed for this study put it, under the old system members of sectoral committees felt a 'loyalty' towards their spending areas. Moreover, expenditure decisions were poorly co-ordinated with revenue measures that were mainly introduced in the autumn and dealt with in a separate Committee on Taxation. In short, prior to the reforms the committee process in the *Riksdag* was highly balkanised and resembled the 'dispersed' model in Figure 10.

The Secretariat of the *Riksdag* Finance Committee illustrates the outcome of budgetary decision-making under the old system with the hypothetical example that is reproduced in Table 20. For simplicity, it is assumed that the legislature consists of three parties with none of them having an outright majority of seats. Moreover, any two of them can form a coalition that commands a majority of seats. Table 20 details hypothetical proposals of the three parties and their net effect. Items that increase the deficit are given a negative sign, and vice versa. In this case, all parties have deficit-neutral preferences, i.e. the net effect of their

proposed changes is zero. However, because each party represents different constituencies, they disagree about allocational decisions.

Table 20: Hypothetical budgetary outcomes with item-by-item voting

	Government	Party A	Party B	Outcome
<i>Seat share</i>	<i>40%</i>	<i>35%</i>	<i>25%</i>	
Expenditure increase	-1000	-1000	-500	-1000
Revenue increase	400	0	200	200
Saving one	300	300	300	300
Saving two	300	0	0	0
Saving three	0	700	0	0
Net change	0	0	0	-500

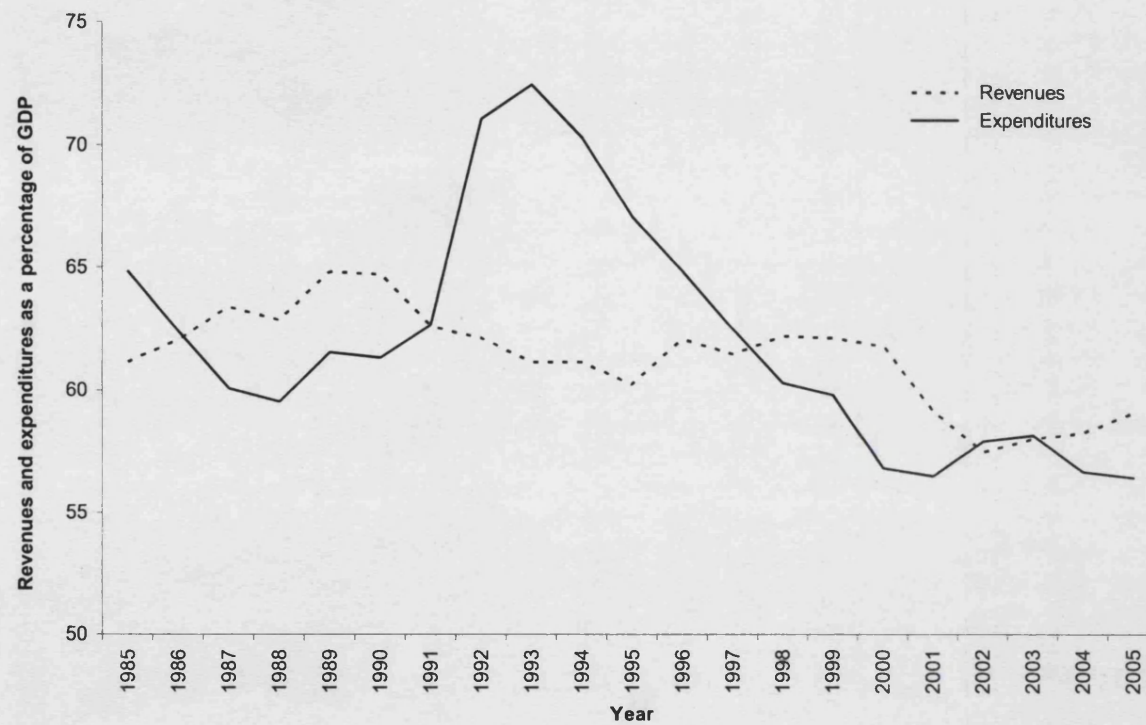
Source: Riksdag Finance Committee.

Given the preference constellation in Table 20, we can derive the outcome of a voting process that proceeds on an item-by-item basis. The first result is that the governing party and party A agree to increase expenditures. However, party B only consents to half the increase in revenues that the government proposes; the median wins. Third, all parties agree on the desirability of a saving on item one, but there is no majority for any further savings elsewhere in the budget. The overall outcome of the item-by-item voting process is given in the final column. Additional revenues and the saving on item one cover only half of the new expenditures. The net effect is an increase in overall spending and a higher deficit, even though all parties agree on the desirability of fiscal discipline.

Efforts to reform the budget system took several years and were propelled forward by economic crisis. In October 1990 the *Riksdag* established a commission to review parliamentary procedures. Soon after, the country was hit by a pronounced macroeconomic crisis. Figure 11 shows the dramatic deterioration of the general government financial balance. Against this background, the investigation greatly

gained in urgency. In its deliberations, the commission also considered the unflattering findings of a study prepared by a Finance Ministry official (Molander 1992). It assessed Sweden's budget institutions on the basis of a framework developed in Von Hagen's (1992) work on budgeting in the European Community, and found that Sweden had the second worst institutions among thirteen countries, only slightly ahead of Italy (see also Molander 1999: 202-208). The commission produced recommendations in June 1993.

Figure 11: General government finances in Sweden, 1985 to 2005



Source: OECD (2005b).

The process for adopting the recommendations was cumbersome. The proposed reforms to the budget process required adjustments to the Riksdag Act, which meant that they also had to be considered by the Committee on the Constitution. In Sweden, parliamentary procedures have special importance and are more entrenched than in many other countries. Provisions fall into two categories, main and supplementary. Changes to the former require approval twice to become effective; before an election and thereafter. The reforms entailed adjustments to several main provisions in chapters three and five of the Riksdag Act. The changes were submitted to Parliament in December 1993 and received approval. Following elections in September 1994, in which the Social Democrats regained power from the centre-right coalition, Parliament approved the amendments for the second time, thus paving the way for the implementation of the new process. The fact that approval was forthcoming despite a change of government underlines the broad consensus in favour of the reforms.

A range of reform measures were carried forward in the mid-1990s that are more fully discussed elsewhere (Molander 1999, Hallerberg 2004: 160-166). The budget was reorganised into 27 'expenditure areas' that greatly systematised the presentation of appropriations (Blöndal 2001: 57). Sweden also moved from a 'broken' fiscal year, running from the beginning of July to the end of the following June, to the calendar year model (Tarschys 2002: 79). For transition purposes, the 1995/96 fiscal year was extended to cover 18 months. The reform of the budget process was further combined with an extension of the electoral term from three to four years. Moreover, Sweden got its first organic budget law

(Government Commission on Budget Law 1996). The law greatly improved legal clarity and transparency, for instance by limiting off-budget expenditures and introducing gross budgeting. Open-ended appropriations used in particular for social benefit programmes were abolished. Finally, the restructuring of the budget process introduced top-down decision-making, involving the determination of aggregate limits prior to allocational decisions.

The move to top-down budgeting changed the sequence of the parliamentary process. Parliament would from now on vote first on budget totals before deciding individual appropriations. The first step was for a Spring Fiscal Policy Bill to propose aggregate expenditure ceilings for the upcoming budget plus two further years, as well as indicative ceilings or 'frames' for the allocations across the 27 expenditure areas. This bill was tabled for the first time in April 1996, preceding the presentation of the draft budget by five months. The Finance Committee received responsibility for scrutiny of the Spring Fiscal Policy Bill. Following parliamentary approval of the bill in June the executive would proceed to finalise a draft budget to be presented to Parliament in September, more than three months before the beginning of the new fiscal year. In short, the reforms changed the parliamentary voting order by requiring an aggregate decision prior to allocational choices.⁶⁸

It should be noted that the role of the Spring Fiscal Policy Bill has since been adjusted. Many parliamentarians apparently felt that the process in the second half

⁶⁸ The relevant formal rules are contained in article 12 of chapter five of the Riksdag Act.

of the 1990s was too cumbersome and amounted to making budgetary decisions twice a year (Finansdepartement 2000). In its report, the Parliamentary Review Commission (2001: 9) recommended a refocusing of parliamentary deliberations on the draft budget to the autumn. The Spring Fiscal Policy Bill now contains general guidelines for budget policy, but it no longer serves the purposes of fixing expenditure ceilings and indicating frames for the expenditure areas. The government now uses the Budget Bill in September to propose aggregate expenditure ceilings for the medium-term. The ceilings are approved in nominal terms and cover all state expenditure and public pensions, excluding interest payments. While ceilings were initially approved three years in advance, in recent years the setting of medium-term ceilings has been delayed, officially due to a pending evaluation of economic growth potential and possibly also to retain flexibility for the period following elections.

In conjunction with the two-step decision-making procedure, the reforms centralised the committee process along the lines of the 'hierarchical' model in Figure 10. The Finance Committee has responsibility for the aggregate spending total as well as frames for each of the 27 expenditure areas. Based on the work of the Finance Committee, the first parliamentary decision in the autumn is now on the expenditure frames for the upcoming budget. Fifteen sectoral committees then have responsibility for between one and four expenditure areas and make allocational proposals within the approved ceilings. Sectoral committees may propose to shift funds between items within an expenditure area, but they may not breach the total set for that area. In effect, a hard budget constraint has been

imposed on sectoral committees. Members on the sectoral committees initially resisted this change, but against the backdrop of fiscal crisis, the reformers assembled enough support for the new process to be accepted.

The specific voting procedure is crucial. The report of the Finance Committee contains a proposal as well as reservations from the opposition parties that cover total spending, the allocation of expenditure across the different areas as well as revenue changes. These are treated as packages, unlike in the previous system where shifting majorities could form on individual items. Under the new system, opposition proposals are eliminated until one main alternative remains (Molander 2001: 36). Opposition parties are ideologically fragmented and typically do not unite against the government, but only support their own proposal. Under these conditions even a minority government can obtain the support of more than half of the members voting.⁶⁹ In practice, pre-budget consultations between the Social Democrats and their legislative allies, the Left Party and the Green Party, have so far ensured broader support.

This overview shows that the reforms fundamentally reorganised legislative decision-making in a way that appears conducive to containing the common pool resource problem. A central change was to institute a vote on aggregates prior to allocational decisions. At the same time, the committee structure for budget scrutiny was centralised by giving the Finance Committee an overall co-ordination function, thus ending the balkanisation of the previous system. The

⁶⁹ Articles 5 and 6 of chapter five of the Riksdag Act deal with the voting procedure.

budget proposals of different parties are now considered as packages, which enables an overall perspective on fiscal policy and strengthens the agenda setting power of a minority government. In the following section, I consider the impact of the reforms on the budgetary role of Parliament.

7.3 Assessing the impact on legislative budgeting

By any standards, Sweden managed an impressive fiscal turnaround in the second half of the 1990s. Figure 11 shows the widening gap between general government revenues and expenditures at the beginning of the decade, with the deficit exceeding 11 per cent of Gross Domestic Product (GDP) in 1993. By the end of the decade, macroeconomic conditions had stabilised and the government was back in surplus. Previous studies suggest that the new budget process should be more conducive to the maintenance of fiscal discipline (Molander 1999: 207-208) and present tentative conclusions regarding its impact on the role of Parliament (Blöndal 2001: 42). At the time of writing, nine budgets had been passed using the new process outlined in the previous section. This provides a critical mass of evidence to allow an initial assessment of the impact of the reforms on legislative budgeting. I first consider whether and what kind of changes can be observed, before discussing in greater detail to what extent any changes may be attributed to the new budget process.

Most studies on the effect of budget institutions use broad indicators of fiscal performance as the dependent variable, typically public debt or deficit measures. This makes sense for studies that consider the overall effect of budget institutions and use indices that combine a number of structural variables (e.g. Von Hagen 1992, Alesina *et al.* 1999). However, such broad indicators of fiscal performance make it difficult to isolate the effect of parliamentary institutions. With case studies it is possible to use much more fine-grained data than are typically available for quantitative cross-national research (Lieberman 2005: 440-441). Here, I use dependent variables that are very specific to the legislative budget process and allow a comparison of the budgetary role of the *Riksdag* prior to and after the budget reforms of the mid-1990s, namely the number of legislative amendments to the government's proposals as well as the net effect of parliamentary amendment activity on spending.⁷⁰

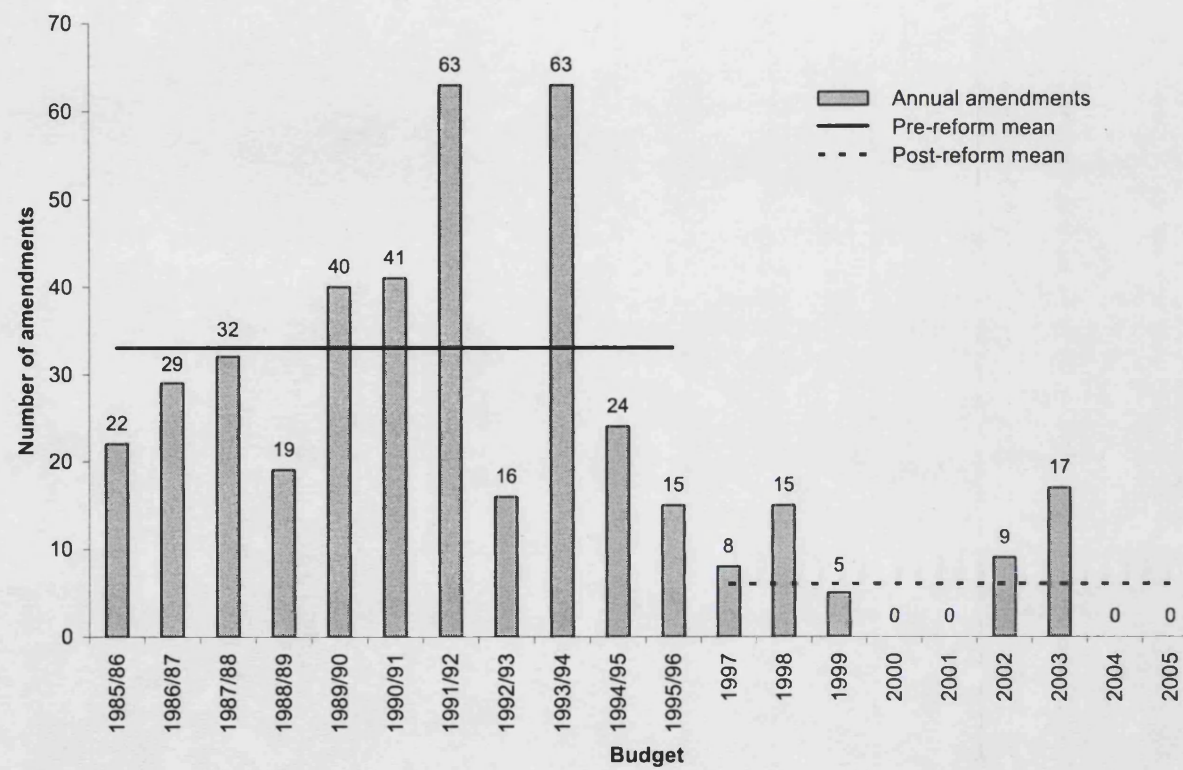
One indicator of the budgetary role of a legislature is the number of amendments made to executive proposals (Lienert 2005). While governments may anticipate legislative reactions and incorporate many of them into the budget prior to introduction, in particular in parliamentary systems where the executive relies on legislative support, the persistent absence of any amendments typically indicates a rubberstamp legislature (see chapter four, Wehner 2006a). Figure 12 reveals that the number of amendments to the government's proposals for 11 budgets passed

⁷⁰ Changes made by the *Riksdag* to the government proposal are documented in the Finance Committee report on the budget (FiU10) that is handed to the Speaker and forwarded to the government. Recent reports are available on the parliamentary website at <http://www.riksdagen.se>.

prior to the reforms (1985/86 to 1995/96) is substantially different from the following nine budgets (1997 to 2005). Prior to the reforms the *Riksdag* made on average 33 amendments, ranging between 63 in 1991/92 and 15 in 1995/96. Under the new process the mean is six, ranging between 17 in 2003 and none in four other instances including the two most recent budgets included in the analysis. This indicates a substantial decrease in amendment activity following the reforms.

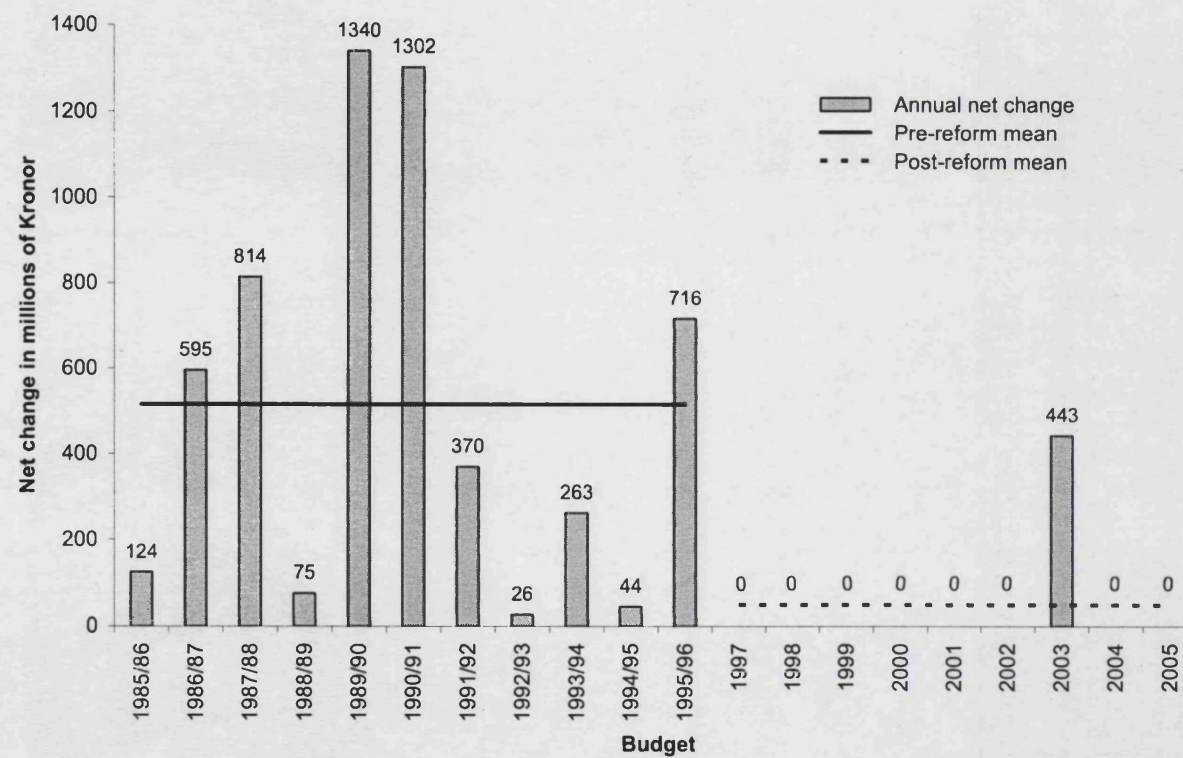
When considering the difference in the number of amendments, some adjustments have to be borne in mind. On the one hand, the number of appropriations has been halved from a previous total of roughly a thousand to about 500 (Hjalmarsson and Jonsson 2003: 2). The reduction in part preceded the reform of the budget process. The smaller number of appropriations reduces the scope for parliamentary amendments to budgetary details. Nonetheless, even when post-reform amendments are double-weighted to compensate for the halving in the number of appropriations, the adjusted level of amendment activity is still two-thirds below the pre-reform average. Moreover, pre and post-reform amendments are not fully comparable. Prior to the reforms almost all changes resulted in increased appropriations. Since any increases now have to be balanced by cuts elsewhere, this augments the number of amendments that are necessary for adjusting the budget. In short, the decrease in amendments is striking even when the reduction in the number of appropriations is taken into consideration.

Figure 12: Riksdag amendments to budget proposals, 1985/86 to 2005



Source: Data from the Riksdag Finance Committee.

Figure 13: Net change due to Riksdag amendments, 1985/86 to 2005



Source: Data from the Riksdag Finance Committee.

To assess the fiscal impact of the parliamentary process, Figure 13 indicates the net effect of amendments over the same period. Amendments to all of the budgets passed prior to the reforms resulted in net increases. The sums involved are relatively small compared to the overall budget, typically not exceeding approximately one per cent of the total. However, the government in many instances had already anticipated Parliament's reactions and incorporated relevant demands into its proposals. The true net cost of parliamentary consent in the pre-reform period is therefore hard to determine but it is almost certainly not fully reflected in these data. Even without this caveat it is clear that the *Riksdag* was unable to maintain fiscal discipline prior to the reforms, as its amendments regularly increased spending. However, there are no net increases in all but one of the years following the reforms. The exception is the 2003 budget, which was passed after an election and had to be adjusted to reflect the co-operation agreement between the Social Democrats and their legislative allies.⁷¹ In general, the parliamentary process following the reforms is characterised by greater fiscal discipline.

To what extent can these changes be attributed to the new budget process? The package voting procedure makes amendments more difficult. It compels

⁷¹ When the budget proposal was submitted to Parliament in early October the Social Democrats had only reached an agreement with the Left Party. Negotiations continued and a few weeks later the Social Democrats, the Left Party and the Green Party presented a joint motion (2002/03:Fi230) suggesting a number of financially neutral changes. However, when the Finance Committee scrutinised these proposals it emerged that some of the indirect effects of an income tax change on local communities had been omitted, which amounted to 443 million Kronor.

opposition parties to be explicit about trade-offs by developing comprehensive alternatives to the government budget proposal. The impact can be illustrated with recourse to Table 20. In effect the new process proceeds column-by-column rather than row-by-row. Unless opposition parties unite and support a single alternative, the executive proposal emerges unaltered if it is pitched against any less popular opposition proposal. An evaluation of the new budget process by the Parliamentary Review Commission (2001: 8) confirms: 'The framework model has made it easier for a minority government to get its budget proposal through parliament, since it has made it more difficult for varying majorities to increase expenditures without financing the expenditures at the same time.' Moreover, although the effects of the two-step voting procedure and the associated redesign of the committee process are difficult to disentangle, the centralisation of aggregate decision-making in the Finance Committee allows the imposition of a hard budget constraint on sectoral committees, which previously generated regular expenditure increases.

In addition, the extension of the electoral period that occurred at the same time as the reforms to the budget process may also have contributed to greater fiscal restraint. Empirical work on electoral budget cycles points to a negative relationship between the length of the electoral term and levels of public debt, suggesting that an extended time horizon induces politicians to pay more attention to the medium-term implications of their fiscal policies (Franzese 1999). In Sweden, the budget reforms coincided with an extension of the electoral term from three to four years. It is not clear whether this was done deliberately on the

basis of an assumption that a longer electoral term makes politicians more fiscally responsible. However, one official interviewed for this study highlighted that although this connection was not made explicit, 'those involved understood it perfectly well.' The data considered above cannot be used to conclusively pinpoint the separate effects of these simultaneous institutional adjustments, but on balance the evidence suggests a cumulative effect in favour of fiscal discipline.

However, while the reformed institutional arrangements support the maintenance of fiscal discipline, they cannot be regarded as its 'ultimate' or 'fundamental' cause (see Gerring 2005: 175-176). Rather, the reforms were initiated by politicians with strong preferences for more prudent fiscal policy. The new arrangements were deliberately chosen to achieve this objective in a process that included consideration of fiscal institutionalist evidence (Molander 1992). Because no party or group of parties controlled the required majority to reform the system on its own, institutional change would never have been possible without strong cross-partisan consensus about the aims of reform, which was forged in a context of economic crisis. As one senior budget official cautioned, it is problematic to relate the improvement of public finances to any specific instrument, but rather 'underlying attitudes and values that changed, and that influenced the result... and the methods chosen.' In other words, budget institutions are endogenous; the current arrangements were shaped by the preferences of politicians across the partisan spectrum in favour of greater fiscal discipline.

This is reflected in consistently strong support for fiscal sustainability at the highest political level. The reform was designed at a time when the then Finance Minister, Göran Persson, used pre-budget consultations with opposition parties to stabilise the budget process, an approach that has been sustained thus far (Hallerberg 2004: 165-166). After becoming Prime Minister in 1996, Persson (1997) published a book that made a personal commitment to fiscal prudence. His government's objective is that public finances, comprising central and local governments plus the pension system, show a surplus of two percent of GDP over the economic cycle (Ministry of Finance 2005: 4). It remains to be seen whether the relative tranquillity of the new budget process is dependent on continuity of political leadership or whether the institutional changes have sufficiently embedded fiscal discipline so that a different government would find it hard to depart from that course.

Lastly, the focus of this chapter is not meant to suggest that the improvement in overall public finances should be entirely attributed to the revised legislative process. Several other factors played a role as well. Favourable macroeconomic conditions in the second half of the 1990s certainly aided fiscal recovery. Moreover, the reforms also strengthened the role of the Finance Ministry during executive negotiations. Notably, since the introduction of expenditure ceilings they have always been adhered to. Compared with the pre-reform process the Finance Ministry is in a stronger position to contain demands from spending ministries. On the other hand, although the reforms coincided with Sweden's entry into the European Union, this played 'at best a secondary role' in spurring

the reforms, which were ‘a direct response’ to economic crisis (Hallerberg 2004: 167). These and possibly other factors are all important for a wider discussion of public finances in Sweden, but they do not affect the conclusions reached here about the impact of the institutional adjustments on legislative budgeting.

Overall, the data show that the role of the Swedish Parliament in the budget approval process has become more predictable after the reforms. Parliamentary amendments have decreased sharply, and the approval process no longer produces regular increases in spending. The new process was deliberately designed by politicians with strong preferences for greater fiscal discipline, and the data support the conclusion that it facilitates more prudent decision-making.

7.4 The challenge of a new accountability

The more predictable role of Parliament in budget approval does not necessarily imply a loss of parliamentary control; it may also mark a transition to a qualitatively different type of control. One quid pro quo for less ex ante influence over budget policy could be greater accountability for results, by enhancing the provision of performance information in the budget as well as ex post accountability arrangements. While reforms in these areas were debated and carried out separately from the adjustments to the budget process reviewed above, they also affect the nature and quality of parliamentary control, and hence should be part of a comprehensive assessment of financial scrutiny. In this final section, I

briefly consider separate developments relating to performance budgeting and ex post scrutiny to assess whether the Swedish Parliament has made a transition to a new kind of accountability, one focused on performance.

Efforts to move towards performance budgeting preceded the reform of the budget process in the 1990s. Already in the 1970s there were experiments with programme budgeting involving a small share of the central government administration. Since 1988 there have been renewed efforts by the government to improve the performance orientation of the public sector (Hjalmarsson 2005). Performance reporting at present is largely focused on outputs.⁷² Agency objectives are specified ex ante in letters of instruction (*Regleringsbrev*) that are issued to agencies following parliamentary approval of the budget. After the end of the fiscal year, agency performance information is presented in annual reports that cover financial as well as non-financial results. However, it appears that parliamentary interest in performance budgeting has been 'lukewarm', as one former official put it. Blöndal (2001: 41) also observed 'dissatisfaction' in Parliament with the quality of performance information, although the Ministry of Finance is working to streamline the process. This suggests that these developments have thus far not had a profound effect on parliamentary scrutiny and accountability.

⁷² Refer to Kristensen *et al.* (2002) for an overview of performance based management and budgeting.

The move towards greater performance orientation has gone hand in hand with a relaxation of input controls (Hjalmarsson 2005: 2, Schick 1988a: 530). For example, agencies now receive a single appropriation for operating expenditures (Blöndal 2001: 45). Apart from solid performance information, strong ex post scrutiny is required in order to maintain parliamentary oversight under such circumstances. Until 2003, Sweden had two audit bodies that operated parallel to each other. The Parliamentary Auditors (*Riksdagens Revisorer*) were directly attached to the Parliament, but only had a small number of staff of about 30. The main audit body with about 300 staff was the Swedish National Audit Office (*Riksrevisionsverket*), which was part of the government. This gave Parliament very limited capacity for ex post scrutiny, and the need for strengthened parliamentary control was widely recognised (Parliamentary Review Commission 2001: 4).

In 2003 the two old audit institutions were merged into a single entity. The new Swedish National Audit Office (*Riksrevisionen*) is independent from the government and headed by three Auditor Generals, who are appointed by Parliament. Its mandate covers both financial and performance audits, and the latter takes up an increasing share of audit activity. *Riksrevisionen* also has a board that is appointed by Parliament and consists of eleven representatives of all parties in the *Riksdag*. The board monitors audit activities and may make recommendations to Parliament on actions to be taken on particular reports.⁷³ Up

⁷³ Further details are contained in the 2002 *Riksrevisionen* Terms of Reference Act and the Auditing of State Activities etc. Act.

to May 2005, the board had received 36 reports, out of which 19 were passed on to Parliament with proposals. No measures were taken in six cases, and five reports were passed on for information purposes only. There is no specialised parliamentary audit committee, such as the Public Accounts Committee in the UK House of Commons. Instead, audit findings are considered by any committee they are referred to.

As the institutional arrangements for ex post scrutiny are still very new, it will take some time before their effectiveness can be properly evaluated. On the one hand, the creation of a well-resourced audit body that is independent from the government is a definite improvement over the previous situation. The move is also in line with international standards that demand the independence of external audit (International Organisation of Supreme Audit Institutions 1998). The previous Swedish National Audit Office did not report to Parliament, which had to rely on its Parliamentary Auditors. The *Riksdag* should be a main beneficiary of the reform of external audit.

However, this requires sufficient capacity and interest in the legislature to absorb the flow of audit information. It is widely recognised that the interaction between supreme audit institutions and legislatures benefits from specialised audit committees (SIGMA 2002). Audit committees allow legislators to develop expertise for ex post scrutiny and to pay greater attention to audit findings than is possible in sectoral committees that are also concerned with a number of other pressing matters, in particular draft legislation. In Sweden, the transmission of

audit findings to Parliament has not been fully effective. The audit board meets on average only about once a month and lacks capacity to engage with reports in detail. This results in delays in the referral of reports to the *Riksdag*. Moreover, instead of substantive proposals, in a number of cases the board generated only a general recommendation that Parliament look into a certain matter. Audit reports still receive little attention in Parliament, apart from the annual report, which is subject to a debate in the plenary.

The Swedish Parliament has not made a transition to a new kind of accountability following the redesign of the budget approval process. In some countries, in particular the UK and other Westminster systems, parliaments have largely withdrawn from influencing budget policy, but maintain substantial ex post scrutiny capacity in a Public Accounts Committee that focuses on value for money delivered by government departments and agencies (McGee 2002). The *Riksdag* may not want to follow this perhaps extreme example. Nonetheless, accountability for results through effective ex post scrutiny can still be improved substantially, for instance by setting up a dedicated audit committee or by greatly enhancing the capacity of the current board.

Conclusions

Sweden's budget reforms have contributed to a containment of the common pool resource problem in Parliament, by instating a top-down voting process in

conjunction with a revised committee structure that centralises control of aggregates in the Finance Committee. In addition, the package voting procedure gives the government greater agenda setting power. Overall, the new institutional arrangements make it more difficult for legislative deliberations to produce net spending increases and hence contribute to the maintenance of fiscal discipline. The study also shows that, in addition to the formal powers of the legislature to amend the budget, a range of legislative institutions deserve attention in efforts to redesign the budget process in order to improve fiscal performance. This is encouraging, because the proposition that amendment powers have to be curtailed for the sake of fiscal sustainability are normatively problematic for those who regard the legislative power of the purse as a democratic fundamental, and in any case, it may not always be possible to adjust constitutional provisions on amendment powers. Moreover, this analysis cautions against a simplistic reading of the fiscal institutionalist literature. Budget institutions cannot always be treated as exogenous variables. In the Swedish case, the preferences of politicians across the partisan spectrum in favour of greater fiscal discipline determined institutional choice. The lesson for budget reformers is that legislative institutions matter, but more fundamentally important are the preferences of those who get to make institutional choices.

This analysis further raises complex questions about the exact nature of parliamentary control. At first glance, the study implies an inverse relationship between legislative influence on budget policy and the maintenance of fiscal discipline. This suggests that effective parliamentary control has to entail that the

legislature is able to control itself. In Sweden, the overall design of the reforms was in the hands of the *Riksdag*, and recent adjustments to the role of the Spring Fiscal Policy Bill again confirm Parliament's power over the budget process. In short, the constraints of the revised legislative process are essentially self-imposed, which in the final analysis makes it difficult to argue that the *Riksdag* has lost budgetary control. Nonetheless, it is evident that individual parliamentarians, in particular those on sectoral committees, have relinquished some influence over budget policy. I have argued that reduced ex ante influence can be compensated by greater accountability for results through improved performance reporting and an effective ex post scrutiny process. While full effectiveness in this regard has not yet been attained, this remains a significant opportunity for reshaping accountability in the post-reform environment. Hence, while the fiscal institutionalist literature may be interpreted to suggest that 'weak' legislatures are fiscally beneficial, a somewhat more nuanced interpretation emerges from this chapter: legislatures can be at the same time both powerful, by retaining full control of the design of the budget process, as well as constrained, by self-imposing institutional devices that support fiscally prudent choices.

8 Conclusion: Beyond macro-constitutional distinctions

This research had three main aims: (i) to establish and apply a framework for assessing how institutional arrangements affect the budgetary role of legislatures, (ii) to explore the determinants of cross-national variation in these institutional arrangements, and (iii) to assess empirically the impact of legislative budget institutions on fiscal policy. I consider each of these in turn, followed by a discussion of the relevance of my findings in the context of the broader institutionalist research agenda in political science and economics.

8.1 Trajectories and patterns of legislative budgeting

The emergence of modern legislatures is inextricably intertwined with the struggle for democratic control of public finances (Einzig 1959, Coombes 1976). From the start, this struggle was about the institutional arrangements that govern the decision-making process, in particular formal powers (Harriss 1975). Moreover, legislative control required an appropriate organisational infrastructure to facilitate scrutiny and oversight (Chubb 1952). The institutional foundations of legislative control emerged over a number of centuries, and they are shaped by local context (Stourm 1917). Yet, different legislatures at different times grappled with essentially rather similar issues relating to their formal powers, organisation and access to information. This provides a basis for constructing a comparative

framework to measure the extent to which the institutional prerequisites for legislative control of public finances are present.

In analysing the effect of institutional arrangements on legislative budgeting, I highlighted an important distinction between two types of impacts: on legislative control on the one hand, and budget outcomes, in particular spending levels, on the other hand. The size of a legislature's feasible set of budgetary choices is affected by a range of institutions, including constraints on its power to amend the budget, the nature of the reversionary outcome, executive vetoes, as well as executive authority to alter the approved budget during implementation. However, only restrictions on amendment powers and executive impoundment authority unambiguously constrain a legislature's choice of aggregate spending by imposing the executive proposal as an upper limit. The hypothesis that amendment powers affect fiscal policy outcomes is in line with the literature on budget institutions (Poterba and Von Hagen 1999, Strauch and Von Hagen 1999), but the analysis challenges some other propositions in this literature, notably with regard to the relevance of reversionary budgets and executive virement authority (Alesina *et al.* 1996, Hallerberg and Marier 2004). Moreover, the use of any formal legislative powers is likely to involve transaction costs, which can be accommodated or lowered through effective organisation of the legislative process in a way that maximises time for budget scrutiny and ensures access to relevant information, as well as a well-designed committee system that is conducive to scrutiny and oversight. These institutional prerequisites affect the extent of

legislative control of budget policy and provide a theoretical framework for comparative empirical work.

To assess cross-national differences, I operationalised these variables in the index of legislative budget institutions. The empirical analysis reveals very different degrees of legislative control of public finances. The US Congress has an index score that is more than three times as great as those for the bottom nine legislatures, predominantly Westminster systems. Moreover, there is a substantial amount of variation in between these extremes, as suggested by the more recent comparative case study literature in the legislative studies tradition (Esaïasson and Heidar 2000, Döring 1995a). This challenges the view that legislative financial control is fundamentally important for democracy (Fish 2006, Einzig 1959). If the power of the purse were indeed fundamentally important for democracy, it is hard to explain why legislative bodies in democratic countries should be so differently equipped for financial scrutiny.

The historical overview in chapter two in conjunction with the cross-sectional assessment in chapter four raises further issues about the trajectory of legislative budgeting. Until the nineteenth century, the struggle was to achieve full parliamentary control of the budget, both in the UK and the US, as well as France (Stourm 1917). Thereafter, however, these legislatures took very different paths. Documenting developments in the UK and France respectively, Einzig (1959) and Stourm (1917) were writing at times when they regarded the golden age of fiscal control as a thing of the past. In the US, however, there is much less of a clear-cut

trajectory of decline. Congress at various points ceded power to the executive, but later struggled to strengthen fiscal control. According to Schick (2000: 8-35), budgeting was dominated by Congress until the triumph of the executive budget movement with the 1921 Budget and Accounting Act, which inaugurated a period of presidential dominance. However, following a souring of legislative-executive relations under the Nixon presidency, the 1974 Congressional Budget and Impoundment Control Act signalled congressional resurgence (see also Wildavsky and Caiden 2001: 69-92). Hence, while in broad terms the initial trajectory of legislative budgeting in these countries was shared, with a common goal to achieve legislative fiscal control, developments from about the nineteenth century onwards became much more diverse. Taking a comparative snapshot of legislative budgeting today, as in chapter four, the US on the one hand and the UK as well as France on the other emerge as polar cases, with most of the cross-national distribution between these extremes.

It is uncertain whether younger and emerging democracies will follow the same path as these pioneers of legislative budgeting. For one, the environmental conditions for legislative scrutiny have changed in many countries. The origins of the battle for legislative fiscal supremacy in the UK and the US owe much to the fact that these bodies sought to impose limitations on unelected executives (Harriss 1975, Einzig 1959). The fiscal leash was a rare mechanism to impose some degree of accountability and control. Nowadays, with more governments than ever before accountable via the ballot box (Huntington 1991), this historically important driver of fiscal scrutiny is less applicable. However, while

the historical golden age of legislative budgeting may have little to offer as a model to newer democracies, there is still substantial variation in the budgetary role of legislatures, even amongst countries with similar levels of democratic maturity.

8.2 Explaining the differences

So which factors might account for this variation? Testing a range of plausible explanations, I found that UK colonial heritage and divided government affect legislative institutions. Thus, legislative budget institutions are shaped by both long-term and more immediate factors. This might seem contradictory at first glance, but not when considering that different elements of the institutional setting are likely to be affected by different factors. Legal frameworks, and constitutional provisions in particular, are often deeply entrenched and slowly changing (Lienert and Jung 2004). This implies a greater importance of long-term causes such as colonial history in shaping these aspects. The key mechanism is institutional replication (Lienert 2003). In particular, the UK bequeathed very similar rules to its former colonies that greatly limit the potential for legislative influence on public finances. On the other hand, legislative organisation and demand for information are more variable in the short-term, which explains why they are sensitive to more immediate political dynamics, notably occurrences of minority government. When partisan control differs across the legislature and the executive, there is greater legislative demand for scrutiny (Messick 2002).

The analysis also challenges the hypothesis that presidential and parliamentary systems are inherently different (Lijphart 1992 and 1999). At the very least with regard to legislative fiscal control, this does not appear to be the case. After controlling for a range of other possible explanatory variables, presidentialism does not have a significant effect on a country's score on the index of legislative budget institutions. This may be due to limitations of the data set, in particular sample size, but at the same time the finding is in line with at least one other recent study that challenges the overriding importance of this macro-constitutional regime distinction for the budgetary role of the legislature (Lienert 2005). One reason why the regime distinction may be overrated is that many legislative researchers have for too long excessively focused on two 'paradigmatic cases' (Cheibub and Limongi 2002: 168), the UK and the US, but until the work by Shugart and Carey (1992) and Döring (1995a) failed to grasp the full range of variation in legislative structures and influence that exists amongst both presidential and parliamentary systems. My findings highlight the importance of careful empirical assessment of the institutional differences *within* presidential and parliamentary systems with regard to the legislature's budgetary role, so as not to prematurely accept the notion that fundamental differences exist between these forms of government.

While this study identified factors that account for some of the cross-national variation in legislative budget institutions, and some that may not, we can only speculate why this variation might be sustained without undermining democratic

control. Does the absence of effective legislative scrutiny of the budget mean that governments are less accountable? Not necessarily. One possibility is the functional equivalence of other mechanisms in holding government to account. In medieval England, parliamentary control of the purse was the most essential and effective tool for controlling the Crown (Harriss 1975). In contrast, modern parliaments have a wide range of ‘oversight tools’ at their disposal (Pelizzo and Stapenhurst 2004: 4). These include committee and plenary hearings, commissions of inquiry, parliamentary questions and question time, interpellations, as well as access to supportive external bodies such as ombudsmen and supreme audit institutions. It may well be that some of these features can be substituted for parliamentary control of the budget. Alternatively, the very nature of financial control may have shifted from *ex ante* scrutiny to *ex post* review and accountability, a possibility that I briefly explored in chapter seven in the context of Sweden’s budget process (see also Schick 2002: 33-35). Further empirical work has to clarify whether parliaments assemble different packages from a menu of oversight tools, occasionally abandoning some old ones and honing new ones instead.

8.3 Legislatures and fiscal discipline

A number of studies claim that legislative institutions – such as amendment powers, the reversionary budget, top-down voting procedures and bicameralism – affect fiscal policy outcomes, focusing on different geographical regions and

using different datasets (e.g. Von Hagen 1992, Alesina *et al.* 1996, Gleich 2003). This thesis presents the first comprehensive evaluation of the effect of a range of legislative institutions on public spending in 25 OECD countries, based on a single dataset. In line with the literature on the common pool resource problem in budgeting, I found evidence that countries where the legislature has unfettered powers to amend the budget proposal of the executive have significantly higher levels of public expenditures, estimated to be around 5 percentage points of general government spending relative to GDP. This effect holds across different operationalisations of this variable, and it withstands a number of robustness checks. On the other hand, I found no evidence for other relevant fiscal institutionalist hypotheses. These findings challenge thinly theorised claims about the fiscal policy impact of other institutional arrangements in the literature on fiscal performance, such as the voting sequence of the budget process (Molander 1999), reversionary budget provisions (Alesina *et al.* 1996), and whether the budget is passed in one vote or separate chapters (Von Hagen 1992).

Chapter six has several significant implications for further empirical work. First, it underscores the importance of replication for the credibility of quantitative research in this particular area as well as in the social sciences more generally. Two decades after Dewald and colleagues (1986) highlighted the embarrassing impossibility to replicate many empirical results in a leading economics journal, replication is arguably more crucial than ever before but remains both undervalued and undersupplied (Hamermesh 2007). In political science, the use of quantitative methods in arguably the leading journal of the discipline

‘skyrocketed’ during the 1960s and has since then become increasingly sophisticated (Sigelman 2006: 467). This makes replication, and in particular what Hamermesh (2007: 1) refers to as *scientific replication* (i.e. using a different sample, different population and similar model) even more fundamentally important. Chapter six highlights how exactly this approach can at the same time help to focus, challenge and confirm research. This is an essential process for enhancing the credibility of empirical political science research that cannot be valued enough (King 1995).

The analysis also has important implications for empirical research on fiscal performance. Crucially, greater attention needs to be paid to the dependent variable. In terms of indicators, if a theory is about expenditure levels, then empirical tests should use public expenditures as the dependent variable rather than other indicators of fiscal performance, such as deficits. If the results are not strong, this should be transparently reported and discussed. Examples of this (notably Stein *et al.* 1998) are too rare, since the social sciences tend not to value ‘negative results’ (Lehrer *et al.* 2007).⁷⁴ Other disciplines started to acknowledge this bias earlier (Hebert *et al.* 2002) and it is time for the social sciences to catch

⁷⁴ Lehrer and colleagues (2007) argue that the social sciences require a forum for negative results. They distinguish inconclusive results (unstable or highly sensitive to model choice), non-results (lacking significant results), confutative results (contradicting established theories) and ersatz results (unintended results that are unrelated to theoretic expectations). For more information on this initiative, refer to the homepage of the *Journal of Spurious Correlations*: <http://www.jspurc.org/> [last accessed April 2007].

up.⁷⁵ Moreover, much of the fiscal institutionalist literature is far too casual with the choice of data source. In coming years, the IMF databases are likely to further extend in coverage. As the European Union enlarges and the OECD discusses the expansion of its membership, they, too, will provide public finance data for an increasing number of countries. The choice of fiscal indicators and data sources should be discussed more extensively than is often the case, otherwise there remain grounds for suspicions that these are chosen to support particular theoretical stances rather than to evaluate them, or that the empirical results may simply be an artefact of carelessly chosen poor quality data.

The analysis of Sweden's budget reforms relied on more in-depth qualitative work, and very specific data about the parliamentary impact on fiscal policy. It suggests that institutional arrangements other than amendment powers can nonetheless impact on fiscal discipline in a legislative setting. However, subtleties such as the peculiarities of Sweden's parliamentary budget procedure are hard to capture in cross-country quantitative indices. Here, the approval process pits pairs of alternative packages of budget proposals against one another and favours the package backed by the largest voting block. Moreover, the study of Sweden's budget reforms also suggests that it is not the sequencing of budgetary decisions in itself that matters (Von Hagen 1992), but the centralisation of the decision over aggregate budget totals in the Finance Committee (Crain and Muris 1995), which

⁷⁵ For example, the *Journal of Negative Observations in Genetic Oncology* was first published in 1997, the *Journal of Negative Results in BioMedicine* in 2002, and the *Journal of Articles in Support of the Null Hypothesis*, which features research in the field of psychology, in 2002.

again is not captured in crude cross-national indices that score voting sequence alone. This finding is entirely consistent with the theory of the common pool resource problem in budgeting (Hallerberg and Von Hagen 1997). In this way, qualitative work can help to clarify exact causal mechanisms, which in turn has the potential to feed into constructing better cross-national quantitative measures. Moreover, the study shows that the achievement of fiscal discipline need not come at the price of emasculating the legislature, as long as the latter maintains control over the design of the budget process.

8.4 Taking lower level institutions seriously

A core argument of this thesis is that institutionalist research in public policy needs to move beyond broad constitutional parameters to incorporate the more detailed organisation of policy-making. In contrast to macro-constitutional distinctions, which offer only rough classifications for political systems – such as unitary versus federal states or presidential versus parliamentary forms of government – I refer to these more detailed arrangements interchangeably as ‘lower level’ or ‘finer grain’ institutions. These institutions might affect only particular policy areas, become influential only under certain conditions, or be hidden away in secondary legislation. As the proverbial devilish detail, they are comparable to the small print in contracts: difficult to decipher and deceptively technical, but potentially decisive for the outcome.

This analysis demonstrates that the details of the policy-making machinery are at least as important as macro-level constitutional design.⁷⁶ To be clear: I am not arguing that macro-level constitutional research is unimportant, but that it would benefit from incorporating additional features, in particular lower level or finer grain institutional variables such as amendment powers (see also Persson and Tabellini 2003: 96 and 2006: 85). There are already nascent signs of the research agenda developing in this direction, for instance the work by Cheibub (2006), who qualifies the impact of presidentialism on fiscal policy with some variables that he suggests determine executive authority vis-à-vis the legislature. There has to be more systematic study of the interaction of macro-constitutional and lower level institutions to better understand how institutional design affects fiscal policy.

The incorporation of lower level or finer grain institutions into the research agenda does, however, pose challenges. One is that it requires more careful theorising about the effects expected from different institutional arrangements. Several of the fiscal institutionalist hypotheses lack the backing of formal theoretical analysis, such as the conjectures about the impact of sequencing (Von Hagen 1992, Molander 1999) and reversionary budgets (Alesina *et al.* 1996, Hallerberg and Marier 2004) on fiscal policy outcomes. The theoretical work in chapter three shows that only two institutional arrangements out of six generate clear-cut predictions in terms of an effect on relative spending levels, i.e.

⁷⁶ The empirical analysis in chapter six, where only a single variable had a significant impact on aggregate public spending, is not incongruent with this statement. As chapter two demonstrated, other institutional features are likely to matter as well, but often in different ways, for instance with respect to the composition of the budget. However, chapter six did not test these effects.

amendment powers and executive impoundment authority, and the econometric work in chapter six found evidence only for the hypothesis that limits on legislative amendment powers contain aggregate public expenditures. Careful modelling can clarify the effects of specific institutional arrangements and help to avoid unfounded or exaggerated claims.

Broadening the analysis to lower level institutions also has methodological implications. One of the key critiques levelled against the early fiscal institutionalist research is that it treats institutions as exogenous (Alesina and Perotti 1996: 4). This might be a justifiable assumption for the short to medium-term with regard to macro-level constitutional variables, which tend to change rarely.⁷⁷ Depending on sample periods and the choice of cases, these variables may even be time invariant in a particular dataset. The lower level institutions for policy-making, on the other hand, might be subject to more frequent adjustments. Thus, fiscal institutionalist research is challenged to develop its understanding of institutional change. One way of doing so, as Poterba (1996: 10) proposes, is through methodological diversification. Recent work by some fiscal

⁷⁷ For instance, in their panel dataset with 60 countries between 1960 and 1998, Persson and Tabellini (2003: 88) find no significant change from a majoritarian to a proportional representation electoral system during the 1960s and 70s, and only two incidents of such change in the 1980s (France and Cyprus). However, the 1990s saw more change in electoral systems. When they classify their sample according to presidential and parliamentary forms of government, they find hardly any change over the entire sample period, except in Bangladesh, which adopted a presidential system in 1991, and a short-lived experiment with parliamentary government in Brazil between 1961 and 1963 (Persson and Tabellini 2003: 98).

institutionalists follows this recommendation and incorporates detailed country studies of how budget systems adapt to changing conditions, in particular political variables (Hallerberg 2004). Case study research cannot always fully resolve this debate, but the analysis of Sweden presented here demonstrates that it can complement quantitative work with a more in-depth understanding of how and why budget institutions change. This suggests that mixed methods research (Lieberman 2005) is one way of tackling the methodological challenges involved in incorporating lower level institutions into the research agenda.

The systematic empirical study of how budget systems evolve has to be underpinned by high quality institutional data. Up to now, the institutional data used is eclectic; there has been little concern with standardising various survey efforts. A number of different bodies are now conducting surveys of budget systems or particular aspects of them, including the European Commission (Deroose *et al.* 2006), the World Bank (OECD and World Bank 2003), the OECD (2002b and 2006), as well as independent think tanks (International Budget Project 2006). While quality control remains a concern, these datasets are becoming increasingly sophisticated and more useful.⁷⁸ If a degree of standardisation is achieved, these surveys could yield consistent data on the institutional evolution of budget systems over time and for a larger set of countries, which would greatly enhance the possibilities for quantitative analysis.

⁷⁸ The 2006 Open Budget Initiative of the International Budget Project (IBP) at the Center on Budget and Policy Priorities (CBPP) in Washington, D. C., provides an excellent example of a high quality and rigorous multi-country research study. This survey included an independent peer review process. Each country survey is published along with the comments of the reviewers.

Overall, the growing popularity of these surveys augurs well for the empirical aspects of the fiscal institutionalist research agenda.⁷⁹

There are a number of possible next steps for advancing this research agenda. One of the primary challenges to the fiscal institutionalist literature is to develop its theoretical analysis of institutional arrangements. Institutional arrangements that are included in multi-item indices are often selected on the basis of conjectures and short informal arguments. This theoretical underinvestment is reflected in the empirical results presented here, which highlight how few (one) of the range of institutional features mentioned in the literature unambiguously affect public spending. Much more careful work is needed to properly theorise individual institutional arrangements. This will help researchers to focus on the truly relevant institutions, and to better understand the conditions under which particular mechanisms have a certain effect. Of the features analysed in chapter three, the reversionary budget in particular deserves further attention, because of the number of papers that attribute a fiscal impact to the variable (e.g. Alesina *et al.* 1996, Hallerberg and Marier 2004, Cheibub 2006). In the medium-term, a better balance between theory and empirical work would greatly enhance the credibility of fiscal institutionalist research.

⁷⁹ At the time of writing, the LSE Public Policy Group is supporting the OECD in designing a standardised budget system survey tool that would allow the gathering of comparable data over a number of years and for a large number of countries, including non-OECD members.

The analysis in chapter six in particular provides a very strong basis for further empirical work and suggests several possibilities. In particular, the finding that only legislative powers of amendment have a significant effect on expenditure levels amongst a range of legislative institutions may disappoint the purveyors of indices, but it is good news for comparative research. The relative simplicity of this measure, compared with complex indices, greatly reduces data requirements and reliance on elaborate survey tools. Data for this variable can be relatively easily collected from constitutional documents and a range of existing surveys for a large set of countries. Hence, a first key task is to further test the empirical relevance of this variable by increasing the number of observations. My first initiative is to gather the relevant data for all countries in the constitutional economics dataset used by Persson and Tabellini (2003). While this dataset has limitations, such as the nature of the dependent variable and the quality of the fiscal data (see section 6.2), the gain in degrees of freedom is substantial. This will allow a further test of the relevance of legislative powers in assessing the effects of constitutions on fiscal policy.⁸⁰

In particular when extending this work to a large number of developing countries, it will be important to revisit the underlying concept of institutions. Already in this thesis, it became evident that formal institutional arrangements combine with

⁸⁰ At the time of finalising this thesis, data collection for this project has already been completed. Preliminary analysis is encouraging and indicates that the effects of limits on legislative amendment powers are also present when using a much larger sample as well as a different definition and source of fiscal data. The paper presenting the results of this work has been accepted for the 2007 Annual Meeting of the American Political Science Association.

non-codified practices – such as the voting behaviour of the opposition parties discussed in chapter seven – to produce policy outcomes. Still, on average, formal institutions are meaningful structures in OECD countries, as this analysis demonstrated. However, to what extent can we stretch this analysis to what Acemoglu (2005: 1045) refers to as ‘weakly institutionalized polities’? Are formal institutions – constitutions, laws and regulations – as meaningful in Fiji, Nicaragua and Zambia as they are in Denmark, the Netherlands and Switzerland? By combining these countries in a single dataset, Persson and Tabellini (2003 and 2004) suggest this is the case. However, research on budgeting in developing countries confirms that formal rules and procedures are often undermined by informal institutions, such as patronage networks (e.g. Rakner *et al.* 2004). Hence, it is likely that we overestimate the relevance of formal institutional structures in these contexts. In other words, the highly formalistic definition of institutions adopted in the introduction of this thesis has limits and may not be universally useful and applicable. How to understand the policy-making process in weakly institutionalised polities is thus a fundamental challenge that future research in this area will have to tackle (Acemoglu 2005: 1045-1047).

While this thesis focused on institutional variables, there is also substantial scope for integrating political variables into the analysis. For example, a number of authors investigate the effects of partisan fragmentation on fiscal policy, using measures such as the effective number of parties or the excess number of seats the governing party commands in the legislature (Volkerink and De Haan 2001, Perotti and Kontopoulos 2002). However, an important question is whether the

effect of partisan fragmentation can be neutralised or mitigated by institutional arrangement, and in particular whether the effect of partisan fragmentation in the legislature is conditional upon the extent of its amendment powers. While this question has been posed (Fabrizio and Mody 2006), it has thus far been neglected in the empirical work based on the common pool resource problem in budgeting. Taking this question to the data opens up interesting possibilities for interacting fluctuating political variables with hardly changing or time-invariant institutional variables, in particular the powers of the legislature to amend budgets, in panel datasets using standard fixed effects specifications.

Moreover, there is a lack of research about institutional effects on the composition of budgets. The analysis in chapter three suggests that a number of institutional features affect decisions about the mix of public spending, as well as or rather than aggregate fiscal policy outcomes, which I did not test empirically in this thesis. A proper exploration of this issue requires combining institutional data with information on legislative and executive preferences in different policy areas, which is empirically messy (Bräuninger 2005). Moreover, there are a range of measurement issues that have to be considered in comparing spending categories across countries. For instance, the measurement of social expenditure is complicated by the use of tax expenditures rather than direct expenditures, the effect of taxation of social benefits and indirect taxes on net social transfers, as well as the use of private mandatory schemes (Journard *et al.* 2003: 116; see also Kühner 2007). While these are difficult data issues that have to be acknowledged, they should not detract researchers from tackling this challenge. There are very

few examples in the academic literature that engage with the determinants of the composition of budgets, and they largely focus on partisan variables (Tsebelis and Chang 2004, Bräuninger 2005). Further work in this neglected area should incorporate budget institutions into the analysis.⁸¹

Finally, research on legislative budgeting would benefit greatly from a cohesive body of methodologically rigorous comparative case studies. As the study of Sweden's budget reforms in chapter seven demonstrated, this method is particularly well suited for exploring the dynamics of institutional change over time, as well as exact causal mechanisms. The available body of case study research on this topic is outdated, eclectic in approach, and it lacks analytical grounding. Crucial for the success of this element of the research agenda is the issue of case selection, which should be based on an explicit framework rather than convenient reversion to the usual suspects of comparative legislative studies. One particularly promising approach, as developed in this thesis, is to focus on those countries that underwent institutional reforms affecting the budgetary role of the legislature. This selection approach is particularly suitable for studying institutional change. The study of within-unit change controls for a range of time-invariant country-specific factors, which can eliminate a number of rival hypotheses. Pursued in this way, a set of well-structured and carefully selected

⁸¹ There is already some applied research into the role of budget institutions in reallocation, which includes useful data on the changing composition of budgets in a sample of OECD countries (Kraan and Kelly 2005).

case studies has the potential to complement the quantitative elements of this research agenda.

Conclusions

The study of the design of political institutions and their effects on public policy is a burgeoning field of research in both economics and political science. Thus far, most of the attention has been paid to macro-level constitutional distinctions. In future, increasing attention needs to be paid to studying the more detailed machinery for policy-making and how its design affects outcomes in particular policy areas. The research on fiscal institutions is one example where this approach has already yielded some dividends, but this thesis demonstrates that it requires more theorising, greater methodological sophistication and additional attention to data issues to fully evaluate institutional impacts on fiscal policy.

To take this research agenda forward, important next steps include further theoretical work to better understand the effect of individual institutional elements. There also needs to be more systematic work to reassess previous empirical findings with larger datasets. Going further, there is plenty of scope to explore the interaction of hardly changing institutional variables with fluctuating political dynamics and how budget institutions affect the composition of budgets. Finally, well-designed case study work can complement quantitative analysis by adding a more in-depth understanding of causal mechanisms. Taking lower level

institutional details seriously is likely to qualify or challenge some of the results from macro-constitutional research, but this approach is crucial for the future of the institutionalist project in political science and economics.

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Appendix

A Data appendix

Variable	Long name	Main sources*	Description	Coding
ALESINA2	Alesina index	OECD (2003), 2.7.c, 2.7.e and 3.2.a.4	Alesina <i>et al.</i> 's (1996) subindex 3; see text for details.	Ranging from 0 = highest degree of legislative power to 20 = lowest degree of legislative power
ALESINA2_Z	Alesina index (standardised)	ALESINA2	Standardised version of ALESINA2.	Ranging from 0 = highest degree of legislative power to 1 = lowest degree of legislative power
AM_ALESI2	Alesina amendment powers	OECD (2003), 2.7.e	The amendment powers item according to Alesina <i>et al.</i> (1996); see text for details.	Ranging from 0 = highest degree of legislative power to 10 = lowest degree of legislative power
AM_ALESI2_Z	Alesina amendment powers (standardised)	AM_ALESI2	Standardised version of AM_ALESI2	Ranging from 0 = highest degree of legislative power to 1 = lowest degree of legislative power
AMEND2	Powers	OECD (2003), 2.7.d	Powers of the legislature to amend budgets. Part of Wehner (2006a) index; see text for details.	0 = accept or reject, 3.3 = cuts only or severe restrictions, 6.7 = aggregate constraint, 10 = unfettered
AMEND2_Z	Powers (standardised)	AMEND2	Standardised version of AMEND2.	0 = unfettered, .33 = aggregate constraint, .67 = cuts only or severe restrictions, 1 = accept or reject
AUDCOM	Audit committee	Parliamentary websites	Committee capacity for the consideration of audit reports. Part of Wehner (2006a) index; see text for details.	0 = no specialised audit committee, 1.7 = audit sub-committee, 3.3 = specialised audit committee
BICAM1	Budgetary bicameralism (version one)	Heller (1997); constitutions	Dummy indicating whether the second chamber of the legislature is co-equal in all budgetary matters.	0 = unicameral legislature or upper chamber with limited powers, 1 = co-equal second chamber

BICAM2	Budgetary bicameralism (version two)	Heller (1997); constitutions	Dummy indicating whether the second chamber of the legislature is co-equal in taxation matters only.	0 = unicameral legislature or upper chamber with limited powers, 1 = co-equal second chamber
BUDCOM	Budget committee	OECD (2003), 2.10.a	Consideration of the draft budget by a specialised budget or finance committee. Part of Wehner (2006a) index; see text for details.	0 = no budget committee, 3.3 = budget committee
BUDCOM_Z	Budget committee (standardised)	BUDCOM	Standardised version of BUDCOM.	0 = no budget committee, 1 = budget committee
CEILING	Von Hagen global vote	OECD (2003), 2.7.j	Dummy indicating whether the legislature establishes aggregate expenditure ceilings before beginning debate on individual expenditure items. Part of Von Hagen's (1992) item two; see text for details.	0 = no ceiling, 4 = ceiling
CEILING_Z	Von Hagen global vote (standardised)	CEILING	Standardised version of CEILING	0 = no ceiling, 1 = ceiling
CGEXP99A	Central government expenditure GFS data (1999 to 2003)	IMF Government Finance Statistics	Consolidated central government [CG] expenses, accrual basis, as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
CGEXP99I	Central government expenditure IFS data (1999 to 2003)	IMF International Financial Statistics	Consolidated central government or budgetary central government expenses (line 82) as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
CGEXP99O	Central government expenditure OECD data (1999 to 2003)	OECD National Accounts, Volume IV General Government Accounts	Central government sector expenditure as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
CHANGE	Amendments	OECD (2003), 2.7.i	Whether the Legislature does in practice make amendments to the executive budget proposal.	0 = does not amend, 1 = amends

COMMI**	Former communist country	http://www.wikipedia.org	Dummy for former communist countries or their successor states.	0 = not former communist country, 1 = former communist country
COMS	Committees	BUDCOM, DEPCOM and AUDIT	Total committee capacity. Part of Wehner (2006a) index; see text for details.	Sum of BUDCOM, DEPCOM and AUDCOM. Ranging from 0 = low committee capacity to 10 = high committee capacity
DEPCOM	Sectoral committee	OECD (2003), 2.10.a	Consideration of the draft budget by sectoral or departmental committees. Part of Wehner (2006a) index; see text for details.	0 = no substantive role, 3.3 = decide departmental budgets
DIVGOV	Divided government index (version one)	World Bank Institute Database of Political Institutions 2001; Europa World Yearbook	Ratio of years in the 1993 to 2002 period in which the government did not have a legislative majority in the lower house.	Ranging from 0 = always majority support to 1 = never majority support
DIVGOV_TOT	Divided government index (version two)	World Bank Institute Database of Political Institutions 2001; Europa World Yearbook	Ratio of years in the 1993 to 2002 period in which the government did not have a legislative majority in either the lower or the upper house, if there is budgetary bicameralism.	Ranging from 0 = always majority support to 1 = never majority support
ENOP99	Effective number of parties	World Bank Institute Database of Political Institutions 2004	Effective number of parties according to Laakso and Taagepera (1979); constructed using the inverse of the HERFTOT variable, 1999 to 2003 average.	N/A
EURO12**	EU12	http://www.wikipedia.org	Dummy for the 11 original members of the Eurozone plus Greece.	0 = not part of EU12 or before 1992, 1 = part of EU12 and 1992 or later
EURO15**	EU15	http://www.wikipedia.org	Dummy for the 15 countries in the European Union before the expansion on 1 May 2004.	0 = not part of EU15 or before 1992, 1 = part of EU12 and 1992 or later
FEDERAL	Federalism	Griffiths (2002)	Dummy for federal countries.	0 = unitary, 1 = federal

FLEXI	Flexibility	WHOLD, VIRE and RESERVE	Flexibility of the executive during budget execution. Part of Wehner (2006a) index; see text for details.	Sum of WHOLD, VIRE and RESERVE. Ranging from 0 = high executive flexibility to 10 = low executive flexibility
FREE99	Freedom	http://www.freedomhouse.org	Freedom House combined average ratings.	Ranging from 1 = highest degree of freedom to 7 = lowest degree of freedom
GGEXPO**	General government expenditure OECD data	OECD Economic Outlook Database	General government total outlays, as percentage of GDP, multiplied by 100.	N/A
GGEXP94O	General government expenditure OECD data (1994 to 2003)	OECD Economic Outlook Database	General government total outlays, as percentage of GDP, multiplied by 100, 1994 to 2003 average.	N/A
GGEXP99A	General government expenditure GFS data (1999 to 2003)	IMF Government Finance Statistics	Consolidated general government [GG] expenses, accrual basis, as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
GGEXP99E	General government expenditure Eurostat data (1999 to 2003)	Eurostat New Cronos Database	Total general government expenditure as a percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
GGEXP99O	General government expenditure OECD data (1999 to 2003)	OECD Economic Outlook Database	General government total outlays, as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
GGREVO**	General government revenue OECD data	OECD Economic Outlook Database	General government total tax and non-tax receipts, as percentage of GDP, multiplied by 100.	N/A
GGREV94O	General government revenue OECD data (1994 to 2003)	OECD Economic Outlook Database	General government total tax and non-tax receipts, as percentage of GDP, multiplied by 100, 1994 to 2003 average.	N/A

GGREV99A	General government revenue GFS data (1999 to 2003)	IMF Government Finance Statistics	Consolidated general government [GG] expenses, accrual basis, as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
GGREV99E	General government revenue Eurostat data (1999 to 2003)	Eurostat New Cronos Database	Total general government revenue as a percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
GGREV99O	General government revenue OECD data (1999 to 2003)	OECD Economic Outlook Database	General government total tax and non-tax receipts, as percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
LNGDP**	Log of GDP per capita	World Bank World Development Indicators	Natural log of GDP per capita, constant 2000 US\$.	N/A
LNGDP94	Log of GDP per capita (1994 to 2003)	World Bank World Development Indicators	Natural log of GDP per capita, constant 2000 US\$, 1994 to 2003 average.	N/A
LNGDP99	Log of GDP per capita (1999 to 2003)	World Bank World Development Indicators	Natural log of GDP per capita, constant 2000 US\$, 1999 to 2003 average.	N/A
MAJ1	Plurality rule	Persson and Tabellini (2003)	Dummy indicating plurality rule for elections to the lower house of the legislature.	0 = not plurality rule, 1 = plurality rule
NO_LAWS	Von Hagen one vote on expenditure	OECD (2003), 2.8.a	Measures the number of separate appropriation laws the legislature approves expenditures. Part of Von Hagen's (1992) item two; see text for details.	0 = one, 2 = two to ten, 4 = more than ten
NO_LAWS_Z	Von Hagen one vote on expenditure (standardised)	NO_LAWS	Standardised version of NO_LAWS	0 = one, .5 = two to ten, 1 = more than ten
OECD	OECD member before 1993	Persson and Tabellini (2003)	Dummy for OECD membership before 1993, excluding Turkey.	0 = not member, 1 = member

OFFSET2	Von Hagen amendments offsetting	OECD (2003), 2.7.h	Dummy indicating whether the legislature is required to offset any amendments that increase spending with commensurate cuts elsewhere in the budget. Part of Von Hagen's (1992) item two; see text for details	0 = no offset, 4 = offset
OFFSET2_Z	Von Hagen Amendments offsetting (standardised)	OFFSET2	Standardised version of OFFSET2.	0 = no offset, 1 = offset
ORG_IND	Organisation sub-index	TIME, COMS and RESCAP s	Legislative organisation sub-index, the rescaled sum of TIME, COMS and RESCAP. Part of Wehner (2006a) index; see text for details.	Ranging from 0 = lowest degree of organisation to 100 = highest degree of organisation
POP15**	Working age population share	World Bank World Development Indicators	Population age 15 to 64 as percentage of total, multiplied by 100.	N/A
POP15_94	Working age population share (1994 to 2003)	World Bank World Development Indicators	Population age 15 to 64 as percentage of total, multiplied by 100, 1994 to 2003 average.	N/A
POP15_99	Working age population share (1999 to 2003)	World Bank World Development Indicators	Population age 15 to 64 as percentage of total, multiplied by 100, 1999 to 2003 average.	N/A
POP65**	Old age population share	World Bank World Development Indicators	Population age 65 or above as percentage of total, multiplied by 100.	N/A
POP65_94	Old age population share (1994 to 2003)	World Bank World Development Indicators	Population age 65 or above as percentage of total, multiplied by 100, 1994 to 2003 average.	N/A
POP65_99	Old age population share (1999 to 2003)	World Bank World Development Indicators	Population age 65 or above as percentage of total, multiplied by 100, 1999 to 2003 average.	N/A
POW_IND2	Powers sub-index	AMEND, REVBUD and FLEXI	Legislative powers sub-index, the rescaled sum of AMEND, REVBUD and FLEXI. Part of Wehner (2006a) index; see text for details.	Ranging from 0 = lowest degree of legislative power to 100 = highest degree of legislative power

PRES	President	Persson and Tabellini (2003)	Dummy for presidentialism.	0 = not presidential, 1 = presidential
RESCALED2	Index of legislative budget institutions	AMEND, REVBUD, FLEXI, TIME, COMS and RESCAP s	Index of legislative budget institutions, the rescaled sum of AMEND, REVBUD, FLEXI, TIME, COMS and RESCAP; see text for details.	Ranging from 0 = lowest degree of legislative power to 100 = highest degree of legislative power
RESCALED2_Z	Index of legislative budget institutions / Wehner index (standardised)	RESCALED	Standardised version of the index of legislative budget institutions.	Ranging from 0 = highest degree of legislative power to 1 = lowest degree of legislative power
RESCAP	Research	OECD (2003), 2.10.e	Specialised legislative budget research office. Part of Wehner (2006a) index; see text for details.	0 = no, 2.5 = less than ten professional staff, 5 = ten to 25 professional staff, 7.5 = 26 to 50 professional staff, 4 = Congressional Budget Office
RESERVE	Reserve	OECD (2003), 3.2.c.1	Power of the executive to fund new policy initiatives from a reserve fund. Part of Wehner (2006a) index; see text for details.	0 = reserve fund, 3.3 = no reserve fund
RESTRICT2	Von Hagen amendments limited	OECD (2003), 2.7.d	Dummy indicating whether the legislature has unfettered powers to amend the budget proposed by the executive. Part of Von Hagen's (1992) item two; see text for details.	0 = unlimited powers, 4 = limited powers
RESTRICT2_Z	Von Hagen amendments limited (standardised)	RESTRICT2	Standardised version of RESTRICT2.	0 = unlimited powers, 1 = limited powers
REV_ALESI	Alesina reversionary budget	OECD (2003), 2.7.c and 3.2.a.4	Reversionary budget item according to Alesina <i>et al.</i> (1996); see text for details.	Ranging from 0 = most disadvantageous for the executive to 10 = most advantageous for the executive
REV_ALESI_Z	Alesina reversionary budget (standardised)	REV_ALESI	Standardised version of REV_ALESI.	Ranging from 0 = most disadvantageous for the executive to 1 = most advantageous for the executive
REVBUD	Reversion	OECD 2003, 2.7.c	Reversionary budget. Part of Wehner (2006a) index; see text for details.	0 = executive budget proposal, 3.3 = vote on account, 6.7 = last year's budget, 10 = legislature approves interim measure

REVBUD_Z	Reversion (standardised)	REVBUD	Standardised version of REVBUD.	0 = legislature approves interim measure, .33 = last year's budget, .67 = vote on account, 1 = executive budget proposal
TIME	Time	OECD 2003, 2.7.b	Amount of time the budget is tabled ahead of the fiscal year; see text for details.	0 = up to two months, 3.3 = two to four months, 6.7 = four to six months, 10 = more than six months
TRADE**	Trade as share of GDP	World Bank World Development Indicators	Sum of imports and exports as a percentage of GDP, multiplied by 100.	N/A
TRADE94	Trade as share of GDP (1994 to 2003)	World Bank World Development Indicators	Sum of imports and exports as a percentage of GDP, multiplied by 100, 1994 to 2003 average.	N/A
TRADE99	Trade as share of GDP (1999 to 2003)	World Bank World Development Indicators	Sum of imports and exports as a percentage of GDP, multiplied by 100, 1999 to 2003 average.	N/A
UKCOL	Former UK colony	Persson and Tabellini (2003)	Former UK colonies with independence within the past 150 years.	0 = not former UK colony, 1 = former UK colony
UNICAM	Budgetary unicameralism	BICAM1	Inverse of BICAM1.	0 = co-equal second chamber, 1 = unicameral legislature or upper chamber with limited powers
VHAGEN2	Von Hagen item two	OECD (2003), 2.7.d, 2.7.e, 2.7.h, 2.7.j and 2.8.a	Von Hagen's (1992) item 2 (structure of parliamentary process); see text for details.	Ranging from 0 = highest degree of legislative power to 20 = lowest degree of legislative power
VHAGEN2_Z	Von Hagen item two (standardised)	VHAGEN	Standardised version of VHAGEN2.	Ranging from 0 = lowest degree of legislative power to 1 = highest degree of legislative power
VIRE	Virement	OECD (2003), 3.2.a.4	Power of the executive to reallocate appropriated funds from one programme to another. Part of Wehner (2006a) index; see text for details.	0 = may reallocate funds without legislative approval, 3.3 = may not reallocate funds or only with legislative approval

VOTCONF	Von Hagen amendments cause fall	OECD (2003), 2.7.h	Whether an amendment to the budget would be considered a vote of no confidence in the government. Part of Von Hagen's (1992) item two; see text for details.	0 = not vote of confidence, 4 = vote of confidence
VOTCONF_Z	Von Hagen amendments cause fall (standardised)	VOTCONF	Standardised version of VOTCONF.	0 = not vote of confidence, 1 = vote of confidence
WHOLD	Withhold	OECD (2003), 3.1.c	Power of the executive to withhold appropriated funds that are not available on a legal or entitlement basis. Part of Wehner (2006a) index; see text for details.	0 = may withhold funds without legislative approval, 3.3 = may not withhold funds or only with legislative approval
WHOLD_Z	Withhold (standardised)	WHOLD	Standardised version of WHOLD variable.	0 = may not withhold funds or only with legislative approval, 1 = may withhold funds without legislative approval

Notes: N/A stands for 'not applicable.' * Excluding sources of specific adjustments to the OECD and World Bank (2003) data, which are documented in detail in the text and a data spreadsheet available from the author. ** Variables used in the panel dataset.

B Summary statistics

Table 21: Cross-section summary statistics for continuous and quasi-continuous variables

Variable	Obs	Mean	SD	Min	Max
Alesina amendment powers (standardised)	36	0.44	0.45	0.00	1.00
Alesina subindex three (standardised)	36	0.59	0.26	0.10	1.00
Alesina reversionary budget (standardised)	36	0.74	0.21	0.20	1.00
Central government expenditure GFS data	25	34.59	7.95	19.76	50.07
Central government expenditure IFS data	29	28.98	8.52	15.65	45.71
Central government expenditure OECD data	22	29.82	7.29	13.99	41.17
Freedom	36	1.52	0.72	1.00	4.10
General government expenditure Eurostat data	20	47.82	5.66	33.64	58.36
General government expenditure GFS data	26	41.95	8.99	21.55	57.17
General government expenditure OECD data	25	44.47	7.42	25.68	58.34
General government revenue OECD data	25	43.76	7.99	29.39	60.21
Index of legislative budget institutions / Wehner index (standardised)	36	0.59	0.16	0.11	0.83
Log of GDP per capita	35	9.38	0.98	6.71	10.54
Old age population share	35	12.54	4.24	4.29	18.33
Powers (standardised)	36	0.33	0.37	0.00	1.00
Reversion (standardised)	36	0.48	0.38	0.00	1.00
Trade as share of GDP	35	76.97	37.70	20.42	173.52
Von Hagen item two (standardised)	36	0.29	0.18	0.00	0.60
Von Hagen one vote on expenditure (standardised)	36	0.19	0.34	0.00	1.00
Working age population share	35	66.24	2.83	56.63	71.72

Notes: Fiscal and socio-economic control variables are averaged over the 1999 to 2003 period. See data appendix for details.

Table 22: Cross-section summary statistics for dichotomous variables

	Obs	No	Yes
Budget committee (standardised)	36	4	32
Budgetary unicameralism	36	8	28
Federalism	36	26	10
Former UK colony	36	30	6
Plurality rule	36	30	6
President	36	29	7
Von Hagen amendments cause fall (standardised)	36	30	6
Von Hagen amendments limited (standardised)	36	17	19
Von Hagen amendments offsetting (standardised)	36	24	12
Von Hagen global vote (standardised)	36	28	8
Withhold (standardised)	36	17	19

Note: See data appendix for details.

C OECD and World Bank survey items used in this study

This appendix contains a complete listing of all items from the OECD and World Bank's 2003 Survey on Budget Practices and Procedures that I used in this research, and highlights some related issues that are relevant to this work. The listing below is verbatim from the original questionnaire, which is also available on the internet: <http://www.oecd.org/dataoecd/14/18/36930865.pdf>. While yielding a unique dataset, there are many problems with this survey, in particular poor design of many survey items, including non-exclusive and non-exhaustive answer categories, and lack of rigorous quality control mechanisms. These problems are not unique to this particular survey, but apply to probably most other surveys of budget institutions. To ensure the best possible quality of data, I invested heavily in cross-checking the results obtained from the 2003 survey database with other sources, in particular surveys that were carried out at roughly the same time period (OECD 2002b, Yläoutinen 2004), and in some cases I sought clarification from country experts (see acknowledgements).

Follow-up research can benefit from the results of a substantially revised survey tool. In the fall of 2005 the OECD requested a team of postgraduate students from the London School of Economics and Political Science to carry out a revised pilot survey targeted exclusively at Latin American countries and funded by the Inter-American Development Bank. The results are available here: <http://www.oecd.org/dataoecd/32/23/37848494.xls> (OECD 2006). On the basis of the pilot study, a team based with the LSE Public Policy Group, led by the author, co-ordinated the process of developing a new questionnaire

and web-based survey tool in the fall of 2006. Amongst the main challenges in revising the survey were to substantially cut the number of questions from about 370 in the 2003 survey to less than 100, to pay much more careful attention to the design of individual items, to exploit the advantages of conducting the survey on-line rather than through paper-based questionnaires, and to design and implement robust quality control mechanisms. The homepage of this revised survey tool is <http://www.oecdbudgetsurvey.org>.

The listing of items from the 2003 OECD and World Bank survey that were used to compile the dataset for this study follows below. The numbering refers to the original item number in the 2003 survey.

2.7.b How far in advance of the beginning of the fiscal year does the executive present its budget to the legislature?

- ☐ Up to two months.
- ☐ Two to four months.
- ☐ Four to six months.
- ☐ More than six months.

2.7.c If the budget is not approved by the legislature before the start of the fiscal year, which of the following describes the consequences:

- ☐ The executive's budget proposal takes effect in any case.
- ☐ The executive's budget proposal takes effect on an interim basis in a constitutional or legislative specified period of time.
- ☐ Last year's budget takes effect on an interim basis.
- ☐ Last years' budget concerning continuing expenditures takes effect.
- ☐ Other interim measures are constitutionally/legislatively required and voted on by the legislature.
- ☐ Other interim measures are voted on by the legislature.
- ☐ The executive would resign and new elections would be called
- ☐ Other, please specify _____

2.7.d Are there any restrictions on the right of the legislature to modify the detailed budget proposed by the executive?

- ☐ Yes.
- ☐ No.

2.7.e If applicable, what form do these restrictions take?

- ☐ May not make any changes. Legislature can only approve or reject the budget in whole.
- ☐ May not increase or propose new expenditures, i.e. legislature can only decrease funding levels.
- ☐ May only make changes to aggregate levels of spending or revenue.
- ☐ May reallocate and increase funding levels.
- ☐ May reallocate or increase funding levels, but only if it reduces others or approves new revenue sources, i.e. no net change in total deficit/surplus.
- ☐ May reallocate and increase funding levels for only certain programmes
- ☐ May reallocate or increase funding levels for only certain programmes, but only if it reduces others or approves new revenue sources, i.e. no net change in total deficit/surplus.
- ☐ May create new spending items, reallocate and increase funding levels.
- ☐ May create new spending items, reallocate or increase funding levels, but only if it reduces others or approves new revenue sources, i.e. no net change in total deficit/surplus.
- ☐ The Executive must approve any changes proposed by legislature.
- ☐ Other, please specify _____

2.7.h Notwithstanding any legal restrictions on the legislator's ability to modify the budget, is a vote on the budget considered a vote of confidence in the government, i.e., the government would resign if any changes are approved to its budget proposal?

- ☐ Yes.
- ☐ No.

2.7.j Are there arrangements in place for the legislature to establish aggregate expenditure ceilings before beginning debate on individual expenditure items?

- ☐ Yes, the Legislature sets hard spending ceilings.
- ☐ Yes, the Legislature sets notional spending constraints.
- ☐ No, but the legislature engages in a non-binding debate on aggregate spending.
- ☐ No.

2.8.a In how many separate appropriations laws/acts does the legislature approve expenditures?

- ☐ One.
- ☐ Two to five.
- ☐ Six to ten.
- ☐ Ten to fifteen.
- ☐ More than fifteen.

2.10.a What best describes the committee structure for dealing with the budget?

- ☐ A single budget committee deals with all budget-related matters with no formal input from other committees. Sectoral committees may make recommendations, but budget committee does not have to follow them.
- ☐ A single budget committee deals with the budget, but members from other sectoral committees attend meetings of the budget committee when expenditures in their specific areas are being dealt with. For example, members of the education committee would attend meetings of the budget committee when expenditures for the ministry of education were being discussed.
- ☐ A single budget committee deals with budget aggregates (total level of revenue and spending and their allocation to each sector) and sectoral committees deal with spending at the level of each appropriation. For example, the budget committee would establish the total level of expenditure for education, but member of the education committee would allocate the total among each appropriation within the education sector.
- ☐ Sectoral committees deal with appropriations for each respective sector. No budget committee is in place or offers only technical assistance.
- ☐ Other, please specify _____

2.10.e Is there a specialised budget research organisation attached to the legislature that conducts analyses of the budget? (Note this organisation may be part of the audit office.)

- ☐ Yes, with less than ten professional staff.
- ☐ Yes, with ten to 25 professional staff.
- ☐ Yes, with 26 or more professional staff.
- ☐ No.

3.1.c Can the Central Budget authority withhold funds that are appropriated, but not available on a legal or entitlement basis?

- ☐ Yes.
- ☐ Yes, with approval from the legislature.
- ☐ Yes, with approval from an executive branch committee.
- ☐ Yes, with approval from an executive branch official.
- ☐ No.

3.2.a.4 Can appropriations be reallocated from one programme to another?

- ☐ There are no restrictions on such transfers.
- ☐ There can be transfers, but only with the approval of the Ministry of Finance/Central Budget Authority.
- ☐ There can be transfers, but only with the approval of the Legislature.
- ☐ There can be transfers, but the legislature must be notified of the transfer.
- ☐ There can be no such transfers.
- ☐ Other, please specify _____

3.2.c.1 Does the annual budget include any central reserve funds to meet unforeseen expenditures? If applicable, please mark more than one.

- ☐ No.
- ☐ A small central reserve fund is operated to meet general unforeseen expenditures.
- ☐ A small central reserve fund is operated for only limited contingent purposes.
- ☐ A small central reserve fund is operated for new policy initiatives.
- ☐ A large central reserve fund is operated to meet general unforeseen expenditures.
- ☐ A large central reserve fund is operated to meet major forecasting errors in the economic and other assumptions underlying the budget. The fund is only used if such errors occur.
- ☐ A large central reserve fund is operated for new policy initiatives.
- ☐ Other, please specify _____

4.5.m Are audit results circulated and discussed in Parliament?

- ☐ No.
- ☐ No, the reports are too late.
- ☐ Yes, by Budget committee.
- ☐ Yes, by oversight committee(s).
- ☐ Yes, by General Assembly.

D Use of the *xtfevd* command in Stata

The procedure of ‘fixed effects vector decomposition’ (FEVD), used in chapter 5, was only recently developed (Plümper and Troeger 2007). To illustrate the use of the *xtfevd* command, I append the relevant lines from the Stata do-file:

```
xtfevd ggexpo lggexpo lngdp pop15 pop65 trade restrict euro12 /*  
*/ pres maj ukcol commi oecd y2-y33 /*  
*/ , invariant(restrict pres maj ukcol commi oecd) pcse
```

```
xtfevd ggexpo lggexpo lngdp pop15 pop65 trade restrict euro12 /*  
*/ pres maj ukcol commi oecd y19-y33 if half1==0/*  
*/ , invariant(restrict pres maj ukcol commi oecd) pcse
```

The statistics reported in this thesis were compiled with Stata 9.2.