The influence of fiscal policymaking frameworks on fiscal outcomes: Evidence from the European Union

by

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ABSTRACT

This dissertation explores the potential of centralised, top-down procedural rules (also known as budget-process rules) and independent fiscal councils to complement numerical fiscal rules as devices for preventing fiscal profligacy. To this end, it studies the connections between fiscal policymaking frameworks and fiscal outcomes in fourteen European Union countries in the years from 1998 to 2004. The fiscal policymaking frameworks of these countries contained various configurations of numerical rules, procedural rules and fiscal councils, and the study uses differences in the degrees to which the countries complied with the supranational rules of the Stability and Growth Pact (SGP) as a measure of the efficacy of these configurations at preventing fiscal profligacy.

The analysis itself consists of two parts. The first part – a cross-sectional analysis of all fourteen countries – uses a set-theoretic technique known as fuzzy-set qualitative comparative analysis (fsQCA) to identify connections between various configurations of the elements of fiscal policymaking frameworks and the degrees to which the countries complied with the SGP rules. These connections are interpreted in terms of sufficiency and necessity and used to identify pathways to consistent compliance with the SGP rules. The second part of the analysis consists of case studies of three of the fourteen countries (Finland, France and Ireland). The case studies are used to verify aspects of the set-theoretic analysis, namely the specification of the set-theoretic model (especially the influence of the preferences of policymakers on compliance with the SGP rules), the accuracy of the quantitative measures of the efficacy of elements of fiscal policymaking frameworks, the explanatory value of the solution pathways and the country-level relevance of two hypotheses derived from the results of the analysis.

The set-theoretic analysis finds some evidence of the efficacy of fiscal policymaking frameworks consisting of combinations of numerical rules, procedural rules and fiscal councils, but establishes that such multifaceted frameworks were neither necessary nor sufficient for preventing fiscal profligacy. The study also shows, in tentative fashion in the set-theoretic analysis and more forcefully in the case studies, that the preferences of

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policymakers were critical determinants of the effectiveness of all types of fiscal policymaking frameworks. Hence, it concludes that the potential of multifaceted fiscal policymaking frameworks should not be exaggerated. In addition, it argues that an unwavering commitment to fiscal prudence complemented by policymaking framework elements chosen to overcome specific incentive distortions is a more promising approach for preventing fiscal profligacy than such multifaceted frameworks per se. More generally, the findings of the study confirm the scope for using fsQCA and other case-oriented methods to complement regression-based analyses of the effectiveness of fiscal policymaking frameworks.

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OPSOMMING

Hierdie proefskrif ondersoek die potensiaal van gesentraliseerde, bo-na-onder begrotingsprosesreëls en onafhanklike fiskale rade om numeriese reëls aan te vul as meganismes om fiskale spandabelrigheid te verhinder. Met hierdie doel voor oë bestudeer dit die verbande tussen fiskale beleidmakingsraamwerke en fiskale uitkomste in veertien lidlande van die Europese Unie in die jare van 1998 tot 2004. Die fiskale beleidmakingsraamwerke van hierdie lande het verskeie konfigurasies van numeriese reëls, begrotingsprosesreëls en fiskale rade bevat, en die studie gebruik verskille in die mate waartoe die lande die bonasionale reëls van die Stabiliteits- en Groeiverdrag ("Stability and Growth Pact", oftewel SGP) nagekom het as 'n maatstaf van hierdie konfigurasies se doelmatigheid met betrekking tot die verhindering van fiskale spandabelrigheid.

Die ontleding self bestaan uit twee dele. Die eerste deel – 'n kruissnitontleding van al veertien lande – gebruik 'n versamelingsteoretiese tegniek was as "fuzzy-set qualitative comparative analysis" (fsQCA) bekend staan om verbande te identifiseer tussen verskillende konfigurasies van die elemente van fiskale beleidmakingsraamwerke en die mate waartoe die lande die SGP-reëls nagekom het. Hierdie verbande word aan die hand van genoegsaamheid en noodsaaklikheid geïnterpreteer en gebruik om roetes na nakoming van die SGP-reëls te identifiseer. Die tweede deel van die ontleding bestaan uit gevallestudies van drie van die veertien lande (Finland, Frankryk en Ierland). Die gevallestudies word gebruik om aspekte van die versamelingsteoretiese ontleding te toets, naamlik die spesifikasie van die versamelingsteoretiese model (veral die invloed van die voorkeure van beleidmakers op nakoming van die SGP-reëls), die akkuraatheid van die kwantitatiewe maatstawwe van die doelmatigheid van elemente van fiskale beleidmakingsraamwerke, die verklarende waarde van die oplossingsroetes asook die tersaaklikheid vir individuele lande van twee hipoteses wat uit die resultate van die ontleding voortvloei.

Die versamelingsteoretiese ontleding vind aanduidings van die doelmatigheid van fiskale beleidsraamwerke wat kombinasies van numeriese reëls, begrotingsprosesreëls

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en fiskale rade bevat, maar stel vas dat sulke saamgestelde raamwerke nóg noodsaaklik nóg genoegsaam vir die verhindering van fiskale spandabelrigheid was. Die studie toon ook, op tentatiewe wyse in die versamelingsteoretiese ontleding en meer oortuigend in die gevallestudies, dat die voorkeure van beleidmakers deurslaggewende bepalers van die doelmatigheid van alle tipes beleidmakingsraamwerke was. Dit kom dus tot die gevolgtrekking dat die potensiaal van saamgestelde fiskale beleidmakingsraamwerke nie oordryf moet word nie. Voorts voer dit aan dat ‘n onwrikbare verbintenis tot fiskale dissipline, aangevul deur elemente van beleidsmakingsraamwerke wat gekies is om spesifieke verwringings van aansporings te bowe te kom, groter belofte inhou as ‘n benadering om fiskale spandabelrigheid te verhinder as sulke saamgestelde raamwerke per se. Op ‘n breër vlak bevestig die studie dat daar heelwat ruimte bestaan om fsQCA en ander metodes wat op gevalle konsentreer, te gebruik om regressie-ontledings van die doelmatigheid van fiskale beleidmakingsraamwerke aan te vul.

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LIST OF ABBREVIATIONS

CEMAC	Central African Economic and Monetary Community
csQCA	Crisp-set qualitative comparative analysis
ECB	European Central Bank
ECCU	Eastern Caribbean Currency Union
ECFIN	Directorate General Economic and Financial Affairs
Ecofin	Economic and Financial Affairs Council
EDP	Excessive Deficit Procedure
EMU	Economic and Monetary Union
EU	European Union
fsQCA	Fuzzy-set qualitative comparative analysis
GDP	Gross domestic product
IMF	International Monetary Fund
INSEE	Institut nacional de la statistique et des etudes économiques
NPRF	National Pensions Reserve Fund
OECD	Organisation for Economic Co-operation and Development
PRP	Rassemblement pour la République (“Rally for the Republic”)
PS	Parti socialiste (“Socialist Party”)
QCA	Qualitative comparative analysis
SGP	Stability and Growth Pact
WAEMU	West African Economic and Monetary Union

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

The choice between rules-based and discretionary policymaking has featured in debates about macroeconomic stabilisation policy ever since the publication of John Maynard Keynes's book "The general theory of employment, interest and money" in 1936.[1] Dornbusch, Fischer and Startz (2004: 198) formulate this choice as follows: "Should the monetary authority and also the fiscal authority conduct policy in accordance with pre-announced rules that describe precisely how their policy variables will be determined in all future situations, or should they be allowed to use their discretion in determining the values of the policy variables at different times?" Over time, the stances of participants in the debate have been influenced by new theoretical arguments, empirical evidence on the effectiveness of the two types of policymaking regimes, and changing circumstances (including political pressures on policymakers).

Rules-based fiscal policymaking regimes have become markedly more numerous in the past two decades: according to Schaechter, Kinda, Budina and Weber (2012: 10), the number of countries with numerical fiscal rules increased from five in 1990 to 76 in March 2012. Several factors have contributed to this trend, including the strong support for policy rules in modern macroeconomic theory, disillusionment with the results of discretionary fiscal policymaking, and the introduction of numerical rules in the member states of four currency unions. Yet the record of numerical fiscal rules has been mixed during this period. In some countries, the adoption or strengthening of such rules has contributed to good fiscal outcomes, whereas the governments of other countries ignored, abandoned, suspended or circumvented quantitative restrictions on fiscal aggregates. The reality that the potential of rules-based fiscal policymaking to improve fiscal performance has been fulfilled to a limited degree has stimulated research into the

[1] It is striking that a seminal paper entitled "Rules versus authorities in monetary policy" (Simons, 1936) appeared in the same year as Keynes's landmark volume.

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extent to which other elements of fiscal policymaking frameworks may enhance the effectiveness of numerical fiscal rules.

The purpose of the present study is to contribute to this body of research by exploring the relationships among numerical rules and two other elements of fiscal policymaking frameworks, namely procedural fiscal rules (budget-process rules) and fiscal councils (non-partisan fiscal agencies). The dissertation focuses on the experiences from 1998 to 2004 of fourteen European Union (EU) countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. It provides a set-theoretic analysis that identifies links between the degrees to which these countries complied with the supranational fiscal rules of the EU and the details of their fiscal policymaking frameworks, that is, the prevalence and efficacy of country-specific numerical fiscal rules, procedural fiscal rules and fiscal councils.[2] It also provides case studies of the relationships between the fiscal policymaking regimes and fiscal outcomes in Finland, France and Ireland. The findings confirm that numerical rules can contribute to prudent fiscal outcomes and that their effectiveness can be enhanced by well-designed budget-process rules and fiscal councils. The observed connections between fiscal performance and the details of fiscal policymaking frameworks are relatively weak, however, largely because idiosyncratic factors (such as the strength of governments' commitment to fiscal discipline) exercise powerful effects on fiscal outcomes. Hence, the findings of this dissertation caution against excessive confidence in the potential of numerical rules and other aspects of fiscal policymaking frameworks to ensure prudent outcomes.

The remainder of this chapter consists of five sections. The next three sections discuss salient aspects of rules-based fiscal policymaking, namely the nature of numerical fiscal rules (Section 1.2), the reasons for the current popularity of rules-based fiscal regimes (Section 1.3) and the record thereof (Section 1.4). Against this backdrop, Section 1.5 formulates the research question. Section 1.6 outlines the structure of the dissertation.

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[2] Supranational fiscal rules are rules to which the governments of countries commit in the context of regional groupings, for example, the Economic and Monetary Union (EMU) in Europe. National fiscal rules are chosen independently by and binding on the governments of individual countries.

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1.2 THE NATURE OF NUMERICAL FISCAL RULES

Numerical fiscal rules are quantitative restrictions on the absolute or relative levels of fiscal aggregates with one or more of three aims, namely maintenance of a sustainable level of public debt, stabilisation of the level of national output, and containment of the size of the government sector. The most common categories of numerical fiscal rules are outlined below.

- *Public-debt rules* specify explicit limits on the extent of the public debt, expressed as amounts or as ratios of the gross domestic product (GDP).
- *Budget-balance rules* impose limits on fiscal balances, expressed as ratios of the GDP.[3] Such limits are imposed on the overall balance (the difference between total government revenue and total government spending), the primary balance (the difference between total government revenue and government spending on items other than interest on public debt), or the current balance (the difference between current government revenues and current government outlays).[4]
- *Expenditure rules* cap the absolute levels, growth rates or GDP shares of public spending aggregates such as current, primary or total outlays.
- *Revenue rules* specify upper or lower limits on government revenue (expressed as ratios of the GDP) or the utilisation of receipts in excess of the budgeted amounts.

The distinction between numerical fiscal rules and procedural fiscal rules features prominently in this dissertation. As was stated earlier, numerical rules are quantitative restrictions on the absolute or relative levels or the growth rates of fiscal aggregates.

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[3] This implies that a balanced-budget rule, which prohibits deficits, is not the only type of budget-balance rule. Other well-known examples of budget-balance rules are Chiles's structural surplus rule (which from 2000 to 2007 prescribed a structural budget surplus of at least 1 percent of GDP) and the deficit rule of the Stability and Growth Pact (which prohibits EU countries from running budget deficits in excess of 3 percent of GDP in all but exceptional circumstances).

[4] Current-balance rules stipulate that government may not borrow to finance current spending or — what amounts to the same thing — that borrowed funds should be used only to finance capital outlays. This principle is known as the "golden rule of fiscal policy" (Balassone and Franco, 2001: 39).

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Procedural fiscal rules, by contrast, are the details of budget processes, that is, the arrangements governing the formulation of budget proposals by executive branches of government, the approval of budget proposals by legislatures and the implementation of budget laws (Corbacho and Schwartz, 2007: 60; Drazen, 2004: 15). Hence, the purpose of procedural fiscal rules is to regulate policymaking processes, while that of numerical fiscal rules is to constrain the outcomes of such processes.[5]

1.3 THE CURRENT POPULARITY OF RULES-BASED FISCAL POLICYMAKING

Philosophers and political theorists have reflected since ancient times on the advisability of using laws and rules to constrain the exercising of judgment by decision-makers in government.[6] To name but one example: in a well-known passage in "The federalist papers" written in 1787, Madison (1987b: 343) identifies precautionary constraints as core elements of political constitutions: "The aim of every political Constitution is or ought to be first to obtain for rulers, men who possess most wisdom to discern, and most virtue to pursue the common good of the society; and in the next place, to take the most effectual precautions for keeping them virtuous, whilst they continue to hold their public trust." Elsewhere in the same book, Madison (1987a: 319-320) argues that such "precautions" should include controls fashioned to induce the fallible individuals who administer the structures of state to act wisely and prudently:

> If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would

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[5] Von Hagen and Harden (1995: 775) refer to approaches to fiscal discipline rooted in numerical and procedural rules as "target-oriented approaches" and "procedure-oriented approaches", respectively.

[6] The Eleatic Stranger, a character in Plato's dialogue "The statesman", provides an early discussion of this issue (Plato, 1892: 494-506). Arguing that law-based forms of governance tend to rely on rigid rules, which he deems inappropriate mechanisms for managing the uncertainties of human interaction, the Stranger opines that the greater flexibility of judgment-based governance makes it inherently superior. He acknowledges, though, that the proper use of judgment requires wisdom and statesmanship and that the outcomes yielded by judgment may be inferior to those of decision-making based on laws if these qualities are lacking. The conviction that wisdom and statesmanship tend to be in short supply in most societies moves the Stranger to conclude that laws derived from the collective wisdom of a society are preferable to judgment-based decision-making.

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> be necessary. In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself.

In fiscal policymaking, widespread adoption of such controls in the form of numerical rules dates from the early 1990s. Kopits (2001: 4-5) lists only a few antecedents. In what he terms the "first wave" of rules-based frameworks, sub-national authorities in some federal dispensations (including most states in the United States in the second half of the nineteenth century and several Swiss cantons from the 1920s onwards) adopted current-balance rules in attempts to access market-based financing for capital spending programmes. The so-called "second wave" occurred after the Second World War, when countries such as Germany, Italy, Japan and the Netherlands adopted budget-balance rules to facilitate the achievement of economic stabilisation goals. In addition, some countries (including Sweden from 1937 to 1980 and South Africa from 1910 to 1976) mimicked the golden rule by using dual-budget systems that distinguished between current and capital outlays and restricted deficit financing to the latter type of spending (cf. Balassone and Franco, 2001: 39-41; Heyns, 1991: 386-389). This section discusses three developments that contributed to the unprecedented proliferation of rules-based fiscal policymaking frameworks since 1990.

1.3.1 Theoretical considerations

The Keynesian paradigm emphasises the economic benefits of anti-cyclical stabilisation policy and assigns a prominent role to fiscal policy as a tool for this purpose. Discretion widely was regarded as a prerequisite for effective anti-cyclical fiscal policymaking during the heyday of Keynesian economics (i.e. the era from the end of the Second World War to the early 1970s). This belief was based on flexibility considerations: the argument was that policymakers with discretionary powers had more leeway to implement such policies than rules-bound ones, especially when required to respond to shocks.

Until the early 1970s, the rules-versus-discretion debate was an extension of the broader dispute about stabilisation policy and participants derived their views on the

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choice between rules-based and discretionary policymaking from their beliefs on the need for and feasibility of active demand-management policies (see, for example, Argy, 1988: 147-160; Blinder, 1987: 399-406). Broadly speaking, the macroeconomic policy debate pitted Keynesians who advocated activist stabilisation policies and discretionary policy regimes against monetarists who supported non-activist policy approaches underpinned by rules-based regimes. Thus the bête noire of the Keynesians, Milton Friedman, based his advocacy of policy rules on technical limits on the abilities of policymakers to be successful at conducting active stabilisation policy: inadequate knowledge of the fundamental causes of business cycles, long and variable lags in economic policymaking, and the existence of natural rates of unemployment not amenable to long-run change by means of demand-management policies (cf. Friedman, 1948; 1968).[7] From the late 1960s onwards, the monetarist case against the Keynesian stabilisation paradigm was boosted by the arguments of the new classical economists. A prominent example was the Ricardian equivalence theorem advanced by Barro (1974), which implies that the fiscal authorities cannot manipulate aggregate demand by varying the level of the budget deficit. In addition, the devastating critique of Keynesian econometric models by Lucas (1976) robbed the paradigm of its major tools for forecasting and policy analysis.

This suite of arguments did grave damage to the theoretical case for active fiscal stabilisation policy, and made monetary policy the preferred tool of macroeconomists as far as the combating of economic fluctuations was concerned. In fact, Eichenbaum (1997: 236) formulates the near-consensus view in the 1990s as follows: "In sharp contrast to the views that prevailed in the early 1960s, there is now widespread agreement that countercyclical discretionary fiscal policy is neither desirable nor politically feasible. Practical debates about stabilization policy revolve almost exclusively around monetary policy" (cf. also Taylor, 2000). One of the main objections to rules-based fiscal policymaking — the allegedly excessive restriction of policymakers'

[7] Argy (1988: 150-152) and Fischer (1988: 2-3, 11-16) provide succinct discussions of Friedman's arguments for policy rules. Friedman's belief that discretionary fiscal policy is ineffective also rested on the claim that bond-financed fiscal stimuli crowd out private-sector investment (Friedman, 1970), and the implications of his permanent-income hypothesis (Friedman, 1957) for the multiplier effects of expansionary fiscal measures.

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flexibility to counter shocks to output — lost much of its force as the popularity of Keynesian fiscal activism waned.[8]

Concurrent developments in the broader rules-versus-discretion debate further bolstered the case for fiscal rules. These developments were direct results of the rational-expectations revolution in macroeconomics, which changed the mainstream view of the nature of macroeconomic policy from that of an optimal-control problem to a game-theoretic problem involving rational economic agents.[9] Such agents consider all relevant information and base their decisions on the past, current, and expected future states of their environments, including anticipated economic policy (Blackburn and Christensen, 1989: 2).[10] As pointed out by Lucas and Sargent (1994: 28), the logical implication of the implied link between private agents' expectations of future policy and the efficacy of current policy actions is to view policymaking as a process of influencing expectations by adopting stable rules that private agents understand well. Hence, policy-selection questions should be posed in terms of appropriate rules that describe how policies will be determined now and in future, rather than in terms of what appropriate policy actions might be given current circumstances (Prescott, 2006: 205).

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[8] The first decade of the Millennium brought a revival of interest in the countercyclical role of fiscal policy (cf. Galí, 2005) that gained momentum when the lower bound of interest rates was reached during the Great Recession (Wren-Lewis, 2010). Nonetheless, the majority view remains that monetary policy should be the main tool for stabilisation policy in normal times (see, for example, DeLong and Summers, 2012: 233). Reflecting on fiscal policymaking during the Great Recession, Wren-Lewis (2011) argues that the continued strength of the opposition to countercyclical fiscal policy moved some fiscal authorities to switch prematurely from expansionary stances that supported economic activity to measures aimed at reducing the level of the public debt.

[9] As Kydland and Prescott (1977: 473) put it: "… economic planning is not a game against nature but, rather, a game against rational economic agents."

[10] In the paper that introduced the notion in economic analysis, Muth (1961: 316) defines rational expectations as expectations that are essentially the same as the predictions of the relevant economic theory, being informed predictions of future events. Taylor (1986: 135) applies this definition as follows in the context of macroeconomic analysis: "… people are forward-looking, and their future expectations can be modelled reasonably accurately by assuming that they have learned the basic statistical regularities of the business cycle, and they use this information to make unbiased (but not error-free) forecasts".

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Kydland and Prescott (1977) apply these ideas to show that optimal-control solutions to policy problems tend to be time-inconsistent: policies that are optimal at the beginning of planning periods often are no longer optimal later, and sub-optimal outcomes result from the responses of rational private agents to announcements of such policies.[11] Given that the optimal state-contingent policies are dynamically inconsistent and, hence, not feasible, Kydland and Prescott (1977) further demonstrate that commitments to simple policy rules are second-best solutions that yield higher levels of welfare than discretionary policymaking. Importantly, this finding does not result from errors or perverted motives on the part of policymakers; its power lies in the purported demonstration that rules-based regimes are superior to discretionary ones even when policymakers are well informed and well intentioned. As such, it invalidates the formerly influential notion that discretion dominates rules because good rules can be implemented successfully by capable and benevolent policymakers with discretionary powers (Fischer, 1988: 3). This result tilted the balance of the theoretical debate in favour of rules. Barro and Gordon (1983a; 1983b) further develop Kydland and Prescott's illustrative application of the idea of dynamic inconsistency to monetary policymaking. Among other themes, they emphasise that credible commitments to policy rules are crucial for overcoming time-inconsistency and for building reputations for sound policymaking. These ideas remain influential in the literature on fiscal rules.

The theoretical developments outlined in this section have had important ramifications for academic thinking about the role of policy rules and the nature of rules-based policymaking. Whereas fiscal policy rules traditionally were seen only as constraints on potentially errant policymakers, their role in environments with forward-looking agents extends to that of mechanisms to enhance the effectiveness of policy by anchoring the expectations of private agents (cf. Leeper, 2009). This broadening of the role of policy rules led to a reformulation of the nature of rules-based policymaking that rests on the notion of policy as an ongoing process, in contrast to the earlier focus on constraints on

[11] An important requirement for time- (or dynamic) inconsistency is that the ex ante optimal policy should not achieve the first-best outcome. Failure to achieve the optimal outcome is usually ascribed to imperfections such as externalities, labour market and other distortions, and the non-availability of appropriate policy instruments (Persson, 1988: 520).

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policymaking flexibility. In the context of monetary policymaking, McCallum (1999: 1486) formulates the more recent understanding of the distinction as follows: "… discretion implies period-by-period reoptimization on the part of the monetary authority whereas a rule calls for period-by period *implementation* of a contingency formula that has been selected to be generally applicable for an indefinitely large number of decision periods" [emphasis in the original]. Taylor (1993: 199) identifies two reasons why policy rules should be reasonably durable (he suggests a minimum lifespan of several business cycles or years). First, the possible credibility benefits of rules depend on the extent to which agents learn and eventually become able to predict how such rules affect the performance of the economy. Second, frequent changes make it very difficult (if not impossible) to judge the performance of policy rules in a rigorous manner. It is widely agreed, however, that rules-based policymaking allows for revision of the rules, for example, when new information about the operation of the economy become available or when policy preferences change (McCallum, 2004: 368; Woodford, 1999: 293).[12] This acknowledgement represents a significant departure from the traditional, rigid view about the consistency and durability of policy rules.

1.3.2 The disappointing results of discretionary fiscal policymaking

Apprehension about the apparent inclination of discretionary fiscal policymaking to give rise to persistent fiscal deficits, rising debt burdens and excessive output volatility has been a major factor behind the growing popularity of rules-based fiscal regimes.[13] The vast majority of industrial and developing countries have experienced regular fiscal deficits as well as rising public debt burdens since the early 1970s (Kumar and Ter-Minassian, 2007: 1-2). Furthermore, discretionary measures have often rendered fiscal

[12] Woodford (1999: 293) suggests that all rules should be chosen in a timeless manner to prevent such revision from collapsing into discretionary policymaking: "The way that this can be done is for the central bank to adopt… the pattern of behavior *to which it would have wished to commit itself to at a date far in the past*, contingent upon the random events that have occurred in the meantime" [emphasis in the original].

[13] An influential report to the Organisation for Economic Co-operation and Development (OECD) by a group of independent experts (McCracken, Carli, Giersch, Marjolin, Matthews, Karaosmanaglu, Komiya and Lindbeck, 1977) contains an early statement of such apprehension.

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policy in industrial and developing countries procyclical by offsetting the effects of the automatic fiscal stabilisers (Balassone and Kumar, 2007: 20-24).[14]

Kumar and Ter-Minassian (2007: 1) point out that the ubiquity and persistence of the so-called "deficit bias" in fiscal policymaking belies the notion that adverse economic shocks were the only or even the most important causal factors. Drawing on a large body of theoretical and empirical research, Debrun, Hauner and Kumar (2007: 11-14) offer four non-mutually-exclusive explanations for the deficit bias in industrial and developing countries. First, voters may not fully understand the intertemporal budget constraint of the government or the procyclical effects of a persistent demand for more public goods and transfers, and this may induce politicians to use expansionary fiscal measures to boost their re-election chances and to delay fiscal consolidations for fear of adverse political consequences. Second, re-election concerns may shorten the time-horizons of politicians and cause them to ignore the future effects of persistent deficit financing (for example, tax hikes and cuts in non-interest expenditure). Third, attempts to keep budget deficits low may be time-inconsistent (that is, optimal at the start of planning periods, but not necessary throughout such periods): for example, the optimal policy would be to save revenue windfalls to lessen financing constraints in recessions, but cash-strapped governments may find it very hard to resist pressure to spend such windfalls when they arise. Fourth, distributive conflict among interest groups could result in "common pool" problems that often distort fiscal outcomes. Such problems arise when interest groups view fiscal policymaking as a process of competing for a common pool of government revenue.[15]

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[14] Having studied the effects of fiscal policy in 91 countries from 1960 to 2000, Fatás and Mihov (2003a) conclude that the discretionary impact of fiscal policy (i.e. changes in the fiscal policy stance not related to current economic conditions) frequently amplified cyclical fluctuations in economic activity.

[15] The essence of the common-pool problem is that many spending programmes are targeted at groups of voters but financed from general revenues. Hence, the beneficiaries of public spending programmes typically pay for only a fraction of the benefits they receive; this causes politicians and voters to overestimate the net marginal social benefits of such programmes and to demand excessive levels of government spending (Von Hagen, 2002: 264). Velasco (1999) shows that the effects of the common-pool problem also include excessive budget deficits and public-debt burdens.

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Procyclical fiscal policymaking is antithetical to the objective of output stabilisation. In practice, procyclicality often accompanies economic upswings, when governments are tempted to cut taxes and increase expenditures (Kumar and Ter-Minassian, 2007: 2). Balassone and Kumar (2007: 28-31) argue that such procyclicality dampens long-run economic growth by amplifying output fluctuations; they add that failure to compensate for deficits incurred during downturns by running surpluses during upswings steadily worsens the public-debt burden, which complicates attempts to implement appropriate countercyclical measures during recessions. Two sets of factors seem to contribute to procyclical fiscal policymaking (cf. Balassone and Kumar, 2007: 24-27). The first is that accurate assessment of the economic cycle is extremely difficult and this, in conjunction with the well-documented lags in the formulation and implementation of fiscal policy measures, often distorts the timing of interventions. According to Balassone and Kumar (2007: 25), the asymmetric incidence of procyclicality indicates that others forces, such as political economy factors in countries lacking strong budget-process rules, may also be at work. In this regard, Tornell and Lane (1999) posit a "voracity effect" (common-pool pressure for increased public spending during upswings), while Talvi and Vègh (2005) suggest that some governments may reduce tax rates during upswings to proactively allay pressure for spending increases during subsequent recessions.

While the case for budget-balance and public-debt rules to reduce deficit bias in fiscal policymaking is straightforward, the usefulness of numerical rules for the correction of procyclical tendencies depends on their design. Rigid rules can worsen procyclicality in fiscal policymaking: for example, if adequate budget surpluses are not achieved during upswings, rules that require balanced budgets can force policymakers to undertake procyclical discretionary actions during subsequent downturns to offset the working of the automatic fiscal stabilisers (Balassone and Kumar, 2007: 26). Constraints on cyclically adjusted budget balances can ameliorate this risk, if policymakers possess the analytical capacity to assess the cyclical states of economies accurately.

1.3.3 The formation of monetary unions

The adoption of fiscal rules by the member countries of four monetary unions — the EU, the Eastern Caribbean Currency Union (ECCU), the Central African Economic and

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Monetary Community (CEMAC) and the West African Economic and Monetary Union (WAEMU) — has contributed significantly to the ongoing proliferation of rules-based fiscal regimes. There are three main reasons why monetary unions impose fiscal rules on member countries despite the fact that the centralisation of monetary policymaking already circumscribes their capacity for independent macroeconomic stabilisation. These reasons all stem from the risk that the fiscal policies of some member states could have adverse spillover effects on the economies of others. Direct macroeconomic spillovers arise when fluctuations in output caused by the fiscal policies of one member state are transmitted to others via trade and capital flows or other financial linkages (Fatás and Mihov, 2003b: 115). In addition, heavy borrowing by the governments of some member states could give rise to higher interest rates and, hence, more onerous debt burdens throughout the monetary union (De Grauwe, 1992: 170). Fatás and Mihov (2003b: 115) also refer to credibility spillovers: the credibility of the commitment to price stability of the central bank of the monetary union would be jeopardised if it attempts to bail out member countries where unsustainable budgetary policies caused financial crises, whether by means of more accommodative monetary policies or by monetising their debts. The negative externality would be compounded if the bailout raises inflation rates throughout the union.

1.4 THE RECORD OF RULES-BASED FISCAL POLICYMAKING

Econometric and case studies confirm the continued validity of an early assessment of the efficacy of numerical fiscal rules: "For the most part, economic performance under fiscal rules has been mixed. Besides a number of successes, some rules have been ineffective, suspended, or abandoned" (Kopits and Symansky, 1998: 12).

The fiscal performance of EU countries under supranational numerical rules since 1992 provides vivid evidence of the mixed record of rules-based fiscal regimes. The overall-balance rule contributed to reductions and convergence in budget deficits of EMU members from 1993 to 1999, but budget deficits increased slightly, on balance, from 1999 to 2002 (cf. Fatás and Mihov, 2003b: 120-124). It appears as if a strong economic upswing and the desire on the part of governments to satisfy the Maastricht convergence criteria for EU membership drove the initial reductions in budget deficits.

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Countries apparently did not have a strong incentive to reduce their deficits further after they had met these criteria, and several experienced larger deficits and more policy volatility when the Eurozone went into recession in 2001. By 2003, several countries (including Germany and France) had breached the 3 percent-of-GDP deficit limit, but the European authorities refrained from implementing the prescribed excessive deficit procedure.[16] The Stability and Growth Pact (SGP) was suspended in November 2003, but resurrected in revised form in 2005. Breaches remained common, however: according to Calmfors and Wren-Lewis (2011: 654), the rules were infringed in 45 out of a possible 177 country years from 1999 to 2007.[17] The SGP came under pressure again during the Great Recession, and failed to prevent large increases in the budget deficits of all EU member states, a severe public-debt crisis in Greece from 2009 onwards and near-crises in Portugal and Spain. From 2008 to 2010, only three of the 27 EU countries never breached the budget-balance and public debt rules, while 16 were in violation of one or both rules in all three and a further six in two years (Calmfors and Wren-Lewis, 2011: 654). These trends led to further changes to the substance of the rules and the procedures for enforcing them in December 2011 (cf. European Commission, 2014a). According to Von Hagen and Wolff (2006) and Beetsma, Giuliodori and Wierts (2009), governments often resorted to creative accounting and to manipulating economic and fiscal forecasts to feign adherence to the rules. Empirical analyses confirm the chequered history of supranational numerical rules in the EU: earlier studies, which focus mainly on the impact of the Maastricht Treaty rules, report deficit-reduction (e.g. Buti and Giudice, 2002) and cyclical stabilisation effects (e.g. Galí and Perotti, 2003), but there is scant evidence of positive effects on the sustainability or countercyclicality of fiscal policy in recent research focusing mainly on the effects of the SGP rules (e.g. Larch, Van den Noord and Jonung, 2010; Poplawski Ribeiro, 2009).

Deficient design and weak enforcement also prevented the numerical rules in the WAEMU and the ECCU from constraining fiscal outcomes (Hitaj and Onder, 2013; Kufa,

[16] This episode in discussed in Section 5.4 in Chapter 5.

[17] Calmfors and Wren-Lewis (2011: 654) define a violation of the SGP rules as the occurrence of a budget deficit in excess of 3 percent of GDP, a gross public debt burden in excess of 60 percent of GDP that is not decreasing, or both. See also Section 2.2.1 in Chapter 2.

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Pellechio and Rizavi, 2013: 7-11, 18-20). Furthermore, case studies of rules-based fiscal policymaking in developing countries identify several regimes whose initial promise waned after governments' commitment to fiscal rectitude faltered, including those of Argentina (Braun and Gadano, 2007), India (Buiter and Patel, 2010) and Venezuela (Berganza, 2012: 30-31).

Yet it is by no means the case that all rules-based fiscal regimes have failed. Several econometric analyses use index variables derived from a database of national numerical rules maintained by the European Commission (2014b) to explore the effects of these rules in EU countries since 1990.[18] On balance, these studies find that numerical rules were effectual constraints on cyclically adjusted primary balance and public debt-to-GDP ratios between 1990 and 2008 (Ayuso-i-Casals, Hernández, Moulin and Turrini, 2007; Debrun and Kumar, 2007a, 2007b; Debrun, Moulin, Turrini, Ayuso-Casals and Kumar, 2008; Marneffe, Van Aarle, Van der Wielen and Vereeck, 2010). Three analyses of the effects of public expenditure rules also report beneficial effects on fiscal discipline (Holm-Hadulla, Hauptmeier and Rother, 2011; Turrini, 2008; Wierts, 2008). Empirical studies of various other groups of countries further support the claim that numerical fiscal rules improve fiscal performance.

- Having studied fiscal outcomes in 74 developing countries from 1990 to 2007, Tapsoba (2012) concludes that numerical rules contributed to fiscal discipline.
- An analysis of attempts to achieve large reductions in public-debt-to-GDP ratios in member countries of the Organisation for Economic Co-operation and Development (OECD) countries and other G-20 countries from 1980 to 2008 by Kumar et al. (2009: 16-19) shows a positive relationship between the existence of a rules-based fiscal framework and the likelihood of achieving and sustaining a large fiscal consolidation.[19]

[18] The database contains detailed information about the institutional coverage and design characteristics of all national numerical rules in use in the EU from 1990 onwards.

[19] Kumar et al. (2009: 18) define a large fiscal consolidation as a continuous drop in the public-debt-to-GDP ratio of at least 10 percentage points over three years and in the initial stock of public debt of 20 percent or more. This definition is one of many in writings on large fiscal consolidations.

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- Measures of fiscal policy volatility in 97 countries show that public consumption spending was more stable in the early 2000s in countries with public debt rules than in countries that lacked such constraints (Brzozowski and Siwińska-Gorzelak, 2010).

Chile's usage of numerical fiscal rules is regarded by many as among the most successful in emerging-market economies (cf. Frankel, 2011). In 2001, the Chilean government adopted a structural-balance rule designed to balance the pursuit of long-term public-debt sustainability with full operation of automatic fiscal stabilisers and adequate flexibility for output stabilisation. Two panels of independent experts were convened to estimate potential output (an important and potentially controversial aspect of the calculation of structural budget balances) and to forecast the long-term price of copper (the country's primary export, and a major influence on the level and stability of total government revenue via its effect on revenues from the copper industry). The targets for the structural balance are not legally binding, but have been endorsed and complied with by successive governments (Frankel, 2011: 423-428).[20]

1.5 RESEARCH QUESTION

The mixed record of rules-based policymaking raises an important question: which factors determine the efficacy of numerical fiscal rules in particular contexts? Stated differently: why is it the case that rules-based fiscal frameworks seem to contribute to greater fiscal discipline in some countries, but not in others? The traditional response to this question has been that the effectiveness of rules-based fiscal frameworks depends on the soundness of their design and the extent to which the authorities that maintain them are committed to fiscal prudence (Kopits and Symansky, 1997: 17, 18-20).[21] This response remains popular and valid (cf. Kumar et al., 2009: 15, 20-34); in fact, the importance of political commitments to fiscal prudence is a recurrent theme in this

[20] The rule was relaxed in 2008 and 2009, when the authorities needed more scope for countercyclical policy during the Great Recession (Schmidt-Hebbel, 2012: 17).

[21] Important design aspects of numerical fiscal rules include their legal basis, institutional coverage, scope, escape clause(s), enforcement procedures and sanctions for non-compliance. For discussions of these issues see Kumar et al. (2009: 20-34) and Schaechter et al. (2012: 17-25).

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dissertation. However, this study also explores an alternative answer inspired by ideas of Wyplosz (2005) and Debrun, Hauner and Kumar (2007a). They suggest that discretion, as such, is not the root cause of the fiscal problems outlined in Section 1.3.2, and that the imposition of numerical rules does not necessarily suffice as a remedy. Debrun et al. (2007a: 10) put this view as follows:

> It is often tempting to attribute… unsatisfactory outcomes to discretion itself, so that suppressing it might appear acceptable. However, … the underlying problem does not lie with discretion as such, but with the incentives shaping the behavior of those who exercise it. This would suggest that rather than remove discretion and put policy on automatic pilots, institutional reforms aimed at correcting incentives would be preferable.

This approach acknowledges that numerical rules can be useful for holding fiscal policymakers accountable and as policy anchors that shape the expectations of private agents (cf. Section 1.3.1). Its novelty lies in the notion that numerical rules should be complemented by other mechanisms aimed at correcting the perverse incentives that cause chronic deficit bias and procyclical tendencies in fiscal policymaking. Three mechanisms of this nature feature prominently in writings about the details of effective fiscal policymaking frameworks.

- Von Hagen (1992) launched an important research programme by arguing the case for budget-process reforms to strengthen the policymaking powers of the treasury and the minister of finance vis-à-vis those of the spending departments and ministers, as well as those of the executive branch of government vis-à-vis those of the legislative branch. This argument hinges on the belief that the common-pool problem in fiscal policymaking can be mitigated by concentrating decision-making authority in the hands of ministers of finance and prime ministers — the participants in budget processes who are most likely to recognise the overall budget constraint and to enforce it against the demands of spending ministers, legislatures and interest groups. The notion that such centralised, top-down systems of budgeting facilitate the maintenance of fiscal discipline is supported by the results of studies of the effectiveness of procedural

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rules in countries in Africa (Gollwitzer, 2010), Europe (Gleich, 2003; Lagona and Padovano, 2007) and Latin America (Alesina, Hausman, Hommes and Stein, 1999).

- A significant number of countries have established non-partisan agencies known as "fiscal councils" to make fiscal policymaking more transparent and to enable accurate assessment of the performance of policymakers: a recent study of the functions and performance of fiscal councils lists 27 agencies of this nature (cf. Debrun, Kinda, Curristine, Eyraud, Harris and Seiwald, 2013: 13). The tasks undertaken by fiscal councils include one or more of the following: forecasting of key budgetary and macroeconomic aggregates, analysis of contextual factors influencing fiscal policy, advising governments on fiscal policy options, and monitoring compliance with numerical rules (Debrun, Hauner and Kumar, 2009: 61-62; Debrun et al., 2013: 13). Although it is difficult to disentangle the effects of fiscal councils from those of numerical rules and other influences on fiscal outcomes, Debrun et al. (2013: 25-41) conclude that such agencies are effective when designed to overcome country-specific impediments to fiscal transparency and protected from interference by politicians.
- The aim of fiscal responsibility laws is similar to that of fiscal councils, namely to make policymakers more accountable by increasing the transparency of fiscal processes. Such laws specify the medium-term paths of major fiscal aggregates, outline annual and medium-term strategies for achieving policy objectives, and establish frameworks for regular reporting on fiscal trends and auditing of fiscal information (Lienert, 2010: 5). Pioneered by Australia, New Zealand and the United Kingdom, fiscal responsibility laws have also been adopted by Spain, some Latin American countries (Argentina, Brazil, Colombia, Ecuador and Peru), India, Pakistan and Sri Lanka. Research on the efficacy of fiscal responsibility laws has consisted of descriptive case studies that have yielded inconsistent results (cf. Corbacho and Schwartz, 2007: 65-70; Lienert, 2010: 11-16).

Policy-oriented writings now advocate multifaceted regimes that combine numerical rules and various combinations of these three mechanisms (see, for example, Debrun et al., 2007a: 15-17; Schaechter et al., 2012: 28). As pointed out by Kumar et al. (2009: 12),

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a growing number of countries have been heeding this advice by assembling frameworks consisting of numerical rules, strong procedural rules and structures to enhance fiscal transparency.[22] Empirical analysis of the effectiveness of such regimes and the degrees of complementarity among their constituent elements remains scant, though. Hence, the objective of this dissertation is to shed light on these relationships by exploring whether centralised, top-down procedural fiscal rules and independent fiscal councils enhance the potential of numerical rules to improve fiscal outcomes. The following hypothesis guides this endeavour:

> The potential of numerical rules to prevent fiscal profligacy is enhanced by combining such rules with centralised, top-down procedural rules and non-partisan fiscal councils.

1.6 STRUCTURE OF THE DISSERTATION

Chapter 2 discusses methodological aspects of the study. It outlines the characteristics of rules-based fiscal policymaking in the EU in the period 1998-2004 that makes it a promising setting for studying the links among numerical rules and other elements of fiscal policymaking regimes, as well as the requirements for a method to analyse these relationships. Against this backdrop, it explains why the set-theoretic technique known as "fuzzy-set qualitative comparative analysis" (fsQCA) is used for the empirical analysis in Chapter 3 and clarifies the complementary relationship between this analysis and the case studies in Chapters 4, 5 and 6.

The first part of Chapter 3 reviews relevant empirical studies and derives five testable propositions about the connections among numerical rules, other elements of fiscal policymaking frameworks and fiscal outcomes. This is followed by the presentation of a set-theoretic model to test these propositions in a group of fourteen EU countries, a discussion of the data sources and an explanation of the calculation of calibrated fuzzy

[22] The most notable endorsement of this approach was the European Council's Directive 2011/85/EU issued on 8 November 2011, which added medium-term budgetary frameworks and fiscal surveillance by independent bodies (e.g. fiscal councils) to numerical rules as formal elements of national fiscal frameworks in the EU (cf. Council of the European Union, 2011).

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membership scores for the variables in the model. Next, the chapter presents the findings of the three parts of the set-theoretic analysis, namely the identification of necessary conditions, sufficient conditions and solution pathways for compliance with the SGP rules. The results are condensed into two hypotheses. Compared to the hypothesis formulated in Section 1.5, these hypotheses represent a more nuanced statement of the connections between the elements of fiscal policymaking frameworks and fiscal outcomes.

Chapters 4, 5 and 6 are case studies of the relationships between the fiscal policymaking frameworks and outcomes in three EU countries (Finland, France and Ireland). These chapters complement the cross-sectional analysis in Chapter 3 in a number of ways. The case studies are used to assess important aspects of the set-theoretic analysis (such as the specification of the model and the measurement of properties of the elements of fiscal policymaking frameworks), the realism of the findings thereof, and the relevance of the two hypotheses for these countries.

Chapter 7 summarises the contents of the dissertation and presents the most important conclusions as well as suggestions for further research.

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CHAPTER 2

METHODOLOGICAL ISSUES

2.1 INTRODUCTION

As stated in Chapter 1, this dissertation studies the relationships among numerical rules and two other elements of fiscal policymaking regimes, namely procedural fiscal rules and fiscal councils. Chapter 1 also indicates that the dissertation presents evidence on the nature and fortitude of these links in fourteen EU countries from 1998 to 2004 in the form of a set-theoretic cross-sectional analysis and case studies of three countries. The present chapter discusses methodological aspects of these analyses. Section 2.2 outlines salient features of fiscal governance frameworks in the EU at the supranational and national levels and explains why the EU is an appealing setting for a study of the connections among elements of fiscal policymaking regimes. Section 2.3 introduces a set-theoretic method known as fsQCA ("fuzzy-set qualitative comparative analysis") and explains its suitability for studying these relationships. A discussion of the relationship between the set-theoretic analysis in Chapter 3 and the case studies in Chapters 4 to 6 follows in Section 2.4.

2.2 FISCAL POLICYMAKING IN THE EUROPEAN UNION

2.2.1 Supranational numerical fiscal rules

The signing of the Treaty of Maastricht on 7 February 1992 marked the introduction of supranational numerical fiscal rules in the EU.[1] The Treaty specifies five convergence criteria that countries had to meet by the first half of 1998 to qualify for membership of the EMU. These criteria include two numerical fiscal rules: the cyclically unadjusted conventional budget deficits and gross debt stocks of general governments were not to

[1] The original signatories were Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom. The provisions of the Treaty became binding on Austria, Finland and Sweden as well when these countries joined the EU on 1 January 1995.

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exceed 3 percent and 60 percent of GDP, respectively.[2] These reference values have been criticised for being arbitrary: on balance, the deficit and debt ratios of the states in the European Community were close to 3 percent and 60 percent of GDP in 1991, but such averages neither were nor are necessarily appropriate for the entire EU or for individual countries (Buiter, Corsetti and Roubini, 1993: 301).[3] The Treaty also establishes the Excessive Deficit Procedure (EDP) as a mechanism for enforcing the provision that member states should avoid excessive budget deficits and public debt burdens. It stipulates that EDPs should be initiated when EU countries breach the reference values for the rules and that member states of the monetary union may incur financial penalties if they fail to correct such situations within specified timeframes.[4]

The two fiscal rules differ from the other Maastricht Treaty convergence criteria in being accompanied by explicit provisions for leniency in assessments of compliance.[5] The reality that some of the original signatories of the Treaty of Maastricht stood little chance of achieving compliance before 1998 necessitated such leniency: Greece and

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[2] The other convergence criteria relate to the attainment of specified levels of price stability, exchange-rate stability and long-term nominal interest rates (cf. Buiter, Corsetti and Roubini, 1993: 297-298).

[3] Buiter et al. (1993: 302) point out that public investment averaged almost 3 percent of the GDP of the European Community in the period 1974-1991. This suggests that the reference value of the deficit rule could have been justified in terms of the principle that loan financing is appropriate for financing public investment. However, this principle (which is the basis of the current-balance rule or "golden rule of fiscal policymaking") has not featured prominently in official documents on the SGP rules.

[4] Other provisions on fiscal policymaking in the Maastricht Treaty are the so-called "no bailout clause" (which stipulates that each state alone is responsible for its public debts and that neither the EU as a whole nor other member states are liable for or allowed to assume such commitments) and the prohibition on obtaining financing from the European Central Bank or national central banks.

[5] These leniency provisions are contained in Article104(c) of the Treaty. Deficits exceeding 3 percent of GDP are not to be regarded as violations of the budget balance rule if the excesses were small, temporary and exceptional, or if deficit-to-GDP ratios had come close to the reference value after substantial declines. Other factors that have to be considered when deciding whether deficits above 3 percent of GDP are excessive include countries' medium-term economic and budgetary positions and whether or not borrowed funds are used to finance investment expenditure. Gross debt ratios in excess of 60 percent of GDP would not infringe the debt limit if such ratios are approaching the reference value at an unspecified "satisfactory pace".

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Italy had budget deficits in excess of 10 percent of GDP in 1991, for example, and the gross public debt burdens of Belgium, Italy and Greece exceeded 100 percent of GDP and that of Ireland 95 percent of GDP (cf. Table 2.1). In practice, the deficit criterion was applied quite stringently in assessments of countries' readiness for EMU membership, while the debt criterion was ignored (Pisani-Ferry, 2002: 5).

Table 2.1

General government budget balances and debt burdens in the first twelve countries that signed the Maastricht Treaty (1991)

Country	% of GDP	
	Net borrowing[1]	Gross debt[2]
Belgium	-6.6	129.5
Denmark	-2.2	71.7
France	-2.1	35.5
Germany	-3.2	41.9
Greece	-16.3	100.9
Ireland	-2.0	95.9
Italy	-10.2	101.4
Luxembourg	-1.0	6.2
Netherlands	-2.5	79.0
Portugal	-6.4	67.4
Spain	-5.2	45.5
United Kingdom	-2.7	41.0

Notes: 1 Total revenue less total expenditure, plus net streams of interest payments resulting from swaps arrangements and forward rate agreements.

2 The sum of liabilities in loans outstanding at the end of the year (measured at nominal value and consolidated), currency and deposits, and securities other than shares (excluding financial derivatives).

Source: Commission of the European Communities (1993: 59, 63).

In 1997, the EU adopted the Stability and Growth Pact (SGP) as a permanent device for maintaining fiscal discipline in the soon-to-be-launched monetary union.[6] The SGP adds a third rule to the two in the Treaty of Maastricht, namely that the medium-term

[6] Beetsma and Giuliodori (2010: 618-620), Bovenberg, Kremers and Masson (1991: 379-383) and Fatás and Mihov (2003a: 114-119) outline the economic motives for the adoption of the SGP, while Heipertz and Verdun (2004) discuss the political-economy issues.

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budgetary positions of the general government sectors of member states should be close to balance or in surplus, and contains guidelines for the application of the EDP (Morris, Ongena and Schuknecht, 2006: 12). The preventive arm of the SGP provides for detailed multilateral surveillance of the fiscal policies of member countries to prevent breaches of the rules, as well as an early-warning system that provides for peer pressure on states deemed at risk of doing so. The corrective arm formalises the process for restoring fiscal discipline in Eurozone countries when the rules have been violated (the SGP applies to all EU countries, but only the member states of the Eurozone are subject to its corrective arm). The process allows ample time to correct imbalances, but failure to do so can result in the imposition of a fine of up to 0.5 percent of the GDP of the country in question.[7]

The implementation of the SGP has revolved around the annual budget-balance rule. The de facto waiving of the debt criterion meant that several countries with debt stocks well above 60 percent of GDP were allowed to join the EMU and made enforcement of the public-debt rule infeasible.[8] Although it has not been enforced either, the medium-term budget-balance rule has become an increasingly prominent element of fiscal policy surveillance in the EU. The 1997 Resolution of the European Council on the SGP (quoted in Artis and Buti, 2000: 565) describes its purpose as follows: "… adherence to the objective of sound budgetary positions close to balance or in surplus will allow all Member States to deal with normal cyclical fluctuations while keeping the government deficit within the value of 3% of GDP." The practical ramifications of this rule remained hazy until 2005, when clear compliance criteria were announced as part of an overhaul of the SGP framework.[9] In the period studied in this chapter (1998-2004), the most

[7] Morris et al. (2006) discuss the features and evolution of the SGP in more detail. The European Commission (2002) explains its role as an element of economic policy coordination in the EU.

[8] Morris et al. (2006: 13) point out that an EDP can be initiated if a debt ratio exceeding 60 percent of GDP is not "sufficiently diminishing and approaching the reference value at a satisfactory pace" (the phrasing is from Article 104 of the Maastricht Treaty). This provision has not been enforced either.

[9] From 2005 onwards, it has been required of EU states to include country-specific medium-term objectives for the structural budget balance in the stability and convergence programmes submitted to the European Commission every year (cf. Council of the European Union, 2005: 28-31). The objectives must be consistent with the regularly revised "minimum benchmark values" set by the Commission.

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common interpretation of the medium-term budget-balance rules was that the budgets of member countries should be balanced in cyclically adjusted terms (Artis and Buti, 2000: 564; Morris et al., 2006: 18). The pan-European authorities never endorsed this interpretation officially, however.

2.2.2 National fiscal governance frameworks

Table 2.2 summarises features of the national fiscal policymaking frameworks of the sample countries in 1991 (the year before supranational numerical rules were introduced in the EU), 1997 (the year before the SGP was adopted) and 2004 (the last year covered by the analysis). Multifaceted frameworks consisting of numerical rules, stronger procedural rules and fiscal councils had become the norm by 2004.[10]

Table 2.2

Elements of the fiscal governance regimes of fourteen EU countries (1991-2004)

Country	Numerical rules (number)			Procedural-rules reforms (years)	Fiscal councils (number)		
	1991	1997	2004		1991	1997	2004
Austria	0	0	1	1998	4	4	4
Belgium	2	6	4	1993, 2003	1	2	2
Denmark	0	2	3	1998	1	1	1
Finland	0	2	5	2003	0	0	0
France	1	2	3	1998	2	2	2
Germany	4	4	4	1998	4	4	4
Greece	0	0	0	1998	1	1	1
Ireland	0	0	3	1993	0	0	0
Italy	0	0	4	1997, 2001, 2002	0	1	1
Netherlands	0	2	2	1995, 1998	1	1	1
Portugal	0	0	2	1998	1	1	1
Spain	2	2	4	1994	2	2	2
Sweden	0	1	3	1997	1	1	1
United Kingdom	0	2	2	1998	1	1	1
Total	*9*	*23*	*40*		*19*	*21*	*21*

Sources: Numerical fiscal rules — European Commission (2014b); reforms to procedural rules — Hallerberg, Strauch and Von Hagen (2007: 348); fiscal councils — European Commission (2014c).

[10] Section 1.2 in Chapter 1 explains the distinction between numerical and procedural fiscal rules.

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Apart from Greece, all fourteen countries adopted national numerical rules in addition to the rules imposed by the SGP. In 1991, Belgium, France, Germany and Spain were the only countries with national numerical rules, but the subsequent proliferation of such arrangements raised the aggregate number from nine in 1991 to 23 in 1997 and 40 in 2004. In fact, batteries of rules that target various fiscal aggregates and apply to various levels of government had become common in the EU by the end of the period studied in this dissertation. Austria was the sole country with only one national numerical rule in 2004, while nine countries had three or more. Belgium, Germany, Italy and Spain then had four numerical rules each, while Finland had five.

All fourteen countries overhauled their procedural fiscal rules between 1993 and 2004, with the most fundamental reforms occurring in the run-up to and around the time that the SGP took effect (Hallerberg, Strauch and Von Hagen, 2007: 348-349). On balance, the reforms enhanced the authority of the finance ministers at the expense of that of the spending ministers in the formulation and execution of budgets and limited legislatures' powers to change budget proposals. As pointed out in Section 1.5 in Chapter 1, theory and empirical evidence suggest that such reforms should have contributed to better fiscal outcomes by mitigating the effects of common–pool problems in budgeting.[11] A comparison of salient characteristics of budget processes in 1991 and 2004 (Hallerberg, Strauch and Von Hagen, 2009: 56-75) indicates that the reforms strengthened the procedural rules of twelve countries (the exceptions were France and the Netherlands), with the most pronounced changes occurring in Greece, Ireland, Italy and Sweden. Although the term "fiscal council" is more recent, organisations undertaking the tasks now associated with such agencies had been in existence before 1991 in all fourteen countries except Finland, Ireland and Italy. The number of agencies of this nature subsequently increased further from 19 in 1991 to 21 in 2004. By 2004, Finland and Ireland were the only countries among the fourteen without fiscal councils, while five states had more than one. As was the case elsewhere, the fiscal councils in EU countries were not given mandates to determine and pursue policy goals (Calmfors and Wren-

[11] To be sure, mitigation of common-pool problems should not be the only considerations when designing procedural rules. Such rules should not preclude legislative control over the use of public money by the executive, which is a key aspect of accountability in democracies (Posner and Park, 2007: 21).

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Lewis, 2011: 660). However, the fiscal authorities of some EU countries have long used forecasts prepared by fiscal councils. The Belgian government is bound by law to use the macroeconomic forecasts generated by the Federal Planning Bureau on behalf of the National Accounts Institute, while the governments of Austria, Germany and the Netherlands have opted to use forecasts prepared by fiscal councils despite the absence of a legal requirement to do so (cf. European Commission, 2006: 171-173).

2.2.3 The case for studying the experiences of EU countries

It transpires from the foregoing overview of aspects of fiscal governance in the EU that the member states have retained the authority to design national fiscal policymaking frameworks after the introduction of the supranational rules of the SGP in 1998. This set-up has resulted in an array of national policymaking frameworks consisting of various configurations of numerical rules, procedural rules and fiscal councils, as well as a clear yardstick for comparing their effectiveness in the form of differences in the degrees to which the member states have complied with the SGP rules. The realism of this yardstick is enhanced by the reality that the countries studied in this dissertation had ample time to prepare for the introduction of the original SGP rules, because these rules were similar to the fiscal convergence criteria imposed by the Maastricht Treaty in 1992 (cf. also Section 3.3 in Chapter 3). Hence, evidence of systematic connections between the details of the countries' fiscal policymaking frameworks and differences in their records of compliance with the SGP rules from 1998 to 2004 would represent tentative yet promising support for the argument that the broader details of these frameworks influenced the efficacy of the rules chosen by the countries themselves as mechanisms for preventing violations of the SGP rules. The goal of the analysis in Chapter 3 and the case studies in Chapter 4 to 6 of this dissertation is to test for the existence and to assess the robustness of such evidence.

This endeavour is facilitated by the availability of a wealth of information about the details of fiscal governance frameworks and other aspects of fiscal policymaking in the EU. The Directorate General for Economic and Financial Affairs of the European Commission (ECFIN) conducts regular surveys of the national numerical rules, independent fiscal institutions and medium-term budgetary frameworks in the member

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countries, and its website contains links to this information as well as the fiscal and macroeconomic data compiled by Eurostat (the Statistical Office of the EU) and the European Central Bank (ECB).[12] Academics and other institutions have generated supplementary material about fiscal governance in the EU, including the information about procedural rules used in Chapter 3. Unfortunately, 2004 is the last period in the procedural rules dataset compiled by Hallerberg, Strauch and Von Hagen (2009) and Fabrizio and Mody (2010). The implications of this constraint for the selection of an empirical technique and the interpretation of the results are discussed in Section 2.3 and in relevant sections of Chapter 3.

2.3 FUZZY-SET QUALITATIVE COMPARATIVE ANALYSIS

As stated in Section 2.1, the empirical analysis in Chapter 3 uses the set-theoretic technique fsQCA. Along with other versions of the approach collectively known as qualitative comparative analysis, this technique has grown in popularity in various scientific disciplines during the past two decades. Rihoux (2006: 697) states that more than 300 applications of QCA had been published by 2006; two-thirds of these dealt with topics in political science and sociology while the remainder spanned the fields of criminology, psychology, education studies, management studies, history, geography and economics.[13] QCA has been used to explore topics such as welfare state reform (e.g. Kvist, 1999; Vis, 2007), economic performance (e.g. Vis, Woldendorp and Keman, 2007; Woldendorp, Vis and Keman, 2011), labour market performance and policy (e.g. Epstein, Duerr, Kentworthy and Ragin, 2008; Vis, 2011), determinants of foreign direct investment (e.g. Pajunen, 2008) and regulatory agencies (e.g. Maggetti, 2009). Yet most economists remain unfamiliar with QCA. Hence, the first part of this section provides a brief outline of fsQCA. The second part explains the decision to opt for fsQCA instead of regression analysis (which, besides being the technique used in the studies reviewed in Section 3.2 in Chapter 3, also dominates empirical research in economics in general).

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[12] The information is available at http://ec.europa.eu/economy_finance/db_indicators/index_en.htm.

[13] At the time of writing this (February 2014), a website dedicated to QCA and related techniques lists 342 empirical applications in academic journals and 108 contributions of a methodological nature. See http://www.compasss.org.

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2.3.1 The nature of fsQCA

fsQCA is a comparative, case-oriented technique for identifying connections between outcomes and causal conditions in groups of cases (cf. Ragin, 2000; 2008). Ragin's (2008: 18) definition of a causal condition as "… an aspect of a case that is relevant in some way to the researcher's account or explanation of some outcome" shows that such conditions are attributes of the cases.[14] The technique views cases as configurations of attributes, and identifies connections between such configurations and outcomes by systematic contrasting and matching of groups of cases (Fiss, 2011: 402). It also makes it possible to identify types of cases that share outcomes and configurations of causal factors. This reliance on comparisons to identify connections and typologies links fsQCA to other systematic comparative procedures rooted in the logic of Mill's (1974 [1843]) "canons of experimental inquiry". To this foundation, fsQCA adds the rigour of set theory and fuzzy-algebra techniques for studying set relations.[15] Set membership is the criterion for ordering conceptual categories, and the existence of subset relations is the foundation for identifying connections between outcomes and causal conditions.

fsQCA-based analyses apply pre-determined membership criteria to divide sets of cases into subsets that display particular outcomes and configurations of causal conditions. In Chapter 3, for example, Section 3.4 applies criteria formulated in Section 3.3 to quantify the extent to which each of the fourteen countries achieves membership of the subsets associated with the outcome (defined as "full compliance with the SGP rules from 1998 to 2004") and all possible configurations of the causal conditions (two examples of such configurations are "effective fiscal councils" and "effective numerical rules AND effective procedural rules"). One of the advantages of the incorporation of principles of fuzzy-set algebra is that fsQCA allows fine-grained categorisations of set membership: apart from the qualitative states of full membership and non-membership with scores of one and zero, respectively, fsQCA also permits partial membership of sets indicated by scores in the interval from one to zero (Ragin, 2000: 153-159; Ragin, 2008: 29-33). The earliest

[14] The adjective "causal" here signifies the possibility (not the proven existence) of a causal link between a condition and an outcome.

[15] Zadeh (1965) wrote the seminal paper that launched fuzzy-set theory.

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version of the technique – which is known as crisp-set qualitative comparative analysis (csQCA) – allows only two types of subset membership, namely non-membership (a score of zero) and full membership (a score of one) (cf. Ragin, 1987). Table 2.3, which shows the membership values for crisp sets and four illustrative fuzzy sets, illustrates the versatility brought to fsQCA by the adoption of fuzzy-set principles.

Table 2.3

Membership values for crisp sets and illustrative fuzzy sets

Crisp set	Fuzzy sets			
	Three-value	Four-value	Six-value	Continuous
1 = Fully in	1 = Fully in	1 = Fully in	1 = Fully in	1 = Fully in
			0.8 = Mostly but not fully in	
		0.67 = More in than out		0.5 < x < 1 = More in than out
			0.6 = More or less in	
	0.5 = Neither fully in nor fully out			0.5 = Cross-over: neither in nor out (maximum ambiguity)
			0.4 = More or less out	
		0.33 = More out than in		0 < x < 0.5 = More out than in
			0.2 = Mostly but not fully out	
0 = Fully out	0 = Fully out	0 = Fully out	0 = Fully out	0 = Fully out

Source: Ragin (2008: 31).

According to Ragin and Rubinson (2009: 30), the subset relations identified in fsQCA-based analyses can be interpreted in more than one way:

> A *descriptive set relation* articulates connections among sets but stops short of explanation. A *constitutive set relation* identifies essential aspects or components of wholes and may be used to constitute theoretically based populations… A *causal set relation* goes beyond establishing an empirical connection and details the causal mechanisms that explain how

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> and why membership in one set (the cause) is empirically linked to membership in another (the outcome).

Analyses with a causal focus often interpret set relationships between outcomes and causal conditions in terms of sufficiency and necessity. Instances of a configuration of causal conditions are subsets of instances of an outcome when cases that exhibit that configuration also display the outcome. Such a configuration of causal factors is a sufficient condition for the outcome. Thus, in the empirical analysis in Chapter 3, a causal combination (e.g. "effective numerical rules and effective fiscal councils") will be a sufficient condition for the outcome "full compliance with the SGP rules from 1998 to 2004" if a subset relation exists between the two such that the countries with high membership scores on that causal combination also have high membership scores on the outcome. In the same way, instances of an outcome are subsets of instances of a configuration of causal conditions when cases that exhibit the outcome also display that configuration. Such a configuration of causal factors is a necessary condition for the outcome. In terms of another example from Chapter 3, the causal combination "effective procedural rules and effective fiscal councils" will be a necessary condition for the outcome "full compliance with the SGP rules from 1998 to 2004" if a subset relation exists between the two such that the countries with high membership scores on the outcome also have high membership scores on that combination.

The scatterplots in Figure 2.1 illustrate subset relationships that are fully consistent with causal sufficiency and causal necessity. For a group of cases, the requirement for a subset relationship fully consistent with sufficiency is that all the membership scores on the configuration of causal factors should be equal to or smaller than the corresponding membership scores on the outcome. All the points are on or above a 45-degree line from the origin when a subset relationship fully consistent with sufficiency is shown in a scatterplot with membership in the configuration of causal conditions on the horizontal axis and membership in the outcome on the vertical axis. By contrast, all the points are on or below a 45-degree line from the origin when a subset relationship fully consistent with necessity is depicted in a scatterplot with a similar axis structure, because in this case all the membership scores on the configuration of causal factors are equal to or larger than the membership scores on the outcome.

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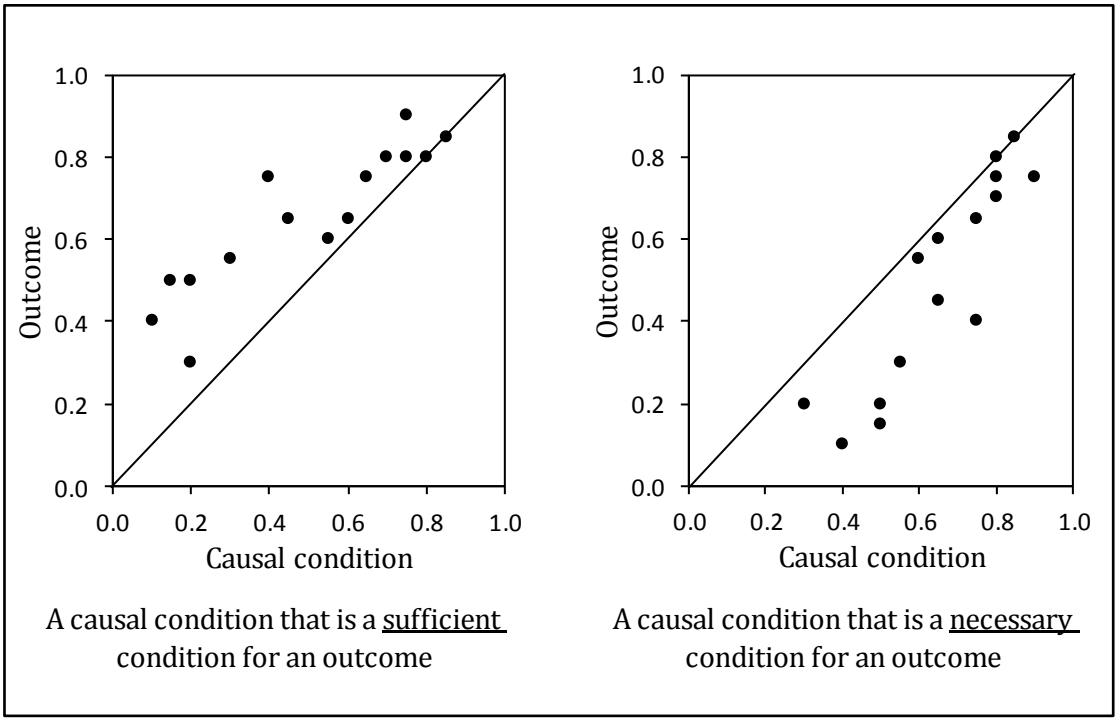
Figure 2.1

Subset relationships fully consistent with sufficiency and necessity



Source: Adapted from Ragin (2008: 48, 54).

Subset relationships that are fully consistent with sufficiency or necessity are rare. In Table 3.5 in Chapter 3, for example, the set membership scores on the causal condition "effective fiscal councils" are smaller than the corresponding set membership scores on the outcome "full SGP compliance from 1998 to 2004" for eight of the fourteen countries and larger for the remaining six. The scatterplots in Figure 2.2 illustrate such imperfect ("rough") subset relationships. Ragin (2008: 44) proposes two descriptive measures for assessing imperfect subset relationships.[16] *Set-theoretic consistency*, which is a measure of significance, shows how consistently configurations of causal factors are associated with specific outcomes (i.e. how closely the connections between outcomes and causal conditions approximate perfect subset relationships). *Set-theoretic coverage* is a measure of the empirical importance of configurations of causal conditions that shows the extent to which such configurations account for instances of outcomes.

[16] Section 3.5 in Chapter 3 provides the formulae for calculating these measures and guidelines for interpreting the resulting quantitative values.

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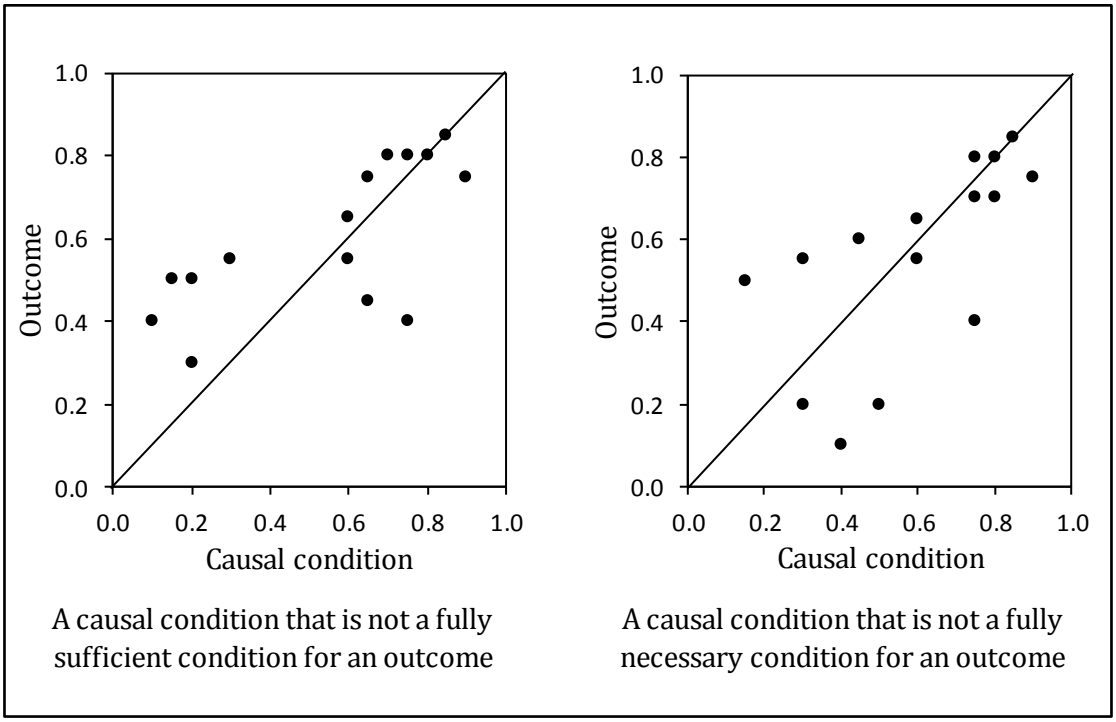
Figure 2.2

Subset relationship not fully consistent with sufficiency and necessity



Source: Adapted from Ragin (2008: 48).

Mahoney and Goertz (2006: 230) characterise regression analysis as an "effects-of-causes" approach that quantifies the average effects of causes in a population of cases. By contrast, fsQCA yields "causes-of-effects" explanations, that is, accounts of outcomes in specific cases (Mahoney and Goertz, 2006: 230). Each case in a population remains identifiable during the analysis and amenable to distinct interpretation at its conclusion (Ragin, 2000: 24, 31). The implications of this focus on cases as wholes are that the connections between outcomes and causal factors are configurational, heterogeneous across cases, and asymmetrical.[17] Three propositions are at the heart of the resulting notion of causation, which is described as "multiple conjunctural causation" (Berg-Schlosser, De Meur, Rihoux and Ragin, 2009: 8):

- Outcomes are usually associated with combinations of causal conditions.

[17] A connection is asymmetrical when the presence and the absence of the outcome require different explanations (Berg-Schlosser, De Meur, Rihoux and Ragin, 2009: 9).

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- A particular outcome may result from several different configurations of causal conditions (a notion referred to as equifinality).
- Depending on the context, an outcome may result from the absence or the presence of a particular causal condition.

This accent on causal complexity explains why Berg-Schlosser et al. (2009: 12) describe the scope for generalising findings based on fsQCA as "limited" and "modest": findings derived from sets of cases do not necessarily have wider relevance because of the assumed pervasiveness of equifinality and the asymmetrical or contextual nature of the relationships between outcomes and configurations of causal conditions (Ragin, 2000: 22). Viewed from the perspective of Windelband's (1980) [1894] distinction between ideographic and nomothetic research strategies, fsQCA veers towards the ideographic end, being oriented primarily towards explaining particular phenomena and their structural coherence (as opposed to generating universal laws of science).

While rooted in the case-oriented paradigm, fsQCA approximates important strengths of variable-oriented research methods (cf. Berg-Schlosser et al., 2009: 14; Rihoux, 2003: 353).[18] First, it can cope with significantly larger numbers of cases than most other qualitative methods: although fsQCA has been used primarily for "intermediate-N" analyses (i.e. studies of 15 to 100 cases), it has proved its mettle in "large-N" analyses as well (Berg-Schlosser et al., 2009: 4). Second, the accusations of ad hoc-practices and non-falsifiable results that are sometimes levelled at case-oriented research methods seem less applicable to fsQCA, which applies formalised analytical techniques from set theory and fuzzy algebra to generate replicable findings amenable to corroboration or falsification.

2.3.2 Reasons for using fsQCA in this study

Against this backdrop, it is possible to explain the decision to opt for fsQCA instead of regression analysis. As stated earlier, an important aim of this dissertation is to ascertain whether the efficacy of national numerical rules (as proxied by degrees of

[18] Mahoney and Goertz (2006) discuss the main differences between the case-oriented (or qualitative) and variable-oriented (or quantitative) research paradigms in the social sciences.

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compliance with the supranational SGP rules) were influenced in EU countries from 1998 to 2004 by the presence and features of procedural rules and fiscal councils. This requires a technique capable of studying links between fiscal outcomes (records of compliance with the SGP rules) and configurations of causes (elements of fiscal policymaking frameworks). Furthermore, a suitable method should be able to cope with equifinality, because the possibility that more than one combination of policymaking framework elements gave rise to particular degrees of compliance with the SGP rules cannot be dismissed on a priori grounds. A third requirement, which follows from the possibility that contextual factors may have influenced the efficacy of configurations of policymaking framework elements in different countries, is that the technique should facilitate assessment of the extent to which the cross-sectional findings explain the relationships between fiscal outcomes and types of fiscal policymaking frameworks in individual countries.[19]

Section 2.3.1 states that fsQCA meets the first two requirements by virtue of being configuration-oriented and capable of handling causal complexity. Its treatment of cases as wholes enables fsQCA to meet the third requirement as well. Because each case remains an identifiable whole throughout an analysis, it is possible to link it to particular configurations of causal conditions found to be subsets of an outcome. This makes it possible to check the robustness of empirical findings about links between outcomes and configurations of causal conditions by conducting in-depth studies of individual cases that account for the influence of contextual factors.

In principle, regression analysis can accommodate conjunctural causation and causal heterogeneity (Scruggs, 2007: 312-316). Multiplicative interaction terms can capture the effects of combinations of variables, and the effects of causal conditions can be made to vary in a population by interacting independent variables with dummy variables that represent contextual factors (see, for example, Rueda and Pontusson, 2000). Another strategy for dealing with causal heterogeneity is to undertake separate regression analyses of smaller samples with common features (see, for example, Hallerberg et al., 2007). Technical factors, however, limit the scope for handling causal complexity by

[19] Such contextual factors include political institutions (such as electoral systems). See, for example, the discussion of an important paper by Hallerberg et al. (2007) in Section 3.2 in Chapter 3.

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these means. Interaction terms can be difficult to interpret and frequently give rise to collinearity and degrees-of-freedom problems, especially when several interaction terms (including higher-order ones) are included in models estimated with modest-sized samples (Brambor, Clark and Golder, 2005; Ragin, 1987: 15, 65-66; Ragin, 2008: 9, 113). Sample-size issues also constrain the scope for dealing with causal complexity by analysing sub-samples. These factors would have complicated (or even have precluded) the use of regression techniques for the analysis in this study: data are available for only seven years for each of the fourteen countries, some of the time series exhibit little variation and an appropriate model should have included interaction terms for all possible combinations of numerical rules, procedural rules and fiscal councils, as well as the control variables usually included in models for explaining fiscal performance. In addition, the relatively large number of interaction terms would have posed severe interpretation challenges.

Another important reason for preferring fsQCA for the empirical analysis in Chapter 3 is that regression techniques sometimes obscure asymmetric connections (Ragin, 2008: 20-23). Being focused on correlational connections (which are identified from patterns of covariation between dependent and independent variables), regression analysis cannot delink the hypothesis "The presence of cause X is associated with the presence of effect Y" from the hypothesis "The absence of cause X is associated with the absence of effect Y". Hence, regression analysis sometimes overlooks important connections because asymmetries weaken the strength of overall correlations between variables.[20]

In sum, the decision to opt for a set-theoretic method for the analysis in Chapter 3 is based on practical considerations and does not amount to a denial of the immense contributions that cross-section econometric studies have made to the study of fiscal policymaking frameworks (and, indeed, economic inquiry in general). In spite of some downsides – most notably, the limited scope for generalising the results generated by fsQCA-based analyses (cf. Section 2.3.1) – this choice reflects the belief that case-oriented methods can complement regression analysis by enabling more nuanced

[20] The claim that regression analysis has difficulty in identifying asymmetric connections in a population of cases differs from that of Clark, Gilligan and Golder (2006), who argue that appropriately specified regression models are capable of testing for the presence of presumed asymmetric relationships.

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interpretation of the connections between outcomes and causal conditions. By explicitly identifying conforming and non-conforming cases and their configurations of causal factors, fsQCA can deepen researchers' understanding of causal processes by forcing them to confront details in datasets that sometimes remain obscured in the results of regression analyses.[21]

2.4 THE RELATIONSHIP BETWEEN THE ANALYSES IN CHAPTERS 3 AND 4 TO 6

Section 2.3.2 hinted at the relationship between the empirical analysis in Chapter 3 of this dissertation and the case studies in Chapters 4 to 6. This section explains in more detail how the two types of analysis in this study complement each other.

The empirical exercise in Chapter 3 is the set-theoretic equivalent of a regression analysis of the relationships between a dependent variable and independent variables in a sample of countries. Some of the preparatory steps correspond closely to those in regression analyses – for example, the specification of a model that links an outcome (the equivalent of a dependent variable) to various causal conditions (the equivalents of independent variables) and the construction of quantitative measures of the outcome and causal conditions for each country. Other steps, however, reflect distinctive aspects of fsQCA (for example, the calibration of these measures to obtain calibrated fuzzy-set membership scores).

The analysis consists of three parts that all use measures of set-theoretic consistency and set-theoretic coverage to quantify the significance and empirical importance of relationships. The aim of the first part is to establish whether any and, if so, which of the causal conditions were necessary conditions for adherence to the SGP rules in fourteen EU countries from 1998 to 2004. Similarly, the second part studies the set relationships between the outcome and various configurations of the causal conditions to identify sufficient conditions for compliance with the SGP rules. Finally, the results of the analysis of sufficient conditions are simplified by applying set logic and minimization algorithms to the subset relationships that achieve benchmarks of significance and

[21] Rihoux (2006) provides examples of QCA-based studies in disciplines other than economics that have enriched the findings of regression analyses of the same datasets.

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empirical relevance. This exercise yields pathways to compliance with the SGP rules in the form of types of fiscal policymaking frameworks. A first assessment of the usefulness of the results is then undertaken by matching the cases to these solution pathways. Such matching indicates whether the configurations of policymaking framework elements represented by the pathways provide plausible explanations for the SGP compliance levels of each of the fourteen countries.

The results of fsQCA-based analyses can be interpreted in descriptive, constitutive or causal terms (cf. Section 2.3.1). Yet Ragin's (2008: 112) statement that causation can be observed only at the level of individual cases suggests that causal interpretation of the cross-sectional results of such analyses is fraught with danger. Accordingly, Chapter 3 stops short of ascribing strong causal significance to its empirical results and of drawing normative conclusions for the design of fiscal governance frameworks in other countries. Instead, it uses these results to refine propositions derived from existing regression-based studies, thus generating hypotheses that should be subjected to more rigorous testing.

Chapters 4 to 6 present evidence on the usefulness of the set-theoretic analysis in the form of case studies of three of the fourteen countries, namely Finland, France and Ireland.[22] The purpose of these studies is to establish whether the plausibility of the empirical results obtained in Chapter 3 survives deeper scrutiny. Hence, the case studies take the solution pathways associated with each of these countries in Section 3.4 in Chapter 3 as points of departure for explaining their levels of adherence to the SGP rules from 1998 to 2004, but pay close attention to the possibility that measurement error and omitted-variable bias could have distorted these preliminary explanations: the composite indices constructed in Chapter 3 may have been inadequate measures of the efficacy of the various elements of policymaking frameworks, and the strong focus of the model on these elements may have resulted in the omission of other important determinants of degrees of compliance with the SGP rules. This approach reflects the

[22] These countries were chosen to obtain diverse configurations of fiscal policymaking frameworks and degrees of adherence to the SGP rules from 1998 to 2004, as well as diverse fiscal outcomes in the two decades prior to the introduction of supranational fiscal rules in the EU. See Section 4.1 in Chapter 4, Section 5.1 in Chapter 5 and Section 6.1 in Chapter 6.

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belief that consistency with evidence from in-depth case studies is an important indicator of the logical coherence and explanatory power of the findings of cross-sectional empirical analyses.

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CHAPTER 3

A SET-THEORETIC ANALYSIS OF FISCAL POLICYMAKING FRAMEWORKS AND OUTCOMES IN THE EU

3.1 INTRODUCTION

Section 2.2.3 in Chapter 2 states that the differences in EU countries' degrees of compliance with the numerical rules of the SGP could be used as a measure of the efficacy of their diverse configurations of national numerical rules, procedural rules and fiscal councils. This makes the EU a pertinent setting for exploring the hypothesis that the potential of numerical rules to prevent fiscal profligacy is enhanced by combining such rules with centralised, top-down procedural rules and non-partisan fiscal councils. This chapter presents a set-theoretic analysis that exploits this feature of fiscal governance in the EU to identify connections between the degrees of SGP compliance in fourteen EU countries and details of their fiscal policymaking frameworks (more specifically, the configurations and design characteristics of numerical rules, procedural rules and fiscal councils). The analysis spans the period from 1998 to 2004 and includes the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.[1]

The remainder of the chapter is structured as follows. Section 3.2 reviews existing empirical studies on related themes and derives five testable propositions about the connections among numerical rules, other elements of fiscal policymaking frameworks and fiscal outcomes. Section 3.3 presents the model for the empirical analysis of the propositions, discusses the data sources and explains the calculation of calibrated fuzzy membership scores for the variables in the model. The findings of the set-theoretic analysis are presented in Section 3.4. Section 3.5 discusses the results and revisits the five propositions in the light thereof.

[1] Luxembourg, the fifteenth member state of the EU when the SGP came into force in 1998, is excluded because some of the data series required for the analysis are not available.

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3.2 REVIEW OF RELATED EMPIRICAL RESEARCH

Sections 1.4 and 1.5 in Chapter 1 refer to cross-sectional econometric analyses of the efficacy of single elements of fiscal policymaking frameworks in the EU and elsewhere. These studies add a variable that summarises the features of a particular policymaking framework element to an otherwise standard model for explaining fiscal balances or the evolution of public-debt stocks (cf. Hallerberg et al., 2007: 349). The general form of the resulting models is as follows:

$$FOV_{i,t} = \alpha + \beta FOV_{i,t-1} + \beta_1 X_{i,t} + \beta 2 Pi_{,t} + \beta_3 S_{i,t} + \beta_4 I_{i,t} + \varepsilon_{i,t} \quad [3.1]$$

In this specification, $FOVi_{,t}$ is a fiscal outcome variable in country i in year t (usually the cyclically adjusted primary balance-to-GDP ratio or the change in the gross public debt-to-GDP ratio), $\beta FOV_{i,t-1}$ is the lagged value of the same fiscal outcome variable in country i in year t-1, $\beta_1 X_{i,t}$ is a vector of macroeconomic control variables (e.g. the real GDP growth rate), $\beta_2 P_{i,t}$ is a vector of political control variables (e.g. election-year dummies), $\beta_3 S_{i,t}$ is a vector of structural control variables (e.g. indicators of the sizes of economies), $\beta_4 I_{i,t}$ is an index of features of a policymaking framework element and $\varepsilon_{i,t}$ is a disturbance term.

Although specification and identification issues make it difficult to judge the robustness of the results, such studies link prudent fiscal outcomes to the presence of strong numerical rules, centralised top-down procedural rules and transparency-enhancing fiscal councils. Findings about the "standalone" efficacy of elements of fiscal frameworks are inadequate bases for strong inferences about their joint effects – the mechanisms that make each effective could clash when elements are used together, for example, and there could be diminishing returns to adding more and more elements to policymaking regimes – but suffice for the formulation of hypotheses. Hence, these findings informed the formulation of the hypothesis in Section 1.5 in Chapter 1, which states that top-down, centralised procedural rules and non-partisan fiscal councils augment the ability of numerical rules to prevent fiscal profligacy. The set-theoretic technique used in this chapter makes it possible to test each of the constituent parts of a complex hypothesis. The hypothesis formulated in Section 1.5 includes four claims that can be formulated as the following propositions.

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- Preliminary proposition 1: Numerical fiscal rules are effective devices for preventing fiscal profligacy.
- Preliminary proposition 2: Fiscal councils enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy.
- Preliminary proposition 3: Centralised, top-down procedural rules enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy.
- Preliminary proposition 4: Combinations of centralised, top-down procedural rules and fiscal councils enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy.

Thus far, three sets of authors have undertaken empirical analyses that have included more than one element of fiscal policymaking frameworks. Debrun and Kumar (2007) and Hallerberg et al. (2007) estimate the autonomous or net effects on fiscal outcomes of two such elements and use the findings to draw conclusions about the relationships between them[2], while Nerlich and Reuter (2012) studied the same issue as this chapter does by estimating the joint effects of combinations of two or three elements. The remainder of this section reviews these studies and draws on their findings to derive a more nuanced set of five propositions about the effectiveness of combinations of the three elements.

Debrun and Kumar (2007a: 495-500) include indicators of key features of the numerical rules and fiscal councils in fourteen EU countries in a model of the determinants of cyclically adjusted primary balances from 1990 to 2004. They observe a positive and significant relationship between the strength and institutional coverage of rules and the degree of prudence of primary balances, but find no evidence of a systematic connection between primary balances and the characteristics of fiscal councils. Yet in a separate regression the value of the fiscal councils index is a positive and statistically significant determinant of the value of the numerical rules index. Viewed together, Debrun and

[2] These studies draw on the same data sources used in this dissertation, namely the ECFIN databases of national numerical rules and independent fiscal institutions in EU countries referred to in Section 2.2.3 in Chapter 2, and the dataset on procedural rules compiled by Hallerberg et al. (2007; 2009) and Fabrizio and Mody (2010).

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Kumar's results suggest that fiscal councils affect outcomes in an indirect manner by influencing the efficacy of numerical rules.

Hallerberg et al. (2007: 341) include indicators of the strength of numerical and budget-process rules in an equation to explain the determinants of annual changes in public-debt levels in the EU-15 countries between 1985 and 2004. The two indices add little to the explanatory power of the model. The coefficient on the index that summarises the strength of numerical rules has the expected negative sign, but is only statistically significant at the 10 percent level; that on the strength of procedural rules fails, albeit only marginally, to achieve statistical significance even at that level and has a positive sign. This sign suggest that more stringent budget-process rules are associated with faster growth in public-debt burdens, which seems illogical.

The authors then use information about electoral systems and government types in the years from 1980 to 2000 to distinguish between "large ideological distance countries" and "small ideological distance countries".[3] This distinction follows from the notion that features of countries' political systems determine whether numerical or procedural rules are the most potent institutions for overcoming excessive budget deficits and debt accumulation (Hallerberg et al., 2007: 340-341). Large ideological distance countries have proportional-representation voting systems, which often yield coalition regimes representing diverse interests.[4] Such set-ups can aggravate common-pool problems and can foster strategic behaviour in decision-making about the allocation of resources, which is inimical to the preservation of fiscal discipline. Hence, a so-called contract approach to policymaking based on numerical rules, which precludes disagreement about the broad fiscal parameters and forces decision-makers to adopt holistic views of

[3] Hallerberg et al. (2007: 344-345) classify Belgium, Denmark, Finland, Germany, Greece, Luxembourg, the Netherlands, Spain and the United Kingdom as large ideological distance countries and Austria, France, Ireland, Italy, Portugal and Sweden as small ideological distance countries.

[4] The notion that the characteristics of voting systems influence the numbers of political parties in countries and governments is well established in political science (see, for example, Duverger, 1954; Taagepera and Soberg Shugart, 1989). The key mediating factor is the electoral district magnitude (i.e. the number of representatives chosen in each electoral district), which determines positions along the spectrum from plurality to proportional representation systems (Hallerberg et al., 2007: 342).

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budgets when bargaining about their details, seems appropriate in the large ideological distance countries. By contrast, small ideological distance countries have plurality voting systems and are likely to have few political parties and a relatively high incidence of single-party governments, ceteris paribus. A so-called delegation approach to policymaking based on centralised, top-down procedural rules – which amounts to the delegation of strategic policymaking authority to the decision-makers who are most likely to consider budgets in their entirety and to resist the lobbying efforts of interest groups – is likely to suffice as a fiscal governance framework in such countries. In fact, Hallerberg et al. (2007: 342) suggest that a delegation approach should yield more prudent fiscal outcomes than a contract approach would in countries where single-party governments are the norm: such governments may well find it relatively easy to ignore or abandon numerical rules, because it is unlikely that doing so would trigger sufficient internal discontent to threaten their survival.

Hallerberg et al. (2007: 354-356) obtain the expected results when they run the model separately for the two groups of countries. The signs and statistical significance of the coefficients indicate that strong procedural rules (i.e. the delegation approach) lower the rate of public-debt growth in the small ideological distance countries but not in the large ideological distance ones. Strong numerical rules (i.e. the contract approach) reduce the rate of public-debt growth in both sets of countries, but the effect is larger in the large ideological distance countries.

In a study of the determinants of fiscal outcomes in 27 EU countries from 1990 to 2007, Nerlich and Reuter (2012) estimate the joint effects of combinations of numerical rules, fiscal councils and medium-term budgeting frameworks, among other things.[5] The authors use dummy variables to proxy for the presence and features of these fiscal framework elements in each country. On balance, they find that countries with national numerical rules have stronger primary balances and lower levels of government revenue and expenditure (as percentages of GDP) than those without, and that these

[5] Nerlich and Reuter draw on the ECFIN databases referred to earlier, an International Monetary Fund database on numerical fiscal rules (Schaechter et al., 2012) and information about budget procedures collected by the OECD (2013). The medium-term budgeting framework dummy is a measure of the accuracy of budgets; as such, it is an indicator of effectiveness, rather than design characteristics.

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effects are amplified when the rules are complemented by fiscal councils and effective medium-term budgeting frameworks.

Several writings acknowledge the possibility that the findings of the studies reviewed in Chapter 1 and in this section may be distorted by omitted variable-biases and reverse causality issues. As Kumar et al. (2009: 19-20) put it in a study of the effectiveness of numerical fiscal rules:

> [B]oth fiscal rules and improved fiscal performance could be affected by omitted determinants of fiscal behavior… standard estimation would attribute the impact of these omitted variables to rules, causing a statistical bias. Stronger political commitment to fiscal discipline, for instance, could lead to both an improvement in performance and the adoption of rules… A related issue is that of reverse causality – improved fiscal performance leading to the adoption of rules, perhaps to "lock in" gains in consolidation, or as a signal of authorities' commitment. Unfortunately, there is no fully satisfactory methodology to deal with this issue unless adequate… information on variables measuring commitment and budgetary processes and procedures can be obtained.

The study by Debrun and Kumar (2007a) referred to earlier in this section illustrates the interpretation difficulties posed by issues of this nature. The authors find that the relationship between the strength of numerical fiscal rules and the soundness of cyclically adjusted primary balances changes from significant to insignificant when re-estimated using plausible instruments for the initial measure of the strength of the rules. According to them, a plausible interpretation of the apparent conflict between the original and instrumental-variable estimates is that numerical rules, as such, have little influence on the levels of the fiscal balance. Instead, the decisive determinant of fiscal outcomes may be the strength of a government's preference for fiscal discipline. Hence, the initial finding of a positive link between the numerical rules indices and primary balances may reflect the tendency of responsible governments to adopt such constraints to signal their preference for prudence, rather than the ability of such rules to thwart irresponsible governments (Debrun and Kumar, 2007a: 501, 506).

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It transpires that the hypothesis formulated in Chapter 1 ignores two important issues highlighted by these three studies: the alleged incompatibility of strong numerical rules and centralised, top-down procedural rules as devices for preventing fiscal profligacy (cf. Hallerberg et al, 2007), and the possibility of a strong link between a country's fiscal performance and the strength of its government's preference for fiscal discipline (cf. Debrun and Kumar, 2007a). These issues can be incorporated into the framework of the empirical analysis in this chapter by reformulating the third and fourth propositions formulated earlier and by adding a fifth. The final set of propositions then becomes:

- Proposition 1: Numerical fiscal rules are effective devices for preventing fiscal profligacy.
- Proposition 2: Fiscal councils enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy.
- Proposition 3: Centralised, top-down procedural rules do not enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy.
- Proposition 4: Combinations of centralised, top-down procedural rules and fiscal councils do not enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy.
- Proposition 5: A strong preference for prudence can substitute for a strong fiscal policymaking framework as a device for preventing fiscal profligacy.

The implication of this addition and the reformulations is that the empirical analysis explores two claims that are consistent with the hypothesis guiding this study, two that contradict it and one that supplements it. This, however, will not strain the task of using the findings of the analysis to assess the validity of the hypothesis, as will be shown in Section 3.5.

3.3 THE MODEL AND THE CONSTRUCTION OF THE FUZZY SETS

This section outlines the specification of the set-theoretic model (which consists of an outcome and four causal conditions), the construction of quantitative measures of the elements of the model for each country, and the conversion of these measures into calibrated fuzzy-set membership scores.

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3.3.1 The outcome

The outcome is full compliance with the SGP rules from 1998 to 2004 (henceforth "SGP compliance"). It would not make sense to identify set-theoretic connections between an outcome and a set of causal factors if logical or other grounds preclude the possibility of interpreting such connections in causal terms.[6] The analysis in this chapter, for example, would be meaningless if some countries had joined the EMU with debt stocks or fiscal balances that would have made subsequent observance of one or more of the SGP rules impossible – if that was the case, the failure of such countries to adhere to the rules would have reflected their fiscal positions in 1997, instead of the efficacy of their fiscal policymaking frameworks from 1998 to 2004. Hence, the outcome should be specified only in terms of those rules that were realistic targets for all the countries throughout the period.

Table 3.1 shows that several countries (notably Belgium, Italy, Greece, Sweden and the Netherlands) joined the EMU with public-debt stocks that exceeded 60 percent of GDP by margins that would have precluded observance of the debt rule for some years thereafter. Hence, degrees of compliance with this rule are excluded from the outcome scores. By contrast, net budget deficits of 3 percent of GDP or less were within the reach of all the countries when the SGP was adopted (the sole non-compliant country in 1997, Greece, had to reduce its deficit by 1 percentage point of GDP to achieve compliance in 1998). Accordingly, an indicator of compliance with the annual budget-balance rule is included in the outcome measure: countries score one for each year from 1998 to 2004 in which general government net borrowing amounted to 3 percent of GDP or less.

It is difficult to judge the countries' readiness to observe the medium-term budget-balance rule in 1998 and, hence, the appropriateness of including indicators of compliance with this rule in the outcome scores. There are two arguments for ignoring degrees of compliance with the medium-term budget-balance rule: first, it differs from

[6] Sections 2.3.1 and 2.4 in Chapter 2 refer to the hazards of proving that set-theoretic connections represent cause-effect relationships. A different point is made here, namely that it is futile to try to identify set-theoretic connections between an outcome and a set of causal conditions if it is evident beforehand that a causal relationship cannot exist.

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the other two SGP rules in that its introduction was not preceded by a convergence period from 1992 to 1997 and, second, it lacked an official compliance criterion until 2005 (cf. Section 2.2.1 in Chapter 2). It should be taken into account, however, that the efforts to meet the net budget-balance requirement of the Maastricht Treaty by 1997 should have prepared countries for compliance with the medium-term budget-balance rule by improving cyclically adjusted budget deficits as well. Furthermore, from 1998 to 2005 it widely was believed in the EU that the rule requires member states to balance their budgets in cyclically adjusted terms, even though the pan-European authorities never officially endorsed this interpretation nor attempted to enforce it (cf. Section 2.2.1 in Chapter 2).

Table 3.1

Indicators of the fiscal positions of the general governments of fourteen EU countries (1997)

Country	Percent of GDP		
	Gross debt	Net balance[1]	Cyclically adjusted balance[1]
Convergence criterion	60.0	-3.0	n/a
Austria	66.1	-2.5	-2.0
Belgium	122.2	-2.1	-1.5
Denmark	65.1	0.7	0.7
Finland	55.8	-0.9	-1.2
France	58.0	-3.0	-2.3
Germany	61.3	-2.7	-2.1
Greece	108.7	-4.0	-3.5
Ireland	66.3	0.9	-0.1
Italy	121.6	-2.7	-2.0
Netherlands	72.1	-1.4	-1.1
Portugal	62.0	-2.5	-1.9
Spain	68.8	-2.6	-1.7
Sweden	76.6	-0.8	0.0
United Kingdom	53.4	-1.9	-2.2

Note: 1 Positive numbers are surpluses and negative numbers deficits.

Source: European Commission (1998: 88; 368-369; 364-365).

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Table 3.1 reveals that the cyclically adjusted budget balances of only two countries (Denmark and Sweden) were not in deficit in 1997. In addition, Ireland had a small deficit of 0.1 percent of GDP. To have achieved compliance in 1998, the other eleven countries had to affect contractionary adjustments ranging from 1.1 to 3.5 percentage points of GDP. Finland reduced its cyclically adjusted budget deficit by 4.6 percentage points of GDP in 2000 (cf. Appendix Table 3.2), which suggests that these adjustments would have been feasible. Hence, the outcome scores also measure compliance with the medium-term budget-balance rule: countries score one for each year from 1998 to 2004 in which cyclically adjusted general government net borrowing was in balance or in surplus. Thus, the full outcome scores can range from zero to fourteen (a score of fourteen would indicate that a country complied with the annual as well as the medium-term budget-balance rules in every year from 1998 to 2004).

3.3.2 The causal conditions

The model contains four causal conditions suggested by the empirical evidence and ideas in Sections 1.4 and 1.5 in Chapter 1 and Section 3.2 of this chapter. Three of these causal conditions are set-theoretic formulations of elements of fiscal policymaking frameworks: comprehensive and strictly enforced numerical fiscal rules from 1998 to 2004 (henceforth "effective numerical rules"); top-down, centralised procedural fiscal rules from 1998 to 2004 (henceforth "effective procedural rules"); and independent and influential fiscal councils from 1998 to 2004 (henceforth "effective fiscal councils").[7] The fourth condition – de facto full compliance with the SGP budget-balance rule from 1970 to 1991 (hereafter "de facto full SGP compliance before 1992") – is included in the model to allow for the possibility that differences in governments' preferences for prudent fiscal outcomes may have contributed to variation in the degrees of compliance with the SGP rules from 1998 onwards. The premise for the operationalisation of this causal condition is that cross-country differences in the levels of fiscal balances prior to 1998 may be proxies for such preferences (cf. also Section 3.3.6). Hence, the inclusion of

[7] The fiscal policymaking frameworks of most EU countries now include medium-term budgeting frameworks. Such frameworks are not included as causal conditions in the model, however, because the ECFIN database lacks data for years prior to 2006.

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this causal factor reduces (but does not eliminate) the risk that observed connections between compliance with the SGP rules and details of fiscal policymaking frameworks are the spurious results of omitted variables and reverse causality. All the scores are period averages of annual values and are constructed such that the efficacy of the fiscal framework elements and the degree of prudence of the fiscal outcomes increase with the scores.

3.3.3 Effective numerical fiscal rules

The scores for this causal condition reflect the strength and institutional coverage of the country-specific (national) numerical rules of the fourteen countries and are calculated from information in the ECFIN database of national fiscal rules (European Commission, 2014b).[8] Table 3.2 lists the six design elements that are used to determine the strength of the national numerical fiscal rules and the scoring systems for each of them.[9]

For each year from 1998 to 2004, a strength score based on these six design aspects are assigned to each active national numerical rule. The coverage score of each rule is determined by the portion of the general government sector to which it applies.[10] Rules that apply to entire general government sectors receive coverage scores of one, while the coverage scores of rules that apply to smaller parts of the government sector are country-specific values from the ECFIN database. The final score of each rule is obtained by multiplying its strength score (which ranges from zero to 24) by its coverage score (a number between zero and one). The resulting scores of all active rules are added up to obtain country totals for each year from 1998 to 2004, and the averages of these totals are the numerical rules scores used to calculate fuzzy-set membership scores. The procedure for calculating the numerical rules scores ties the country values to the number of rules; hence, the variable differs from the other causal conditions in that it

[8] The numerical rules indices of Debrun and Kumar (2007a), Debrun et al. (2008) and Nerlich and Reuter (2012) are based the same dataset and broadly similar aggregation approaches.

[9] The six design aspects have equal weights in the overall strength scores. This reflects the absence of a theoretical or other a priori basis for ranking their importance.

[10] These coverage scores should be distinguished from the set-theoretic coverage scores defined and used in Section 3.4 in this chapter.

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lacks a pre-defined maximum value. It has a minimum value, however: countries with no national numerical rules would have scores of zero.

Table 3.2

Design aspects and scoring systems for indicators of the strength of national numerical fiscal rules

Design aspects	Scores
1. The statutory basis of the rule:	
Political commitment	0.00
A coalition or intergovernmental agreement	2.00
The constitution or any other law	4.00
2. The scope for changing the numerical constraint(s) encapsulated in the rule:	
The constraint(s) can be changed freely (the rule contains broad principles only)	0.00
There is some, but limited, scope for changing the constraints	2.00
The constraints are fixed by the rule itself and cannot be changed	4.00
3. The nature of monitoring of compliance with the rule:	
Compliance is not monitored at all	0.00
A government body monitors compliance and no alerting mechanism exists[1]	1.00
A government body monitors compliance and an alerting mechanism exists[1]	2.00
An independent body monitors compliance and no alerting mechanism exists[1]	3.00
An independent body monitors compliance and an alerting mechanism exists[1]	4.00
4. The nature of the body charged with enforcing the rule:	
The rule is not enforced by any specific body	0.00
A government body is charged with enforcing the rule	2.00
An independent body is charged with enforcing the rule	4.00
5. The nature of the enforcement mechanism when the rule is breached:	
Actions to be taken when breaches occur are not specified ex ante	0.00
The responsible authority must take or announce corrective actions	1.33
Automatic correction mechanisms exist (with the possibility of sanctions)	2.66
Automatic correction mechanisms exist and sanctions are implemented	4.00
6. The nature of escape clauses attached to the rule:	
Escape clauses are nor foreseen nor clearly specified	0.00
Escape clauses are foreseen and clearly specified	4.00

Note: 1 Alerting mechanisms enable real-time monitoring of compliance with rules (for example, by highlighting growing risks of breaches).

Source: Adapted from European Commission (2014b).

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3.3.4 Effective procedural fiscal rules

This causal condition measures the extent to which the countries' budget processes concentrate decision-making powers in the hands of the participants with the strongest incentives to fully internalise the costs and benefits of public spending programmes (e.g. prime ministers and finance ministers).[11] The scores are based on one aspect of the preparatory phase of budget processes, three aspects of the approval of budgets by legislatures, and three aspects of the implementation phase. The maximum values of the scores for each of the seven aspects are the same (viz. four), which implies that the totals can range from zero to 28. Table 3.3 lists these aspects and their scoring systems.

Twelve countries receive scores, taken from Fabrizio and Mody (2010: 385), for each element for each year from 1998 to 2004. France and Ireland, which are not included in the Fabrizio and Mody study, implemented major budget-process reforms in 1998 and 1993, respectively (Hallerberg et al., 2007: 348; cf. also Table 2.2). It is assumed that their identical sets of scores for 2000 and 2004 reported in Hallerberg et al. (2009: 58-67) apply for every year from 1998 to 2004.

3.3.5 Effective fiscal councils

The indicator for this causal condition reflects the existence (or otherwise) and salient characteristics of three types of fiscal councils, namely sources of macroeconomic and fiscal forecasts, providers of normative policy assessment or recommendations, and providers of fiscal policy analysis. The premise for the construction of the indicator is that fiscal councils should be independent and influential in order to make fiscal policymaking more transparent and to contribute to better outcomes. For each type of council, Table 3.4 lists eight features deemed likely to enhance the independence and influence of such entities. Countries obtain one point for each of these features their fiscal councils possess, up to a maximum of eight. The scores for the three types of councils are added up to generate overall scores for each country that can range from zero to 24.

[11] The discussion of common-pool problems in fiscal policymaking in Section 1.5 in Chapter 1 summarises the theory behind this approach.

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Table 3.3

Design aspects and scoring systems for indicators of the effectiveness of procedural fiscal rules

Design aspects	Scores
1. The distribution of agenda-setting powers in the preparation of budgets:	
The finance minister collects spending bids from other ministers	0.00
The finance minister collects spending bids from other ministers, subject to pre-agreed guidelines	1.00
Budgets are based on norms agreed in advance by the entire cabinet	2.00
Budgets are based on norms proposed by the finance minister and agreed in advance by the entire cabinet	3.00
The prime minister or finance minister determines budget parameters to be observed by other ministers	4.00
2. The scope for changes to budgets by parliament:	
Changes are allowed and are not required to be off-set	0.00
Changes are not allowed or must be off-set	4.00
3. The sequence of voting on budgets:	
Voting on the details precedes voting on the total size of budgets	0.00
Voting on the total size precedes voting on the details of budgets	4.00
4. The relative powers of the executive and the legislature in decisions on budgets:	
Parliamentary amendments to budgets cannot cause the collapse of governments	0.00
Parliamentary amendments to budgets can cause the collapse of governments	4.00
5. The scope for changing budgets during the implementation phase:	
The executive can make such changes at its discretion	0.00
The consent of the legislature is required for such changes	2.00
Changes require new laws subject to the same regulations as ordinary budgets	4.00
6. The scope for transferring spending items between ministerial budgets:	
There is unlimited scope for such transfers	0.00
There is limited scope for such transfers	1.00
Such transfers require the approval of the finance minister	2.00
Such transfers require the approval of the legislature	3.00
Such transfers are not allowed	4.00
7. The procedures for responding to deteriorations of budget deficits:	
The finance minister cannot block expenditures	0.00
The finance minister can block expenditures	4.00

Source: Adapted from Fabrizio and Mody (2010).

The source of the information is the ECFIN database on fiscal institutions (European Commission, 2014c), but details about amendments to the mandates of some councils are taken from their websites. When countries have more than one of a certain type of

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council, scores are based on the features of the best-performing one. Fiscal councils that fulfil more than one of the roles identified earlier enter the country scores separately for each role. Given the absence of relevant information, it is assumed that perceptions of the quality of the work of the councils reported in the ECFIN database remained the same throughout the period from 1998 to 2004.

Table 3.4

Design aspects and scoring systems for indicators of the effectiveness of fiscal councils

Design aspects	Scores
1. An agency that undertakes independent analysis of fiscal policy:	
The agency has a constitutional or other legal basis	1.00
The mandate of the agency is stated explicitly in an official document	1.00
The agency is not formally attached to the government or parliament	1.00
The senior management structure of the agency contains no politicians	1.00
Analyses by the agency cover the entire general government sector	1.00
The agency regularly produces non-confidential reports on fiscal issues	1.00
Government must take the agency's analyses into account or respond to them	1.00
Analyses by the agency are perceived to be of high quality	1.00
2. An agency that provides independent macroeconomic or budgetary forecasts:	
The agency has a constitutional or other legal basis	1.00
The mandate of the agency is stated explicitly in an official document	1.00
The agency is not formally attached to the government or parliament	1.00
The senior management structure of the agency contains no politicians	1.00
Analyses by the agency cover the entire general government sector	1.00
Government must take the agency's forecasts into account and explain deviations	1.00
The agency has access to privileged macroeconomic and fiscal information	1.00
Forecasts by the agency are perceived to be of high quality	1.00
3. An agency that provides independent assessments of and recommendations on fiscal policy:	
The agency has a constitutional or other legal basis	1.00
The mandate of the agency is stated explicitly in an official document	1.00
The agency is not formally attached to the government or parliament	1.00
The senior management structure of the agency contains no politicians	1.00
Analyses by the agency cover the entire general government sector	1.00
The agency is mandated to highlight possible deviations from initial fiscal plans	1.00
The government always or generally follows the agency's recommendations	1.00
Analyses by the agency are perceived to be of high quality	1.00

Source: Adapted from European Commission (2014c).

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3.3.6 De facto SGP compliance before 1992

As mentioned in Section 3.3.2, the fourth causal condition proxies for differences in the strength of governments' preferences for prudent fiscal outcomes. This causal condition, "de facto SGP compliance before 1992", is a measure of the extent to which each country would have satisfied the annual budget-balance rule in the SGP had it been in force from 1970 to 1991 (the latter being the year before the Treaty of Maastricht introduced supranational rules in the EU). Countries score one for each year from 1970 to 1991 in which the conventional budget balance of the general government sector amounted to 3 percent of GDP or less.[12] The budget balance data are from Tanzi and Fanizza (1995: 2-3) and the scores can range from zero to 22.

A more detailed explanation of the quantification of "de facto SGP compliance before 1992" is in order. The non-observable nature of policymakers' preferences makes the use of a proxy unavoidable; this, in turn, necessitates contentious assumptions. More specifically, it is assumed that fiscal prudence was a self-imposed norm in countries that seldom or never recorded budget deficits in excess of 3 percent of GDP in the years before the Treaty of Maastricht and the SGP required commitments to adhere to budget-balance rules. A further assumption is that the existence or non-existence of such norms had a direct influence on the preferences of the policymakers from 1998 to 2004 and perhaps an indirect influence via their impact on politicians' perceptions of the electoral costs of breaching the SGP rules. The assumptions seem plausible, but remain unproven and open to criticism.[13]

Be that as it may, the causal condition "de facto SGP compliance before 1992" plays two important roles in the set-theoretic analysis in this chapter. First, it makes it possible to

[12] For some countries, comparable data are not available for the years before 1970.

[13] To give but one example: differences in fiscal outcomes before 1992 could have resulted from other factors besides diverse norms or preferences, including differences in the effectiveness of fiscal policymaking frameworks at the time. Such frameworks are not changed often; hence, the possibility arises that "de facto SGP compliance before 1992" largely reflects the same aspects of the countries' fiscal governance set-ups that determine their scores on the other three causal conditions for the period 1998-2004. The results generated in Section 3.4 would be biased if this was the case. The introduction to Section 3.4 discusses this issue and its implications in more detail.

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test the fifth proposition formulated in Section 3.2, which states that a strong preference for prudence can substitute for a strong fiscal policymaking framework as a device for preventing fiscal profligacy. The second role was mentioned in Section 3.2: the inclusion in the model of a proxy for policymakers' preferences lowers the risk that the results of the set-theoretic analysis are distorted by the omission of a potentially significant influence on fiscal outcomes. Hence, its inclusion could contribute to a more realistic assessment of the set-theoretic connections between degrees of compliance with the SGP rules and configurations of elements of fiscal policymaking frameworks.

3.3.7 Determination of fuzzy-set membership scores

Appendix Tables 3.1 to 3.8 contain the raw data for the calculation of the outcome and causal conditions scores. This information is summarised in Figure 3.1, which shows the period averages of the variables for each country.

The outcome scores vary markedly, ranging from zero in Greece and Portugal (failure to observe the annual as well as the medium-term budget-balance rules in every year from 1998 to 2004) to fourteen in Finland (compliance with both rules in all seven years). Denmark (thirteen), Ireland and Sweden (twelve each) have the highest outcome scores apart from Finland, while the scores of Italy (three), France and Germany (four each) are somewhat higher than those of Greece and Portugal. The more clearly specified and more strictly enforced annual budget-balance rule was observed more often than the medium-term budget-balance rule (the mean years of compliance for the two rules were 4.9 and 2.1, respectively). The scores for the causal conditions also vary markedly. The distribution of those for the efficacy of numerical rules is somewhat distorted by an outlier at the top and that for the efficacy of procedural rules by the absence of very low scores, whereas the scores for the efficacy of fiscal councils and de facto compliance with the annual budget-balance rule from 1970 to 1991 are distributed well across the range of possible values.

The next step is the conversion of these raw scores into calibrated fuzzy membership scores. Calibration — the adjustment of measuring devices and measures to achieve conformance with external standards (Ragin, 2008: 72) — enhances the precision of quantitative measurements by adding important qualitative information. According to

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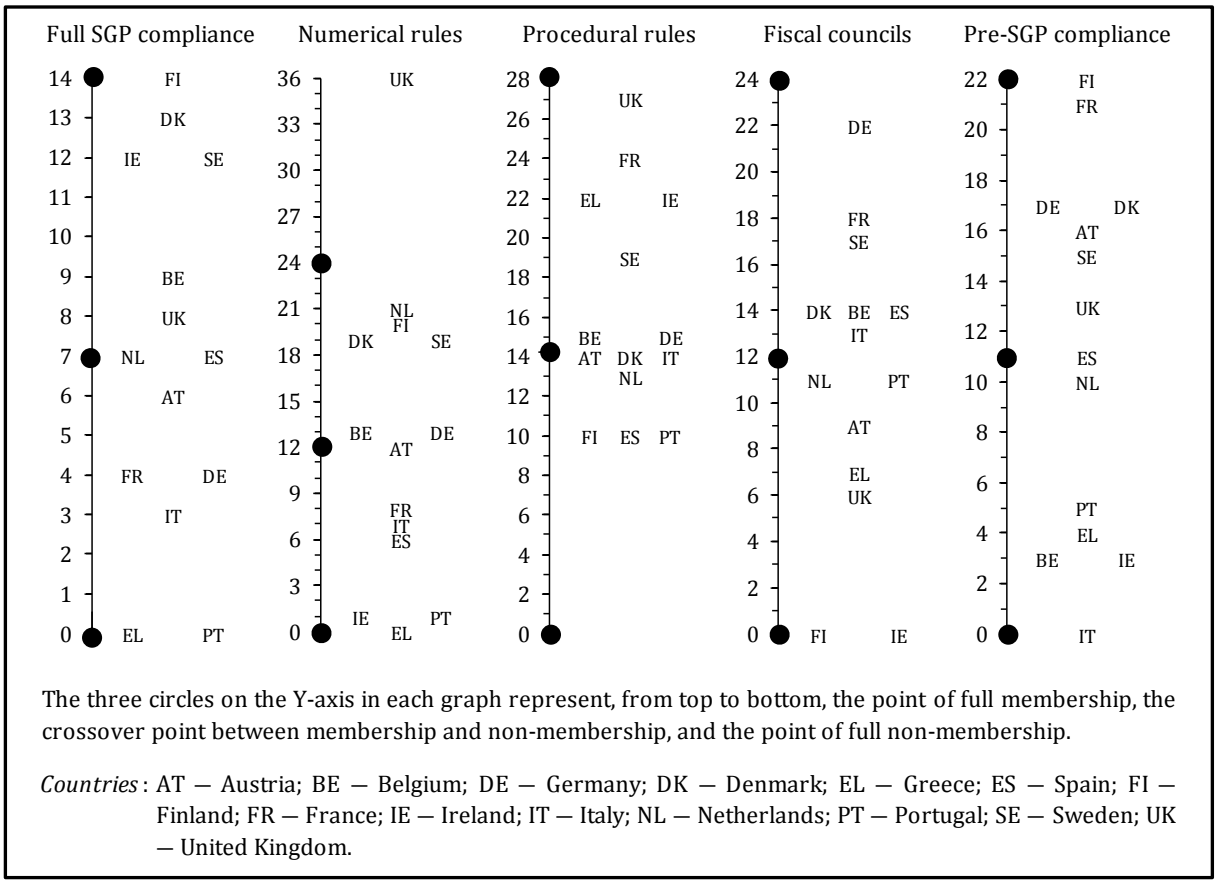
Ragin (2000: 154-155), calibrated fuzzy membership scales represent more refined forms of measurement than conventional ratio scales. Both have the features of interval-scale measurement, but conventional ratio scales have one fixed point (zero) while calibrated fuzzy membership scales have three anchors: full non-membership of a set (zero), the point of maximum ambiguity between set membership and non-membership (0.5) and full set membership (one). The precision brought by well-executed calibration is useful for distinguishing between relevant and irrelevant variation and for accurate placement of cases relative to one another (Ragin, 2008: 74). The paucity of commonly accepted external standards is a formidable barrier to calibration efforts in the social sciences, though.

Figure 3.1

Raw scores and calibration cut-off points



The three circles on the Y-axis in each graph represent, from top to bottom, the point of full membership, the crossover point between membership and non-membership, and the point of full non-membership.

Countries: AT — Austria; BE — Belgium; DE — Germany; DK — Denmark; EL — Greece; ES — Spain; FI — Finland; FR — France; IE — Ireland; IT — Italy; NL — Netherlands; PT — Portugal; SE — Sweden; UK — United Kingdom.

Source: Own calculations based on sources listed in Appendix Tables 3.1 to 3.8.

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The following principles are used to calibrate the outcome scores and causal conditions scores assembled for the present analysis. The outcome scores and those for one of the causal conditions ("de facto full SGP compliance before 1992") are indicators of the degree of membership of the sets associated with full compliance. In both cases, the highest possible, mid-point and lowest possible scores are natural anchors for full membership, the point of ambiguity between membership and non-membership and full non-membership. Hence, simple rescaling of the raw scores suffices as a calibration strategy for obtaining fuzzy membership scores for the outcome and the causal condition "de facto SGP compliance before 1992". The raw scores of two other causal conditions ("effective fiscal councils" and "effective procedural rules") are composite indicators of the design characteristics identified in other studies as conducive to effectiveness. Neither theory nor empirical evidence provides bases for weighting the contributions of these features to the efficacy of councils or procedural rules. Hence, the fuzzy membership scores for these causal conditions are also anchored in the highest possible, lowest possible and mid-point raw scores.

The specification of a maximum value is a requirement for converting raw scores to fuzzy membership scores. Hence, the reality that the raw scores for the condition "effective numerical rules" are calculated in a manner that does not yield pre-defined maximum values (cf. Section 3.3.3) is problematic. To enable the conversion, the raw numerical rules scores are calibrated to a maximum value of 24 — the score of a rule that applies to the entire general government sector and achieves the maximum scores for the six strength-related design elements listed in Table 3.2. In this case, too, the basis for the calculation of the raw scores justifies the use of the lowest possible score and the mid-point score as the second and third anchor points. Figure 3.1 depicts the values that anchor the fuzzy membership scores for the outcomes and the causal conditions as circles on the y-axes of each graph.

Table 3.5 contains the calibrated membership scores for the continuous fuzzy sets associated with the outcome and each of the four causal conditions. These scores are generated by the software package "fsQCA version 2.0" (Ragin, Drass and Davey, 2006). In principle, the membership scores of continuous fuzzy sets can assume any value from zero to one (cf. Section 2.3.1 in Chapter 2). However, the software package assigns fuzzy

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membership scores of 0.95 to cases with full membership of sets and 0.05 to those with full non-membership. Scores of 1.00 arise only when the raw scores significantly exceed the anchor point for full membership (the only example of this in the present analysis is the score of the United Kingdom for the causal condition "effective numerical rules"). As explained in Section 2.3.1 in Chapter 2, such calibrated membership scores are used to identify set-theoretic connections among the elements of the model.

Table 3.5

Calibrated fuzzy membership scores on the outcome and causal conditions for fourteen EU countries

Country	Outcome	Causal conditions			
	FSC[1]	ENR[1]	EPR[1]	EFC[1]	DSC[1]
Austria	0.39	0.48	0.50	0.34	0.80
Belgium	0.70	0.55	0.56	0.62	0.10
Denmark	0.93	0.84	0.50	0.62	0.84
Finland	0.95	0.88	0.30	0.05	0.95
France	0.22	0.20	0.89	0.82	0.94
Germany	0.22	0.58	0.55	0.92	0.84
Greece	0.05	0.05	0.85	0.22	0.13
Ireland	0.89	0.06	0.85	0.05	0.10
Italy	0.15	0.22	0.52	0.26	0.05
Netherlands	0.50	0.91	0.45	0.44	0.43
Portugal	0.05	0.06	0.30	0.45	0.16
Spain	0.50	0.66	0.30	0.62	0.50
Sweden	0.89	0.85	0.74	0.78	0.75
United Kingdom	0.61	1.00	0.94	0.18	0.63

Note: 1 FSC — full SGP compliance; ENR — effective numerical rules; EPR — effective procedural rules; EFC — effective fiscal councils; DSC — de facto full SGP compliance before 1992.

Source: Own calculations described in the text.

The membership scores in Table 3.5 are indicative of considerable causal heterogeneity: several different configurations of the causal factors occur among countries with strong membership in the outcome set "full SGP compliance" and among those with weak or non-membership. Thus, Ireland and Sweden exhibit similar high degrees of compliance although Ireland has a high score on only one causal factor while Sweden has relatively

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high scores on all four. Similar contrasts mark the scores on the causal conditions of countries with low levels of compliance with the SGP rules (e.g. France and Italy). As pointed out in Section 2.3.2 in Chapter 2, such causal complexity confirms the value of fsQCA as a technique for analysing the dataset. The fuzzy membership scores also suggest that the influence of policymaking frameworks on fiscal outcomes should not be exaggerated. To be sure, the empirical evidence reviewed in Sections 1.4 and 1.5 in Chapter 1 and in Section 3.2 of this chapter suggests that such frameworks matter for fiscal performance. Yet the examples of Greece and Ireland, which have strikingly dissimilar compliance scores despite having very similar frameworks rooted in strong procedural rules, are reminders that other factors too could have been powerful determinants of fiscal outcomes from 1998 to 2004.

When undertaking set-theoretic analyses, the software package "fsQCA version 2.0" ignores cases with fuzzy membership scores on causal conditions of exactly 0.5, because efforts to analyse cases with this score are complicated by the rules governing the intersection of fuzzy sets (Fiss, 2011: 407). Hence, Ragin (2008: 131) recommends that the assignment of fuzzy membership scores of exactly 0.5 should be avoided if possible. Table 3.5 contains three membership scores of exactly 0.5, namely those of Austria and Denmark for "effective procedural rules" and that Spain for "de facto SGP compliance before 1992". To avoid the dropping of these cases from aspects of the set-theoretic analysis, constants of 0.001 are added to these three raw scores for purposes of the analysis discussed in Section 3.4.[14] Similar adjustments are unnecessary for fuzzy membership scores of 0.5 on the outcome (e.g. those of the Netherlands and Spain), because these scores are not intersected with others during the analysis.

3.4 ANALYSIS AND RESULTS

This section identifies and assesses set relationships between the outcome and various configurations of the four causal conditions in the period from 1998 to 2004. The fuzzy membership score of a case on a combination of causal conditions is obtained by

[14] Fiss (2011) also uses such small adjustment to overcome the difficulties caused by fuzzy membership scores of exactly 0.5.

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applying logical "AND", which implies taking the smallest of its fuzzy membership scores on the causal conditions included in the combination (Ragin, 2008: 36-37). For example, Table 3.5 shows that the United Kingdom has a membership score of 1.00 on the causal factor "effective numerical rules" and a score of 0.18 on the causal factor "effective fiscal councils". Hence, its membership score on the causal combination "effective numerical rules AND effective fiscal councils" is the smallest of the two, namely 0.18.

The indicators used for the assessment of the set relations are consistency and coverage scores. These indicators were introduced in Section 2.3.1 in Chapter 2, where it is stated that they measure the significance and empirical importance of set relations. Ragin (2008: 45) relates the roles of these indicators to those of corresponding measures in correlation-based analyses as follows:

> These assessments of set relations are important in the analysis of explicit connections in the same way that assessments of significance and strength are important in the analysis of correlational connections. Consistency, like significance, signals whether an empirical connection merits the close attention of the investigator. If a hypothesized subset relation is not consistent, then the researcher's theory or conjecture is not supported. Coverage, like strength, indicates the empirical relevance or importance of a set-theoretic connection… just as it is possible in correlational analysis to have a significant but weak correlation, it is possible in set-theoretic analysis to have a set relation that is highly consistent but low in coverage.

Consistency scores indicate how closely connections between outcomes and configurations of causal conditions approximate perfect set relations (cf. Section 2.3.1 in Chapter 2). The following formula measures the consistency of a set relation between the scores on a combination of causal condition (X_i) and those on an outcome (Y_i) (Ragin, 2008: 52):

$$Consistency\ (X_i \leq Y_i) = \sum [min\ (X_i\ ,\ Y_i)] \ /\ \sum\ (X_i) \qquad [3.2]$$

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The expression "min" indicates that the lower of the two values is chosen. Consistency scores range from zero to one. Ragin (2008: 136) points out that values below 0.75 indicate weak connections — especially in analyses of small numbers of cases — and suggests 0.85 as a benchmark for identifying strong set relations. Consistency scores equal to or greater than 0.85 do not necessarily imply high levels of significance when small numbers of cases are analysed, however: a two-tailed z-test for a population of fourteen (the number of cases in the analysis in this chapter) shows that an observed consistency score of 0.85 is not significantly different from 0.57 at the 90 percent level of confidence. This should be kept in mind when interpreting the results.

Coverage scores measure the extent to which such configurations of causal conditions account for instances of outcomes. The coverage of an outcome by a configuration of causal conditions is calculated after it has been established that the set relation meets the desired consistency threshold (the extent to which such a configuration accounts for instances of the outcome is irrelevant unless a reasonably consistent set relation exists between the configuration and the outcome). The following formula is used to calculate the coverage of a set relationship between the scores on a configuration of causal condition (X_i) and those on an outcome (Y_i) (Ragin, 2008: 57):

$$Coverage\ (X_i \leq Y_i) = \sum [min\ (X_i\ ,\ Y_i)] \ / \ \sum\ (Y_i) \qquad [3.3]$$

Coverage scores also range from zero to one, and the expression "min" again indicates that the lower of the two values is chosen. To obtain high consistency scores it is often necessary to specify combinations of several causal factors; such complex combinations, however, typically account for relatively few instances of the outcomes and therefore have relatively low coverage scores.[15]

Section 3.3.6 acknowledges that the scores on the causal condition "de facto SGP compliance before 1992" possibly reflect differences in the efficacy of the countries' fiscal policymaking frameworks from 1970 to 1991, instead of societal differences in preferences for prudent fiscal outcomes. Table 3.6, which contrasts the countries' fuzzy

[15] As Epstein et al. (2008: 79) put it: "… very particular or exact explanations (which may be highly consistent) tend to be less generalizable."

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membership scores on the causal conditions in 1991 with the averages for the period 1998-2004 that also appear in Table 3.5, illustrates this problem and its implications for interpreting the results presented in this section.[16]

Table 3.6

Calibrated fuzzy membership scores on selected causal conditions for fourteen EU countries

Country	DSC[1]	ENR[1]		EPR[1]		EFC[1]	
	1970-1991	1991	1998-2004	1991	1998-2004	1991	1998-2004
Austria	0.80	0.05	0.48	0.30	0.50	0.15	0.34
Belgium	0.10	0.15	0.55	0.45	0.56	0.32	0.62
Denmark	0.84	0.05	0.84	0.50	0.50	0.62	0.62
Finland	0.95	0.05	0.88	0.30	0.30	0.05	0.05
France	0.94	0.09	0.20	0.95	0.89	0.82	0.82
Germany	0.84	0.45	0.58	0.45	0.55	0.92	0.92
Greece	0.13	0.05	0.05	0.18	0.85	0.22	0.22
Ireland	0.10	0.05	0.06	0.66	0.85	0.05	0.05
Italy	0.05	0.05	0.22	0.22	0.52	0.05	0.26
Netherlands	0.43	0.05	0.91	0.34	0.45	0.44	0.44
Portugal	0.16	0.05	0.06	0.30	0.30	0.44	0.45
Spain	0.50	0.18	0.66	0.30	0.30	0.62	0.62
Sweden	0.75	0.05	0.85	0.22	0.74	0.78	0.78
United Kingdom	0.63	0.05	1.00	0.85	0.94	0.18	0.18
Average	–	0.10	0.52	0.42	0.59	0.40	0.46

Note: 1 DSC — de facto full SGP compliance before 1992; ENR — effective numerical rules; EPR — effective procedural rules; EFC — effective fiscal councils.

Sources: Own calculations using the fsQCA software, with the data taken from European Commission (2014b; 2014c), Fabrizio and Mody (2010) and Tanzi and Fanizza (1995).

The assumption that "de facto SGP compliance before 1992" proxies for preferences or norms – as opposed to the efficacy of the countries' fiscal policymaking frameworks – is plausible for countries such as Austria and Finland, where large budget deficits were rare or absent in the 1970s and the 1980s despite weak policymaking frameworks. It is

[16] 1990 is the first year in the data series used to determine membership scores on the causal conditions representing salient features of the countries' fiscal policymaking frameworks. The 1991 values are provided here as rough indicators of the nature of these frameworks in the period from 1970 to 1991.

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tenuous, however, for countries whose policymaking frameworks contained elements that could explain their generally sound fiscal outcomes (e.g. France and Germany) and those whose high incidences of budget deficits in excess of 3 percent of GDP could have been caused by weak policymaking frameworks (e.g. Greece and Italy). As stated in Section 3.3.6, this measurement problem could bias the results presented below: if "de facto SGP compliance before 1992" primarily reflects features of fiscal policymaking frameworks and those features remained in place from 1998 onwards, its inclusion in the model as a proxy for preferences for fiscal prudence would exaggerate the role of such preferences and reduce the significance of the set relations between the outcome and the other three causal conditions. While a solution to this problem remains elusive, it is less likely to affect the significance of "effective numerical rules" than that of "effective procedural rules" and "effective fiscal councils": the two sets of membership scores on these conditions show that the numerical-rules elements of the countries' policymaking frameworks changed markedly more between 1991 and 1998 than the procedural-rules and, especially, the fiscal-councils elements did.

3.4.1 Identification of necessary conditions

The first step in the set-theoretic analysis is to establish whether any of the causal conditions were necessary for the outcome (i.e. if one or more of the causal conditions were present whenever the outcome occurred) (Ragin, 2000: 91). This would be the case if the outcome is a subset of the cause (or, put differently, when a superset relation exists between the outcome and the causal condition). As pointed out in Section 2.3.1 in Chapter 2, the requirement for the existence of a necessary condition is that each of the membership scores on the outcome should be smaller than each of the corresponding membership scores on the condition. Table 3.7 provides consistency scores that make it possible to identify necessary conditions. In addition, it contains coverage scores that indicate the empirical importance of the various relations. Scores are given for the presence and the absence of each condition. The United Kingdom, for example, has a fuzzy membership score of 0.94 on the causal condition "effective procedural rules" (cf. Table 3.5). Hence, its membership score on "not effective procedural rules" is 0.06, which is obtained by subtracting 0.94 from 1.00 (i.e. by negating the fuzzy membership score in question) (cf. Ragin, 2008: 36).

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Table 3.7

Necessary conditions for the outcome "full SGP compliance"

Causal condition[1]	All countries		Large ideological distance countries[2]		Small ideological distance countries[3]	
	Consistency	Coverage	Consistency	Coverage	Consistency	Coverage
ENR	0.83	0.79	0.93	0.76	0.66	0.91
EPR	0.76	0.65	0.67	0.67	0.93	0.63
DSC	0.75	0.73	0.83	0.84	0.60	0.56
efc	0.74	0.67	0.75	0.77	0.73	0.57
EFC	0.61	0.67	0.60	0.73	0.61	0.59
dsc	0.58	0.60	0.56	0.70	0.62	0.50
epr	0.58	0.71	0.67	0.84	0.43	0.50
enr	0.47	0.49	0.32	0.57	0.71	0.45

Notes: 1 ENR — effective numerical rules; enr — not effective numerical rules; EPR — effective procedural rules; epr — not effective procedural rules; EFC — effective fiscal councils; efc — not effective fiscal councils; DSC — de facto full SGP compliance before 1992; dsc — not de facto full SGP compliance before 1992.

2 Belgium, Denmark, Finland, Germany, Greece, the Netherlands, Spain and the United Kingdom.

3 Austria, France, Ireland, Italy, Portugal and Sweden.

Source: Own calculations undertaken using the fsQCA software package.

The second and third columns in Table 3.7 contain scores for all fourteen countries. The consistency scores in these columns all fall short of Ragin's guideline for strong set relationships of 0.85, which implies that neither the presence nor the absence of any of the causal factors was a necessary condition for the outcome. The fact that none of the three elements of fiscal policymaking frameworks was present or absent in all the countries that complied strictly with the SGP and that only some of the most SGP-compliant countries had avoided large budget deficits in most years from 1970 to 1991 confirms the impression of causal complexity suggested by the fuzzy membership scores in Table 3.5.[17] A salient feature of the results is that the consistency score on the

[17] Eight of the fourteen countries' membership scores on "effective numerical rules" satisfy the requirement for a necessary condition, being equal to or larger than the corresponding membership scores on the outcome "full SGP compliance" (cf. Table 3.5). For the other causal factors, the numbers of countries that meet this requirement are as follows: "effective procedural rules" — seven, "effective fiscal councils" — six, and "de facto full SGP compliance before 1992" — eight.

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superset relation between "full SGP compliance" and "effective numerical rules" is notably higher than the scores on the other relationships and, at 0.83, close to Ragin's benchmark of 0.85. The fiscal governance system of the EU encourages the member states to adopt national numerical rules that facilitate compliance with the SGP rules. By contrast, the aims of the procedural rules and fiscal councils in these countries are to contribute to fiscal discipline in a more general sense. Hence, it is not surprising that the superset relation between "full SGP compliance" and "effective numerical rules" has the highest score, although an even stronger connection might have been expected in the light of the theoretical predictions and empirical findings summarised in Chapter 1 and in Section 3.2.

The ideas of Hallerberg et al. (2007) about the links between electoral systems and the efficacy of aspects of fiscal policymaking frameworks may explain the relative frailty of the link between "full SGP compliance" and "effective numerical rules". Hence, Table 3.7 also provides separate sets of scores for the eight large ideological distance countries and the six small ideological distance countries. The results are striking despite the small sample sizes. In line with the claim of Hallerberg et al. (2007) that numerical rules help countries with proportional representation-based voting systems to cope with common-pool problems, the superset relationship between "full SGP compliance" and "effective numerical rules" is markedly stronger and that between "full SGP compliance" and "effective procedural rules" markedly weaker in the eight large ideological distance countries than the corresponding relationships in the full sample. The consistency score on "effective numerical rules" reaches 0.93 in the large ideological distance countries – a value that surpasses the benchmark for a strong set relation. Similarly, the consistency scores for the full group and for the six small ideological distance countries show that the superset relationship between "full SGP compliance" and "effective procedural rules" is markedly stronger and that between "full SGP compliance" and "effective numerical rules" markedly weaker in the latter group. This is consistent with the argument of Hallerberg et al. that strong procedural rules are more effective than numerical rules in countries with plurality-based voting systems. In this group of countries, the consistency score on "effective procedural rule" (0.92) is indicative of a significant set relationship.

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3.4.2 Sufficiency analysis for configurations of causal conditions

A causal condition (or a combination of causal conditions) is sufficient for an outcome when it always produces that outcome (Ragin, 2000: 92). As explained in Section 2.3.1 in Chapter 2, perfect sufficiency is indicated when all the set membership scores on a causal condition (or a combination of causal conditions) are smaller than or equal to the corresponding set membership scores on the outcome. This subsection tests the validity of the five propositions formulated in Section 3.2 by establishing the extent to which relevant configurations of the causal conditions in the model were sufficient conditions for "full SGP compliance" in the fourteen EU countries from 1998 to 2004. Table 3.8 contains the results of tests of the first four propositions in the form of measures of the significance and empirical importance of the subset relations between the causal factors representing elements of fiscal policymaking frameworks ("effective numerical rules", "effective procedural rules" and "effective fiscal councils") and the outcome ("full SGP compliance"). Separate sets of scores are provided for all fourteen countries, the eight large ideological distance countries and the six small ideological distance countries.

Table 3.8

The sufficiency for "full SGP compliance" of causal configurations consisting of elements of fiscal policymaking frameworks

Configurations of causal conditions[1]	All countries		Large ideological distance countries[2]		Small ideological distance countries[3]	
	Consis-tency	Cover-age	Consis-tency	Cover-age	Consis-tency	Cover-age
ENR*EPR*EFC	0.90	0.54	0.87	0.51	0.95	0.59
ENR*EFC	0.88	0.59	0.84	0.59	0.95	0.61
ENR*EPR	0.85	0.65	0.82	0.67	0.90	0.61
ENR	0.80	0.83	0.76	0.93	0.91	0.66

Note: 1 ENR — effective numerical rules; EPR — effective procedural rules; EFC — effective fiscal councils.

2 Belgium, Denmark, Finland, Germany, Greece, the Netherlands, Spain and the United Kingdom.

3 Austria, France, Ireland, Italy, Portugal and Sweden.

Source: Own analysis of data in Table 3.5 using the fsQCA software package.

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The consistency scores of several of the causal configurations listed in Table 3.8 exceed the threshold for strong subset relations of 0.85. This yardstick identifies strong set-theoretic links between "full SGP compliance" and three of the four configurations for all the countries, one of the four configurations for the "large ideological distance countries" and all four configurations for the "small ideological distance countries". As mentioned earlier, though, the small number of cases included in the analysis suggests that much caution should be exercised when interpreting the results. The coverage scores range from 0.51 to 0.93. While there are no firm guidelines for gauging the empirical importance of subset relations, the fact that each configuration accounts for at least one-half of the instances of the outcome suggests that all are relevant for explaining "de facto SGP compliance". In the following discussion, the coverage scores are used to rank configurations with roughly similar consistence scores.

The results for all fourteen countries yield the following perspectives on the first four propositions formulated in Section 3.2.

- *Proposition 1: Numerical fiscal rules are effective devices for preventing fiscal profligacy*. The consistency score of 0.80 indicates that membership in the fuzzy set "effective numerical rules" is not a sufficient condition for membership in the fuzzy set "full SGP compliance from 1998 to 2004" and renders the high coverage score of 0.83 meaningless. Nonetheless, Proposition 1 receives qualified support from the scores for the other configurations, which suggest that strong numerical rules were critical elements of the policymaking frameworks associated with high levels of compliance with the SGP rules. In sum, numerical rules seemingly were effective devices for constraining fiscal outcomes, though not sufficient in the absence of complementary mechanisms.
- *Proposition 2: Fiscal councils enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy*. The experience of the fourteen countries from 1998 to 2004 was consistent with this proposition. The consistency score for "effective numerical rules AND effective fiscal councils" (0.88) is markedly higher than that on "effective numerical rules" (0.80) and exceeds the benchmark for strong subset relationships. Moreover, the coverage score (0.59) implies that "effective numerical rules AND effective fiscal councils" accounts for more than

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half of the instances of the outcome; as such, it remains impressive despite falling well short of that on "effective numerical rules".

- *Proposition 3: Centralised, top-down procedural rules do not enhance the effectiveness of numerical rules as devices for preventing fiscal profligacy*. The consistency score on "effective numerical rules AND effective procedural rules" (0.85) achieves the benchmark for strong subset relations, albeit just. In addition, it exceeds that on "effective numerical rules" (0.80), which implies that the subset relationship between "effective numerical rules" and "full SGP compliance from 1998 to 2004" is strengthened by adding "effective procedural rules" to the former. The coverage score of this combination (0.65) is also impressive, despite being significantly lower than that of "effective numerical rules". The finding that strong procedural rules apparently enhanced the efficacy of numerical rules in preventing fiscal profligacy contradicts Proposition 3.
- *Proposition 4: Centralised, top-down procedural rules do not enhance the effectiveness of combinations of numerical rules and fiscal councils as devices for preventing fiscal profligacy*. "Effective numerical rules AND effective procedural rules AND effective fiscal councils" has an impressive consistency score of 0.90, which is slightly higher than that of "effective numerical rules AND effective fiscal councils" (0.88) and markedly higher than that of "effective numerical rules AND effective procedural rules" (0.85). The coverage score indicate that the threefold configuration explains instances of the outcome better than "effective numerical rules AND effective procedural rules", though less well than "effective numerical rules AND effective fiscal councils". The finding that the addition of "effective procedural rules" strengthens the potency of "effective numerical rules AND effective fiscal councils" contradicts Proposition 4.

The consistency and coverage scores for the large ideological distance countries are all smaller than the corresponding ones for all fourteen countries, but these differences do not invalidate these perspectives on the propositions. Turning to the small ideological distance countries, the results support the perspectives on Propositions 1 and 2, which pertain to the roles of numerical rules and fiscal councils. Unlike those for the large ideological distance countries (and the full group of fourteen states), however, the

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results for the small ideological distance countries also support Propositions 3 and 4: the consistency scores imply that the significance of neither "effective numerical rules" nor that of "effective numerical rules AND effective fiscal councils" is bolstered by adding "effective procedural rules". These results contradict the argument of Hallerberg et al. (2007) that strong procedural rules are more likely than strong numerical rules to contribute to sound fiscal outcomes in small ideological distance countries.

In Table 3.9, the fourth causal condition ("de facto SGP compliance before 1992") is added to each of the configurations included in Table 3.8. Table 3.9 contains consistency and coverage scores for all fourteen countries and for subgroups consisting of the seven countries with the highest and the seven countries with the lowest membership scores on "de facto SGP compliance before 1992". Assuming that the levels of fiscal balances from 1970 to 1991 are indeed good proxies for country-specific preferences or norms about prudent fiscal outcomes, the scores in Table 3.9 show how the results pertaining to configurations of framework elements associated with strict compliance with the SGP rules are affected when such proxies are included in the analysis.

Table 3.9

The sufficiency for "full SGP compliance" of configurations of all four causal conditions

Configurations of causal conditions [1]	All countries		Seven highest DSC countries[2]		Seven lowest DSC countries[3]	
	Consis-tency	Cover-age	Consis-tency	Cover-age	Consis-tency	Cover-age
ENR*DSC	0.91	0.73	0.89	0.92	0.99	0.44
ENR*EFC*DSC	0.91	0.51	0.87	0.56	0.99	0.44
ENR*EPR*EFC*DSC	0.91	0.46	0.87	0.53	0.99	0.36
ENR*EPR*DSC	0.90	0.57	0.87	0.70	0.99	0.37
DSC	0.73	0.75	0.69	0.95	0.87	0.45

Notes: 1 ENR — effective numerical rules; EPR — effective procedural rules; EFC — effective fiscal councils; DSC — de facto full SGP compliance before 1992.

2 Austria, Denmark, Finland, France, Germany, Sweden and the United Kingdom.

3 Belgium, Greece, Ireland, Italy, the Netherlands, Portugal and Spain.

Source: Own analysis of data in Table 3.5 using the fsQCA software package.

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The following perspectives on Proposition 5 emerge from the findings for all fourteen countries:

- *Proposition 5: A strong preference for fiscal prudence can substitute for a strong policymaking framework as a device for preventing fiscal profligacy*. The fifth row shows a consistency score for "de facto full SGP compliance before 1992" for all fourteen countries of 0.73. This score is well below the significance threshold of 0.85 – which implies that "de facto SGP compliance before 1992" is not a sufficient condition for "full SGP compliance" – and lags the consistency scores of the four configurations of causal factors that include policymaking frameworks elements. Hence, this finding contradicts Proposition 5. It is striking, though, that the combination "effective numerical rules AND de facto SGP compliance before 1992" has a consistency score of 0.91, which implies a more significant subset relationship with "full SGP compliance" than those of "effective numerical rules AND effective procedural rules", "effective numerical rules AND effective fiscal councils" and "effective numerical rules AND effective procedural rules AND effective fiscal councils".[18] It is tempting to interpret this finding as indicative of the capacity of a strong preference for fiscal prudence to substitute for top-down, centralised, procedural rules and strong fiscal councils as a complement to strong numerical rules, but the possible endogeneity problem discussed earlier cautions against doing so. A more prudent conclusion is that strong preferences for small budget deficits seemingly complemented strong numerical rules in the countries that achieved high levels of compliance with the SGP rules (and perhaps did so more effectively than fiscal councils and procedural rules), but did not suffice as substitutes for fiscal policymaking frameworks built around numerical constraints.

These perspectives on proposition 5 hold for both subgroups. In fact, the consistency score of 0.99 on "effective numerical rules AND de facto SGP compliance before 1992" for the seven countries with the lowest scores on "de facto SGP compliance before 1992" shows that the connection between this causal configuration and the outcome

[18] "Effective numerical rules AND de facto SGP compliance before 1992" clearly is important from an empirical perspective, too, as indicated by its impressive coverage score of 0.73.

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approaches a perfect subset relation. As was shown earlier, scores on configurations of causal conditions are given by the smallest membership score on any of the constituent causal conditions. Hence, countries with low scores on "de facto SGP compliance before 1992" are likely to have low scores on "effective numerical rules AND de facto SGP compliance before 1992" as well. This raises the likelihood of a high consistency score, because the membership score on the causal configuration may well be lower than the membership score on the outcome.

The findings of this section can be summarised as follows. The argument that the electoral systems of countries determine whether policymaking frameworks anchored in strong numerical rules or in centralised, top-down procedural rules are preferable for fiscal discipline finds scant support in the experiences of these fourteen EU countries from 1998 to 2004. Instead, the analysis that includes only the three elements of policymaking frameworks as causal factors yields results consistent with the hypothesis formulated in Chapter 1: adherence to the SGP rules was better in the countries that chose strong numerical rules supplemented with non-partisan fiscal council and top-down, centralised procedural rules. However, the results in Table 3.9 imply a powerful complementary relationship between "effective numerical rules" and "de facto SGP compliance before 1992"; in fact, adding "effective procedural rules" or "effective fiscal councils" has no effect on the significance of the subset relationship between "effective numerical rules" and "full SGP compliance" once "de facto SGP compliance before 1992" is included in the model as a fourth causal condition. Provided the assumption that "de facto SGP compliance before 1992" is a good proxy for norms of fiscal prudence derived from societal preferences is valid, this finding suggests that such norms could make numerical rules markedly more effective as devices for maintaining fiscal discipline, perhaps to the point of obviating the need for fiscal councils and strong procedural rules. Unfortunately, it is impossible to gauge the validity of this assumption, in part because the scores on "de facto SGP compliance before 1992" could reflect aspects of the policymaking frameworks of some countries that also influence the membership scores on, especially, "effective procedural rules" and "effective fiscal councils". Given that the effects of each of the causal factors cannot be identified precisely using cross-sectional analysis, the case studies in Chapter 4 discuss the relationships among these factors in three of the countries.

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3.4.3 Identification of pathways to the outcome

A further purpose of this type of set-theoretic analysis is to find sets of pathways to the outcome. As will be shown below, such pathways are useful starting-points for attempts to explain each case with reference to the findings of a set-theoretic analysis for several cases. The first step in the identification of solution pathways is the construction of a truth table. Thereafter, critical pathways are identified by applying set logic and minimization algorithms to the configurations that achieve benchmarks of significance (cf. Rihoux and Ragin, 2009).[19]

Table 3.10 is a truth table based on the information in Table 3.5. Each of its 16 rows represents a configuration of the four causal conditions, with "1" indicating membership and "0" indicating non-membership in the sets associated with the conditions (in other words, the causal conditions define a four-dimensional vector space with 16 corners, each of which represents one of the logically possible configurations of the conditions). The criterion used by the software package "fsQCA version 2" to assign membership in the sets associated with the various conditions is a fuzzy membership score above 0.5 (Ragin, 2008: 131). Hence, the first row in the table represents the configuration defined by membership in the sets "effective numerical rules", "effective procedural rules" and "effective fiscal councils", and non-membership in the set "de facto SGP compliance before 1992". The sixth column shows the distribution of the cases across the configurations of causal conditions. Thus, only one country has membership in the configuration depicted in the first row (viz. Belgium, whose fuzzy membership scores on the four causal conditions are as follows in Table 3.5: "effective numerical rules" – 0.55, "effective procedural rules" – 0.56, "effective fiscal councils" – 0.62, and "de facto SGP compliance before 1992" – 0.10). The fourteen countries populate ten of the 16 corners of the vector space, with no corner having more than three countries. The seventh column contains consistency scores that show the strength of the evidence for the claim that each configuration is a subset of the outcome. Still using the first row as an example, the consistency score of 0.97 points to a strong subset relationship between

[19] The software package "fsQCA version 2" uses the Quine-McCluskey algorithm for the minimisation of Boolean functions to derive solution pathways from truth tables. Ragin (1987: 85-124) provides a detailed discussion of this method, which is also known as the method of prime implicants.

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that configuration of the causal conditions and the outcome. This reflects that Belgium's fuzzy membership scores on the four causal factors are all smaller than 0.70 – its fuzzy membership score on the outcome (cf. Table 3.5).

Table 3.10

Truth table showing causal conditions relevant to the outcome "full SGP compliance from 1998 to 2004"

Row	Causal conditions[1]				Number of cases[2]	Consistency scores
	ENR	EPR	EFC	DSC		
1	1	1	1	0	1	0.97
2	1	0	0	1	1	0.97
3	1	1	0	1	1	0.96
4	1	0	0	0	1	0.95
5	1	0	1	1	1	0.92
6	1	1	1	1	3	0.91
7	0	1	0	1	1	0.86
8	0	0	0	0	1	0.67
9	0	1	0	0	3	0.66
10	0	1	1	1	1	0.65
11	1	0	1	0	0	0.97
12	1	1	0	0	0	0.97
13	0	0	0	1	0	0.86
14	0	0	1	1	0	0.82
15	0	1	1	0	0	0.78
16	0	0	1	0	0	0.76

Notes: 1 ENR — effective numerical rules; EPR — effective procedural rules; EFC — effective fiscal councils; DSC — de facto full SGP compliance before 1992.

2 The number of cases in each row with fuzzy membership scores larger than 0.5.

Source: Own analysis of data in Table 3.5 using the fsQCA software package.

To proceed, it is necessary to decide which of the 16 configurations to include in the analysis. The first criterion is empirical importance, as indicated by the number of cases with membership in the various sets. The small number of countries included in the study dictates that all ten configurations with at least one member case should be retained. The second criterion is the significance of the subset relationships between the populated configurations and the outcome. As before, a consistency score of 0.85 is chosen as a threshold for retaining configurations of the causal conditions.

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After the user exercised these choices, "fsQCA version 2" generates two sets of solution pathways.[20] The *complex solution* is obtained by ignoring configurations lacking cases with membership scores above 0.50. In other words, these pathways are generated by simplifying only the populated configurations that satisfy the significance criterion (i.e. the configurations in rows one to seven in Table 3.10). The *parsimonious solution* is a further simplified set of pathways generated by including configurations not populated by actual cases in the analysis as "counterfactuals".[21] To obtain such "counterfactuals", "fsQCA version 2" is programmed to assume that the presence and the absence of each causal condition can contribute to the achievement of the outcome. This implies that the minimisation algorithm uses all sixteen configurations in Table 3.10. Clearly, the usefulness of the parsimonious solution hinges on the realism of this assumption about the connections between the causal conditions and the outcome. The software can also produce a third set of pathways known as the *intermediate solution*. These pathways are also obtained using "counterfactuals" derived from configurations not populated by cases to simplify the complex solution. In this case, though, the assumptions about the nature of the connections between the causal conditions and the outcome are not programmed into the software, but provided by the user. Intermediate solutions are

---

[20] As stated before, these solutions are generated by implementing the Quine-McCluskey algorithm to simplify the Boolean functions depicted in the truth table. Ragin (1987: 93) formulates the most important rule used for this purpose as follows: "If two Boolean expressions differ in only one causal condition yet produce the same outcome, then the causal condition that distinguishes the two expressions can be considered irrelevant and can be removed to create a simpler, combined expression." Thus, the first and sixth rows in Table 3.10 depict the following Boolean expressions, with FSC as the outcome ("full SGP compliance"):

> If ENR equals 1 AND EPR equals 1 AND EFC equals 1 AND DSC equals 0, then FSC equals 1.
>
> If ENR equals 1 AND EPR equals 1 AND EFC equals 1 AND DSC equals 1, then FSC equals 1.

These expressions imply that FSC equals one when ENR, EPR and EFC each equals one, irrespective of whether DSC equals zero or one. Hence, DSC can be considered irrelevant. The two expressions can be combined to create the following simpler expression:

> If ENR equals 1 AND EPR equals 1 AND EFC equals 1, then FSC equals 1.

[21] The inclusion of additional functions makes it possible to eliminate more terms via Boolean minimisation, thus generating a simpler solution.

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simpler than complex ones by design and, if the links between causal conditions and outcomes are uncontroversial, also more realistic than parsimonious ones.

Table 3.11 reports the complex and parsimonious solutions for the data in Table 3.10, as well as an intermediate solution based on the assumption that only the presence of the four causal conditions can contribute to the outcome. The complex solution consists of four pathways, while the intermediate solution and the parsimonious solution have two each. In Boolean terminology, the plus sign signifies logical "OR" (i.e. the union of sets). Hence, the solution expressions imply that the outcome occurs if any of the terms in each pathway is satisfied.

Table 3.11

Solutions of the truth table analysis for the outcome "full SGP compliance from 1998 to 2004"

Solutions[1]	Consistency	Coverage
Complex solution:	0.88	0.82
Expression: FSC = ENR*epr*efc + ENR*DSC + EPR*DSC*efc + ENR*EPR*EFC		
Pathway terms:		
ENR*epr*efc	0.94	0.50
ENR*DSC	0.91	0.73
EPR*DSC*efc	0.91	0.46
ENR*EPR*EFC	0.90	0.54
Intermediate solution:	0.78	0.84
Expression: FSC = EPR*DSC*efc + ENR		
Pathway terms:		
EPR*DSC*efc	0.91	0.46
ENR	0.80	0.83
Parsimonious solution:	0.76	0.85
Expression: FSC = DSC*efc + ENR		
Pathway terms:		
DSC*efc	0.89	0.56
ENR	0.80	0.83

Notes: 1 FSC – full SGP compliance from 1998 to 2004; ENR — effective numerical rules; EPR – effective procedural rules; Epr — not effective procedural rules; EFC — effective fiscal councils; efc — not effective fiscal councils; DSC — de facto full SGP compliance before 1992.

Source: Own calculations undertaken using the fsQCA software package.

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The software calculates consistency and coverage scores for each pathway term and for the three solutions. As before, the consistency scores are measures of the degrees to which the pathway terms and solutions are subsets of the outcome, while the coverage scores show the extent to which the pathway terms and solutions account for or explain the outcome. While the coverage scores of the three solutions differ little, only the complex solution satisfies the benchmark value for a strong subset relationship. Hence, it was decided to discard the intermediate and parsimonious solutions and to restrict further analysis to the complex solution. This choice also makes it unnecessary to rely on hypothetical counterfactuals to obtain solutions – an important consideration in view of the complexity of the relationships between the causal conditions and the outcome (as confirmed by the results in Section 3.4.2).

The four pathway terms of the complex solution all have consistency scores of 0.90 or higher as well as non-trivial coverage scores. "Effective numerical rules" features in three of these pathways. This result mirrors a key finding of Section 3.4.2, namely that strong numerical rules were elements of the fiscal policymaking frameworks of most of the countries that achieved above-average levels of compliance with the SGP rules, especially in combination with "de facto SGP compliance before 1992". Yet the pathway "effective procedural rules AND de facto SGP compliance before 1992 AND not effective fiscal councils" indicates that strong numerical rules were not essential for compliance, which echoes a finding of the analysis of necessary conditions in Section 3.4.1. The solution also confirms the complexity of the links between numerical rules and other elements of fiscal policymaking frameworks: while one pathway ("effective numerical rules AND effective procedural rules AND effective fiscal councils") suggests that procedural rules and fiscal councils complement numerical rules, another ("effective numerical rules AND not effective procedural rules AND not effective fiscal councils") contradicts this suggestion. In sum, the complex solution is indicative of considerable causal heterogeneity in the connections between the fiscal policymaking frameworks and degrees of SGP compliance of the fourteen countries.

The ability of the pathways to explain the cases is a useful indicator of the value of this type of analysis. The scatterplots in Figure 3.2, which plot membership in the fuzzy sets associated with the each of the four solution terms against membership in the outcome,

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enable rough assessments of the explanatory power of the pathways. The fuzzy membership scores for the pathway sets are given by countries' lowest scores in any of the causal conditions included in those sets (i.e. by applying logical "AND" to intersect the sets). These membership scores are provided in Table 3.12. In principle, a solution pathway is a good explanation for a country's degree of compliance with the SGP rules when its fuzzy membership score for that pathway lies on or close to a 45-degree line through the origin of the graph (points on such lines indicate perfect correspondence between membership scores on causal configurations and membership scores on outcomes) and a possible explanation when the membership score on a configuration of causal conditions is somewhat further but not too distant from the 45-degree line. Standard criteria for identifying good and possible explanations do not exist, and the solid and dotted lines in the graphs that define the ranges of good and possible explanations, respectively, are judgement-based.

The upper-left graph in Figure 3.2 depicts the explanatory power of "effective numerical rules AND not effective procedural rules AND not effective fiscal councils", which has the highest consistency score and the second lowest coverage score of the four solution pathways. This pathway seemingly provides good explanations for the outcome scores of two countries (Greece and Portugal, the two overlapping points near the origin of the graph[22]) and possible explanations for six others (Austria, France, Germany, Italy, the Netherlands and Spain).[23] Yet it fails to suggest explanations for the outcome scores of Belgium, Denmark, Finland, Ireland, Sweden and the United Kingdom, which are the six countries with the highest levels of compliance with the SGP rules from 1998 to 2004.

As suggested by its impressive coverage score of 0.73, the pathway depicted in the upper-right graph – "effective numerical rules AND de facto SGP compliance before 1992" – has the strongest explanatory power among the terms in the complex solution. It seems to provide good explanations for the outcome scores of six countries (France, Greece, the Netherlands, Portugal, Spain and the United Kingdom) and perhaps also for

[22] The points for Greece and Portugal also overlap near the origins of the upper-right and lower-right graphs.

[23] The points for France and Germany overlap above and to the left of that of Italy.

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those of five others (Austria, Denmark, Finland, Italy and Sweden). Apart from yielding the largest number of possible explanations, "effective numerical rules AND de facto SGP compliance before 1992" also accounts for a wider range of outcome scores than any of the other solution pathways.

The explanatory power of "effective procedural rules AND de facto SGP compliance before 1992 AND not effective fiscal councils" – the pathway with the lowest coverage score – is depicted in the lower-left graph. This pathway provides possible explanations for all the countries barring the five with the highest outcome scores. Yet only three of these nine explanations appear to be strong (viz. those for France, the Netherlands and the United Kingdom), whereas the other six (those for Austria, Germany, Greece, Italy, Portugal and Spain) seem less robust.

Table 3.12

Fuzzy membership scores on the outcome and solution pathways for fourteen EU countries

Country	Outcome[1]	Pathways in the complex solution[1]			
	FSC	ENR*epr*efc	ENR*DSC	EPR*DSC*efc	ENR*EPR*EFC
Austria	0.37	0.48	0.48	0.50	0.34
Belgium	0.69	0.38	0.10	0.10	0.55
Denmark	0.93	0.38	0.84	0.38	0.50
Finland	0.95	0.70	0.88	0.30	0.05
France	0.21	0.11	0.20	0.18	0.20
Germany	0.21	0.08	0.58	0.08	0.55
Greece	0.05	0.05	0.05	0.13	0.05
Ireland	0.89	0.06	0.06	0.10	0.05
Italy	0.15	0.22	0.05	0.05	0.22
Netherlands	0.47	0.55	0.43	0.43	0.44
Portugal	0.05	0.06	0.06	0.16	0.06
Spain	0.47	0.38	0.50	0.30	0.30
Sweden	0.89	0.22	0.75	0.22	0.74
United Kingdom	0.58	0.06	0.63	0.63	0.18

Note: 1 ENR — effective numerical rules; EPR – effective procedural rules; epr — not effective procedural rules; EFC — effective fiscal councils; efc – not effective fiscal councils; DSC — de facto full SGP compliance before 1992.

Source: Own calculations described in the text.

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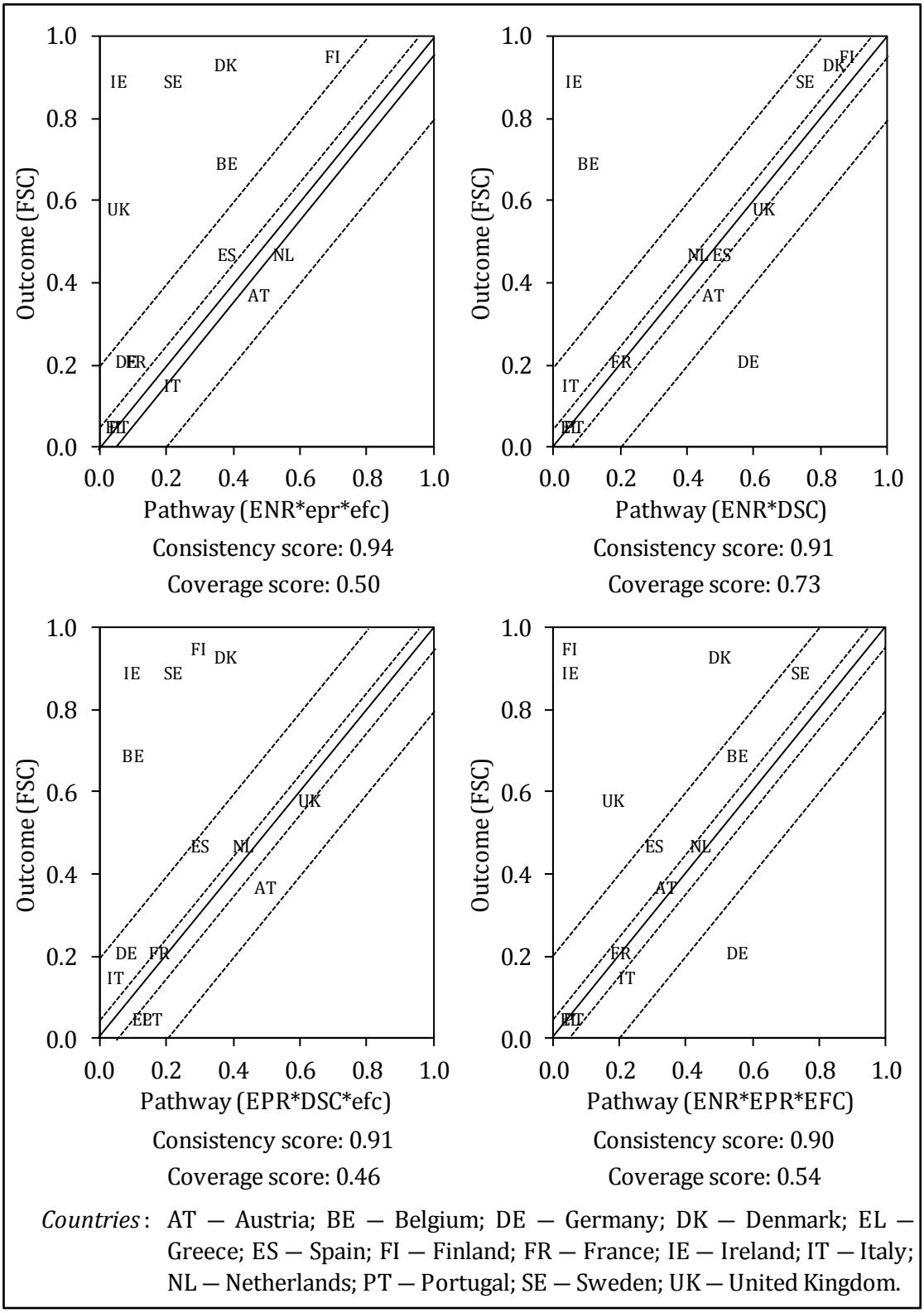
Figure 3.2

The explanatory power of the complex solution



Source: Own calculations undertaken using the fsQCA software package.

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The lower-right graph shows that "effective numerical rules AND effective procedural rules AND effective fiscal councils" offers potentially good explanations for the outcome scores of Austria, France, Greece, the Netherlands and Portugal, and possibly explains those of Belgium, Italy, Spain and Sweden as well. With the exception of "effective numerical rules AND de facto SGP compliance before 1992", this pathway also accounts for the widest range of outcome scores.

In sum, the four pathways in the complex solution provide one or more potentially good explanations for the outcome scores of seven of the fourteen countries (Austria, France, Greece, the Netherlands, Portugal, Spain and the United Kingdom) and at least one possible explanation for those of six others (Belgium, Denmark, Finland, Germany, Italy and Sweden). Ireland is the only country not covered by any of the four pathways. The significant but incomplete explanatory power of the four solution terms (as indicated by the coverage scores) confirms the complexity of the links between numerical rules and other elements of fiscal policymaking frameworks. It is striking, for example, that one of the pathways ("effective numerical rules AND effective procedural rules AND effective fiscal councils") is fully consistent with the hypothesis guiding this dissertation, while another ("effective numerical rules AND not effective procedural rules AND not effective fiscal councils") directly contradicts it. Thus, these results suggest that the analytical efforts in this dissertation to identify an irrefutably optimal fiscal policymaking framework for all fourteen countries may well be futile, or at least not entirely convincing. As was suggested earlier, one of the reasons why this might be the case is that contextual factors powerfully influence the effectiveness of fiscal policymaking frameworks.

3.5 CONCLUDING COMMENTS AND INTRODUCTION TO THE CASE STUDIES

This chapter set out to garner empirical evidence about the validity of two perspectives about the links between fiscal policymaking frameworks and fiscal outcomes. The first, which is encapsulated in the hypothesis formulated in Section 1.5 in Chapter, can be described colloquially as "more is better": numerical rules are vital for prudent fiscal outcomes, but the constraining effect of such rules is enhanced by centralised, top-down procedural rules and independent and influential fiscal councils. The other perspective,

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which is reflected in the first four propositions formulated in Section 3.2, view these relationships in more nuanced terms. It argues that the two types of fiscal rules do not work well together and that states' electoral systems dictate which type of rule should anchor their fiscal policymaking frameworks: states with proportional-representation voting systems should adopt a contract approach to policymaking that relies on numerical rules, while those with plurality voting systems will be served better by a delegation approach to policymaking based on centralised, top-down procedural rules. This perspective builds on the results of Hallerberg et al. (2007; 2009).

The findings presented here contradict some core tenets of the second perspective, but support aspects of the "more is better" approach. This evidence of the effectiveness of multifaceted fiscal policymaking frameworks is tentative, though, because the results are also consistent with the notion that effects on fiscal outcomes often ascribed to such frameworks actually reflect the influence of an unobserved variable labelled "the degree of political commitment to fiscal discipline".[24] It transpires that the observed efficacy of numerical rules as devices for maintaining fiscal discipline is enhanced markedly by the addition as a causal condition of a measure of such commitment (here labelled "societal norms or preferences regarding fiscal prudence" and proxied by the extent to which the countries would have satisfied the annual budget-balance rule of the SGP had it been in force from 1970 to 1991). In fact, the results suggest that the existence of a strong commitment of this nature might render fiscal councils and strong procedural rules superfluous. Possible endogeneity issues preclude strong conclusions of this nature, but the influence of this non-tangible factor on fiscal outcomes clearly deserves further study.[25]

It is worth reiterating that the findings generated in this chapter should be interpreted with caution: the availability of data restricts the analysis to seven years, only fourteen countries are included in the analysis, and fsQCA identifies empirical connections (as

[24] Kumar et al. (2009: 19-20) also mention the possible importance of such a commitment (cf. Section 3.2). Some authors regard it as more important for fiscal discipline than numerical rules (e.g. Siebrits and Calitz, 2004: 770) or as a requirement for effective rules (e.g. Kopits and Symansky, 1997: 17).

[25] The case studies in Chapters 4 to 6 of this dissertation reinforce the impression that such factors matter materially for fiscal performance.

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opposed to causal relationships) between causal conditions and outcomes. In addition to the margin for errors introduced by these problems, the observed connections between the elements of fiscal policymaking framework and fiscal outcomes are relatively weak (as pointed out earlier, none of these elements was a necessary or a sufficient condition for rigorous adherence to the SGP rules from 1998 to 2004). In view of these considerations, it would be imprudent to present these findings as categorical results. Accordingly, they are proffered as two hypotheses that could be subjected to more rigorous empirical testing in future research.[26]

- Numerical rules, though valuable institutions for preventing fiscal profligacy, are insufficient unless a country has a record of fiscal prudence that reflects a strong commitment to fiscal discipline on the part of the fiscal authorities.
- In the absence of a record of fiscal prudence that reflects a strong commitment to fiscal discipline on the part of the fiscal authorities, independent and influential fiscal councils and centralised, top-down procedural rules enhance the efficacy of numerical rules as institutions for preventing fiscal profligacy.

Empirical testing of these hypotheses is not attempted in the remaining chapters of this dissertation. Instead, Chapters 4, 5 and 6 contain case studies of three countries, namely Finland, France and Ireland. Users of fsQCA and related methods often draw on case-based evidence to assess and interpret their findings. Many adherents of these methods

[26] The decision to present the results of an empirical analysis as hypotheses seemingly conflates the well-known categories of hypothesis-testing research and hypothesis-generating research (for a brief discussion of this distinction, see Mouton and Marais, 1988: 35-36). Hartwick and Barki (1994: 447) comment as follows on the value of the approach adopted here:

> In hypothesis testing research, the researcher specifies one or more a priori hypotheses, based on existing theory and/or data, and then puts these hypotheses to an empirical test with a new set of data. In hypothesis generating research, the researcher explores a set of data searching for relationships and patterns, and then proposes hypotheses which may then be tested in some subsequent study. However, while these objectives remain distinct, we see no reason not to pursue both of them in a single research project. In particular, we believe that, following a failure to support a priori specified hypotheses in a project designed to test some theory, further explorations of the data in an attempt to generate new hypotheses frequently yield interesting and useful results.

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share Ragin's (2008: 112) belief that causation can be observed only at the level of individual cases, and use consistency with case-based evidence as a gauge of the logical coherence and explanatory power of qualitative comparative analyses. Hence, the case studies in Chapters 4, 5 and 6 explore the usefulness of the set-theoretic analysis in this chapter and the applicability of the two hypotheses for the three countries in question. As far as the set-theoretic analysis is concerned, the case studies attempt to establish whether the fuzzy membership scores computed in this chapter accurately quantify the efficacy of the three countries' numerical rules, procedural rules and fiscal councils. In addition, the case studies probe two aspects of the specification of the set-theoretic model. The first is the effects of preferences and norms on degrees of compliance with the SGP rules and the validity of using historical data as measures of these intangible influences on fiscal outcomes.[27] Second, the case studies provide a sense of the extent to which the countries' records of compliance with the SGP rules were affected by factors omitted from the set-theoretic model, for example the macroeconomic, political and structural control variables included in equivalent econometric models (cf. Section 3.2). This matters because the results of the set-theoretic analysis could exaggerate the roles of elements of fiscal policymaking framework if omitted factors were pivotal. The introductions to Chapters 4 to 6 explain why Finland, France and Ireland were chosen as case studies.

In closing, it is necessary to comment on important data series quoted in the narratives. Each case study includes a figure depicting trends in economic growth and key general government aggregates from 1970 to 2004. The courses of the following aggregates are shown in panels (a) – (e) of these figures:[28] (a) the annual GDP growth rate at constant 2005 prices, (b) the total revenue and total expenditure of the general government as percentages of GDP, (c) the conventional balance of the general government as a percentage of GDP (d) the structural (1970-1992) and cyclically-adjusted (1992-2004)

[27] As highlighted by some of the econometric studies reviewed in Section 3.2, a key issue requiring further study is the possibility of reverse causation: a strong preference for fiscal discipline could be the reason why some countries adopted strong fiscal policymaking framework *and* why they consistently adhered to the SGP rules.

[28] Panels (b) to (e) in these figures depict nominal (current-price) data.

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balances of the general government as percentages of GDP, and (e) the gross debt stock of the general government as a percentage of GDP. The data for the years from 1992 to 2004 are from ECFIN publications (European Commission, 2013a; 2013b) and reflect the definitional conventions now used in the European Union. Earlier data based on these definitions are not available for all EU states; hence, the information for the period 1970–1992 is from an International Monetary Fund working paper (Tanzi and Fanizza, 1995) that uses somewhat different definitions of the fiscal aggregates. While not consistent, the two series suffice as rough indicators of trends that complement the discussions of key influences on fiscal outcomes.

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CHAPTER 4

FINLAND AND THE SGP RULES (1998-2004)

4.1 INTRODUCTION

Of the fourteen countries studied in this dissertation, only Finland complied with the annual and the medium-term budget-balance rules of the SGP in every year from 1998 to 2004. The fuzzy membership scores in Table 3.5 suggest that Finland's policymaking regime was anchored during this period by strong numerical rules: the country's procedural rules seemingly were weak, and it did not have a fiscal council. Another feature that sets Finland apart from the others in the group of fourteen is that it never had a budget deficit in excess of 3 percent of GDP from 1970 to 1991. These factors suggest a simple explanation for the country's stellar record of compliance with the SGP rules from 1998 to 2004: strong national numerical rules and a strong preference for fiscal prudence among policymakers and voters sufficed for compliance with the SGP rules and made centralised, top-down procedural rules and fiscal councils superfluous. This chapter evaluates this explanation of Finland's adherence to the SGP rules. Positive evidence of its validity would affirm the usefulness of the pathway analysis in Section 3.4.3 in Chapter 3 (which links Finland's score on "full SGP compliance" to the pathway "effective numerical rules AND de facto SGP compliance before 1992") and the applicability of the two hypotheses formulated in Section 3.5 in Chapter 3.

The case study also explores two unresolved issues in Chapter 3. The first is the ideas of Hallerberg et al. (2007; 2009) about the links between electoral systems, the efficacy of elements of fiscal policymaking frameworks and fiscal outcomes. In Chapter 3, these ideas suggest a plausible explanation for an otherwise puzzling finding in Section 3.4.1 (namely the relative frailty of the link between "full SGP compliance" and "effective numerical rules" in the analysis of necessary conditions), but receive scant support in Section 3.4.2. Finland's experience from 1998 to 2004 was consistent with predictions derived from these ideas: it is a "large ideological distance country", its policymaking

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framework seemingly consisted of strong numerical rules and weak procedural rules, and it achieved full compliance with the SGP rules. Hence, one of the reasons for studying Finland in more depth is to gain insight into the mixed results regarding these ideas in Chapter 3. Second, this chapter discusses the relevance of what Sections 3.2 and 3.5 in Chapter 3 labelled the "reverse causation" thesis for explaining the effectiveness of Finland's numerical rules. Given the country's history of sound fiscal outcomes and seemingly strong numerical rules, Finland is an ideal context for exploring the notion that deeply rooted preferences for fiscal discipline among policymakers and voters often underpin the adoption and success of rules-based fiscal frameworks.

The remainder of this chapter consists of three sections. Section 4.2 discusses Finland's fiscal policymaking framework from 1998 to 2004, in part to gauge the accuracy of the fuzzy membership scores used in Chapter 3. Section 4.3 assesses the contributions of the policymaking framework and other factors to fiscal outcomes in the context of a synopsis of macroeconomic and fiscal trends in Finland from 1970 to 2004. Section 4.4 summarises the findings of the chapter and comments on the implications thereof for the analysis in Chapter 3.

4.2 THE EFFICACY OF FINLAND'S FISCAL POLICYMAKING FRAMEWORK

As stated in Section 3.2 in Chapter 3, Hallerberg et al. (2007: 343) categorise Finland as a "large ideological distance country", that is, a country in which coalition governments representing diverse interests are common. Fully 55 of the 72 administrations since 1917 have been coalition governments, and about half of these have included all four major parties (eight of the remaining 17 were single-party governments, whereas nine were "caretaker cabinets" consisting of civil servants, experts and leaders of interest groups) (cf. Arter, 1987: 53-54; Statistics Finland, 2013).[1] This pattern is the result of the proportional-representation system of voting as well as a qualified-majority voting

[1] Historically, the four major parties have been the conservative National Coalition, the Central Party (formerly the Agrarians), the Social Democratic Party and the Left Alliance (the result of a merger between the former Communist Party of Finland and the former Democratic League of the People of Finland) (Arter, 1987: 56-67). The long-established Swedish People's Party of Finland and the more recently established Green League have also been partners in some coalition governments.

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system in the legislature: until 1992, the passage of any law that could have impinged upon the constitutional rights of citizens, including tax changes and other economic measures possibly affecting property rights, required a two-thirds majority in the legislature (cf. Arter, 1987: 49-50; Corsetti and Roubini, 1996: 33).

Section 3.2 in Chapter 3 states that strategic decision-making and severe common-pool problems, which could jeopardize fiscal discipline, are likely in states where multiparty-coalition governments are pervasive. Hence, Hallerberg et al. (2007; 2009) argue that such states should adopt the contract approach to policymaking, which uses numerical rules to prevent disagreement about broad fiscal parameters and to force decision-makers to adopt holistic views of budgets when bargaining about the details. Finland's high fuzzy membership score of 0.88 on the causal condition "effective numerical rules" suggests that the country followed such an approach, and this may have been one of the reasons for its excellent fuzzy membership score of 0.95 on the outcome "full SGP compliance from 1998 to 2004" (cf. Table 3.5 in Chapter 3). Yet Finland achieved exemplary fiscal outcomes from 1970 to 1991 as well: its fuzzy membership score on the causal factor "de facto SGP compliance before 1992" was also 0.95. The fact that numerical rules were introduced in Finland for the first time in 1995 (cf. Table 4.1) raises the possibility that these constraints were not essential for the country's compliance with the SGP rules from 1998 to 2004.

The first government of Prime Minister Paavo Lipponen, which was in power from 1995 to 1999, introduced the first two rules in the context of a major fiscal consolidation programme.[2] One rule, the twofold aim of which was to maintain the momentum of the consolidation programme and to enable Finland to meet the public debt criterion in the Maastricht Treaty, committed the administration to reducing the debt-to-GDP ratio of the central government during its term in office. This commitment was made in the policy programme submitted by the government to the Finnish parliament.[3] The second rule stipulated that the budgets of the local authorities should be in balance. While

[2] Section 4.3 provides more information about the reasons for and the details of this consolidation effort.

[3] The Constitution of 1919 obligates new governments to submit such programmes to the legislature (Blöndal, Kristensen and Ruffner, 2002: 121-122; cf. also Section 4.3).

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potentially important in view of the high degree of financial autonomy and extensive expenditure responsibilities of these authorities in Finland[4], this rule has had little effect in practice because the norm of balanced budgets was already deeply entrenched in the local government sector by then.

Table 4.1

National numerical rules in Finland (1995-2004)

Type of rule	Coverage	Adopted	Revised	Scrapped	Score[1]
Debt reduction	Central government	1995	–	–	6.23
Balanced budget	Local government	1995	2001	–	6.42/6.88
Balanced budget	Central government	1999	2003	–	4.40/3.30
Expenditure ceiling	Central government	1999	–	–	1.60
Revenue surpluses	Social security funds	1999	–	–	1.56

Note: 1 The scores are the product of the strength scores (the sums of six strength-related elements) and the coverage scores in Appendix Table 2. Where two numbers appear, the first is the score of the original rule and the second that of the revised rule.

Source: Adapted from European Commission (2012: 129-132).

By 1999, when Prime Minister Lipponen's second government assumed office, the fiscal consolidation process had been concluded and Finland had obtained membership of the EMU. The focus of policymakers had changed to the future fiscal challenges posed by the rapid ageing of the population.[5] To prepare for these challenges, the government committed itself to reducing the central government debt ratio below 50 percent of GDP and introduced two new rules in support of this objective. These rules formalised the commitments in the policy programme for the period from 1999 to 2003 not to increase central government spending in real terms and to balance the budget of the central

[4] In 2002, for example, own tax sources and levies yielded about 75 percent of the revenues of the Finnish local governments. Their expenditures – of which 77 percent were on education, healthcare and social protection services – amounted to 37.5 percent of the non-grant spending of the general government sector. See International Monetary Fund (2005: 183, 185-186).

[5] From 2000 onwards, the elderly dependency ratio increased more rapidly in Finland than in any other European country. Projections by the Government of Finland (2001: 20) suggested that increases in healthcare and longer-term care services were likely to boost general government spending by about 6.5 percentage points of GDP from 2010 to 2013 and a further 2 percentage points from 2030 to 2050.

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government in structural terms by the end of its tenure (Government of Finland, 1999: 2).[6] A third rule introduced in 1999, which contained stipulations on the allocation of revenue surpluses in the social security funds, has had little influence on fiscal outcomes at the aggregate level.

It transpires from Table 4.1 that Finland's relatively high numerical rules score for the period 1998 to 2004 largely reflects the features of the local-government budget balance rule, the central-government debt rule and the central government structural balance rule. By contrast, the ceilings on real outlays by the central government and the rule for the allocation of revenue surpluses in the social security funds contribute little to the aggregate numerical rules score. Yet there are indications that the scores of the various rules, which measure their strength in de jure terms, do not accurately capture the actual contributions of each to the efficacy of the rules-based fiscal policymaking framework. As stated earlier, the behaviour of local governments was not affected significantly by the seemingly powerful budget-balance rule, which formalised a pre-existing norm (i.e. an informal rule). According to Ljungman (2008: 20-28) and the European Commission (2012: 250-255), the expenditure rule became the backbone of the fiscal policymaking framework: by aligning the contours of the annual budgets with the priorities expressed in the policy programmes of governments, the expenditure ceilings contributed greatly to Finland's success in complying with its own structural-balance and public-debt rules as well as the SGP rules.[7] The main reasons why the effectiveness of this rule is not reflected in a higher score in Table 4.1 are that the presentation of multi-year targets remains voluntary and that parliamentary approval of the ceilings is not a legal requirement. In addition, there are no formal sanctions for non-compliance, although the media and opposition parties monitor governments' performance against the targets.

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[6] The medium-term expenditure ceilings adopted in 1999 replaced the ineffective annual expenditure limits (known as "frames") that were introduced in the early 1990s. From 1999 onwards, Finnish governments have announced ceilings for their four-year terms of office for real non-interest spending. Certain items affected by the state of the business cycle have been excluded from the ceilings to preserve the effectiveness of the automatic fiscal stabilisers (Ljungman, 2008: 22).

[7] According to Perez (2011: 541), Finland is widely regarded as an example of "best practice" as far as public spending rules are concerned.

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A notable feature of rules-based fiscal policymaking in Finland from 1998 to 2004 was that the most influential rules (including the expenditure ceilings) did not satisfy Kopits and Symansky's (1998: 2) well-known definition of a numerical rule as a "constraint on fiscal policy… intended for application on a *permanent basis by successive governments* in a given country" [emphasis added]. These rules are described more accurately as medium-term targets derived from the policy goals of specific administrations and tied to their periods in office. Section 4.3 comments on the implications of this flexible approach for the efficacy of rules-based fiscal policymaking in Finland.

Given the absence of a fiscal council, the set of rules governing the budget process was the other important aspect of the Finnish fiscal policymaking framework. Finland's procedural rules score was ten out of a possible 28 in every year from 1998 to 2004 (cf. Appendix Table 4). These scores, which are based on the legal framework governing budgeting, suggest that the budget process was a weak mechanism for preventing fiscal profligacy. Four aspects of this framework clashed with the conceptualisation of expenditure-restraining procedural rules suggested by Hallerberg et al. (2007:346): (i) the Finnish parliament had the authority to change the budgets proposals of the executive and was under no obligation to offset amendments that raised the envisaged level of outlays by means of cutbacks to other expenditures; (ii) the legislature voted on the details of budgets before it approved the total expenditure envelope; (iii) during implementation, the executive had the authority to increase public spending beyond the levels in the budgets approved by parliament; and (iv) the minister of finance lacked the authority to block expenditures approved by the legislature. In practice, however, the Finnish budget process has been significantly more supportive of fiscal discipline than these features suggest. Although the Constitutions of 1919 and 1999 vest the legal authority to determine budgetary policy in the Finnish parliament, the de facto power shifted over time to the cabinet, where the principle of collective policymaking and the prominent roles of ministers of finance have been powerful restraining influences.

Nousiainen (1994: 88-91) points out that the strength of the principle of collective policymaking has limited the ability of Finnish cabinet ministers to use their budgets to promote sectional interests: tradition and detailed legal regulation have dictated that the cabinet as a whole has to ratify even routine matters. The unitary and disciplined

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character of political parties has also contributed to this state of affairs. In addition, ministers of finance have long dominated the preparation and implementation of budgets in Finland (Blöndal et al., 2002; Tiihonen, 1990). Salient factors that have strengthened the position of ministers of finance vis-à-vis the spending ministers have included their high status within the cabinet (Finnish prime ministers do not have legally mandated leadership roles, and the non-existence of ministries of public administration and economic management has endowed finance ministers with wide-ranging powers beyond budget-related matters) and the strong capacity of the finance ministry to assess the proposals and monitor the activities of other ministries (Blöndal et al., 2002: 128, 136; Tiihonen, 1990: 336, 338). The authority of the finance ministers was boosted further in the period under review by aspects of the budget process such as the provision for bilateral discussions of the spending proposals of other ministers, public dissemination of the budget requests of the spending ministers[8] and the political backing of the Cabinet Finance Committee (a body consisting of the prime minister, the minister of finance and one minister from each political party in the governing coalition that has to approve all large outlays and projects and reviews all legislative proposals with budgetary implications) (Blöndal et al., 2002: 124, 126, 142).

Blöndal et al. (2002: 151, 129) state that "[t]he Parliament appears to be a weak actor in the budget system of Finland despite its potential and constitutional rights" and that "[t]he parliamentary budget process in Finland seems more of a step in the consensus building process, than oversight and ownership of the actual budget document". The limited fiscal role of the legislature explains why its powers to change budget proposals and the practice of voting on the details of budgets before approving total spending envelopes have had little effect on fiscal outcomes: members of the legislature have often produced amendments that have raised total spending, but the effects have been small (Blöndal et al., 2002: 130). Tiihonen (1990: 343) acknowledges that the extreme complexity of the structure of the budget has contributed to the discrepancy between the de jure and de facto roles of the Finnish parliament as far as budgets are concerned,

[8] Blöndal et al. (2002: 126) explain that this practice has tempered the requests of spending ministers, because failure to obtain such requests is likely to be interpreted by their peers and by the public as a sign of fiscal irresponsibility or political powerlessness.

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but argues that this situation has been an unintended consequence of the entrenchment of the principle of collective policymaking:

> [L]egally binding budgetary decisions can only be made, even in small details, very high up in the hierarchy. When Parliament and the Cabinet decide upon everything, they end up deciding upon very little. When the ideal of the legal ideology is that down to every detail it is Parliament (a collegiate body of 200) and the Council of State (a collegiate body of 18) that make the decisions, the decision-making power of the individual decision-makers, the Members of Parliament or the ministers is restricted to very minor matters only. As Parliament and the Council of State are organs too clumsy for actual national economic planning, the responsibility has shifted to small unofficial preparatory bodies. The formal and heavy decision-making process in Parliament and the Council of State is replaced by a ministry responsible for the practical efficiency of the economy, coordination and planning in general.

It transpires that Finland's fuzzy membership scores on the causal conditions "effective numerical rules" and "effective procedural rules" are imperfect indicators of the actual effectiveness of these elements of the country's fiscal policymaking framework from 1998 to 2004. These scores quantify the de jure effectiveness of framework elements (as defined by formal characteristics); as such, they are not necessary appropriate indicators of de facto (actual) effectiveness. In addition, the distribution of budgetary decision-making powers suggests that Finland's fuzzy membership score on "effective procedural rules" understates the extent to which the budget process constrained public spending growth from 1998 to 2004. Hence, it is incorrect to interpret Finland's experience in this period as clear confirmation of the effectiveness of combinations of strong numerical and weak procedural rules in "large ideological distance countries".

4.3 MAJOR INFLUENCES ON FISCAL OUTCOMES IN FINLAND SINCE 1970

As stated before, Finland achieved sound fiscal outcomes in the 1970s and the 1980s (cf. Figure 4.1). The general government sector often recorded budget surpluses – the conventional balance was in surplus in ten and the structural balance in 19 of the 21

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years from 1970 to 1990 – and the largest conventional deficit was 2.9 percent of GDP. According to Brunila (2000: 591), regular surpluses on the partially funded social security funds underpinned these prudent outcomes: the central government often recorded modestly sized deficits, while the consolidated accounts of local governments were close to balance in most years. The public debt burden peaked in 1987 at only 20.9 percent of GDP. These outcomes were obtained despite a rapid expansion of the social security system that brought the scope of the Finnish welfare state in line with those of other Nordic countries (Huber and Stephens, 1998: 369).

To be sure, the solid growth performance of the Finnish economy in the 1970s and the 1980s assisted the fiscal authorities in maintaining fiscal discipline.[9] Yet two other factors were important as well. As stated in Section 4.2, aspects of the budget process (such as the strength of the principle of collective policymaking and the dominant role of finance ministers) also played a part. Furthermore, there is evidence, albeit of an indirect nature, that the policymakers were strongly committed to fiscal prudence. For example, the fiscal authorities evidently preferred taxation to borrowing when it came to financing the increases in social security-related and other expenses: general government revenue expanded by 19.3 percentage points of GDP from 1970 to 1990, while gross public debt increased by a mere 1.4 percentage points (Brunila, 2000: 591; International Monetary Fund, 1999: 4). Furthermore, according to Mjoset (1987: 452) and the Organisation for Economic Co-operation and Development (1991: 37-40), the high priority given to balancing the budget every year was one of the main reasons why Finnish policymakers did not adopt the countercyclical (Keynesian) approach to fiscal policymaking until the late 1970s. The prioritisation of balanced budgets also motivated their irregular application of this approach during the 1980s. Hence, the evidence is fully consistent with the argument that the preferences of policymakers contributed to Finland's admirable fiscal outcomes in the era before numerical rules were adopted.

[9] The average annual rates of growth in GDP at constant 2005 prices were 3.9 percent in the 1970s and 3.1 percent in the 1980s (European Commission, 2013a: 48).

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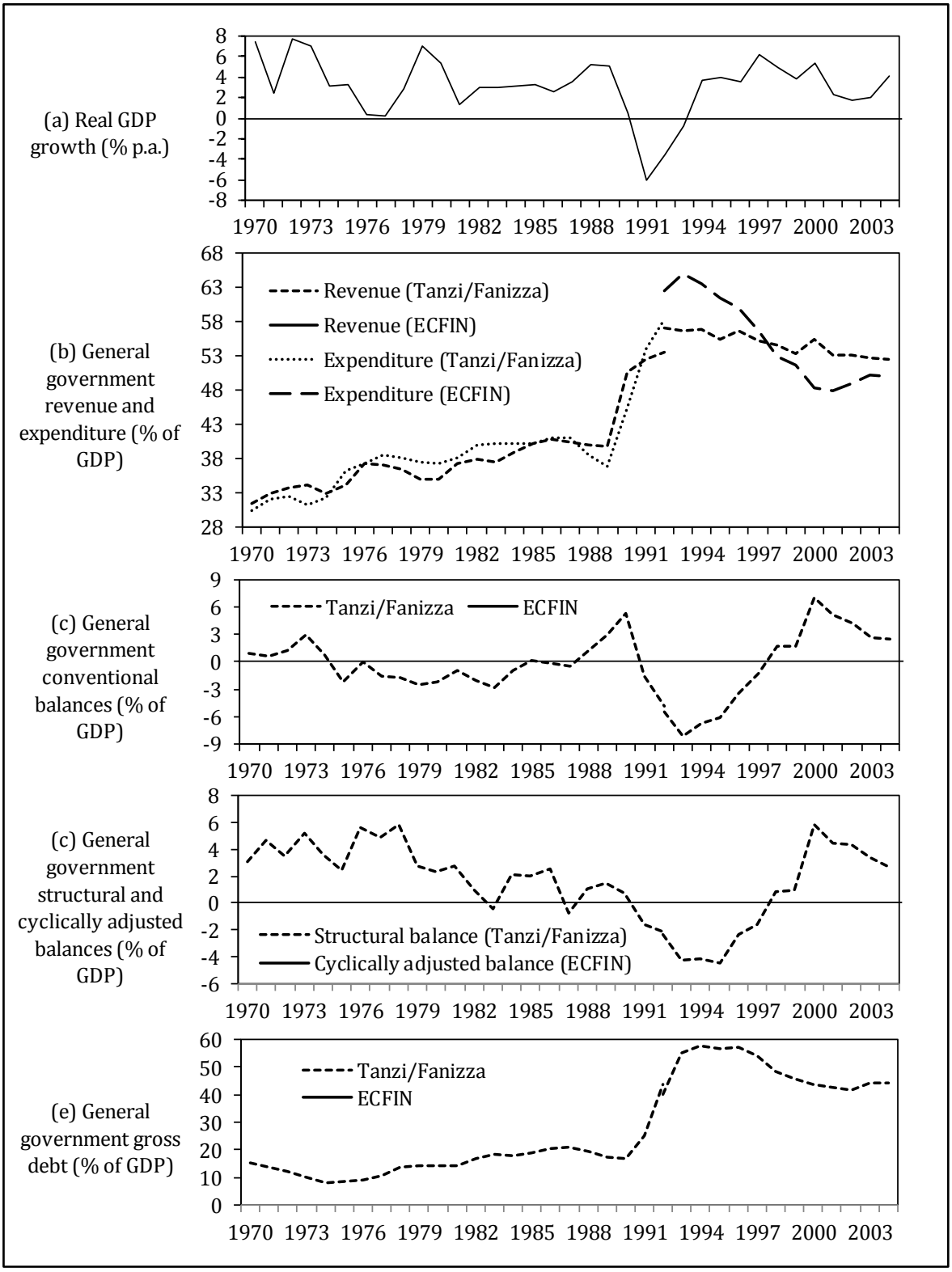
Figure 4.1

Real economic growth and fiscal outcomes in Finland (1970-2004)



Sources: Tanzi and Fanizza (1995: 2-3, 11, 30-31); European Commission (2013a: 61, 71, 81, 87, 91; 2013b: 184).

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The long period of good economic performance was followed in the early 1990s by a deep recession (cf. Figure 4.1(a)). The root causes of the contraction of about 10 percent in the real GDP from 1990 to 1993 were a financial crisis and a currency crisis, which were exacerbated by the export-depressing effect of the collapse of the Soviet economy (until then, the Soviet Union had been Finland's major trading partner) and a general slowdown in the world economy (Honkapohja and Koskela, 1999; Jonung, Schuknecht and Tujula, 2005: 9-12;). Although fiscal policy had little to do with the onset of the recession, the high income tax burden and comprehensive unemployment support system meant that the shock to the Finnish economy had large effects on key fiscal aggregates. Furthermore, the recapitalisation of the Finnish banking sector absorbed public money amounting to 7.5 percent of the total GDP in the period 1991 to 1994 (Honkapohja and Koskela, 1999: 409). Hence, the conventional balance of the general government worsened from a surplus of 5.4 percent of GDP in 1990 to a deficit of 8.2 percent in 1993, while the gross public debt ratio increased from 14.0 percent of GDP in 1990 to a peak of 57.6 percent in 1994 (European Commission, 2013a: 81; 2013b: 184). General government expenditure, which had amounted to 44.7 percent of GDP in 1989, had soared to 64.9 percent four years later (cf. Figure 4.1(e)).

Policymakers and the public initially resisted fiscal tightening, but capital flight, sharp increases in interest rates and pressure on the Finnish markka forced the authorities to respond (Tarkka and Tulla, 2001: 87-88). The coalition partners agreed in April 1992 to cut public spending by 2 percent of GDP in 1993; this step was followed by a series of expenditure reduction programmes until 1999 (Tarkka and Tulla, 2001: 89-94; cf. also International Monetary Fund, 1999: 15-22). The burden of reducing the budget deficit fell heavily on government spending, which decreased from the already-quoted figure of 64.9 percent of GDP in 1993 to 51.7 percent in 1999 (cf. Figure 4.1(b)). Tarkka and Tulla (2001: 93) point out that the scope of the expenditure reduction programmes enabled the authorities to effect sharp reductions in the conventional and the structural budget deficits while implementing tax cuts that lowered its revenue from taxes on labour by about 2 percent of GDP from 1995 to 1999. By 1999, the conventional and the structural balance were back in surplus and the public debt ratio had shrunk to 45.7 percent of GDP.

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As pointed out in Section 4.2, numerical rules were introduced for the first time in Finland in 1995, that is, during this fiscal consolidation programme. Additional rules were adopted in 1999. Although it would be difficult to prove causal relationships, it seems highly probable that the preferences of policymakers and other aspects of the policymaking milieu enhanced the effectiveness of these rules from 1998 to 2004. The remainder of this section discusses the roles of these factors.

First, the administrations of Prime Ministers Lipponen (1995-2003) and Vanhanen (2003-2010) were strongly committed to fiscal discipline and recognised the potential of numerical rules as rudders for fiscal decision-making. To be sure, short- to medium-term considerations (such as the need to stabilise the public finances after the crisis and the imperative of qualifying for membership of the EMU) influenced the decision to adopt such rules and to elevate compliance to a policy priority. Yet from the outset, Finnish fiscal policymakers saw numerical rules primarily as mechanisms for securing the longer-term sustainability of the public finances in the context of a rapidly ageing population. The conundrum facing the policymakers was that this challenge called for even stricter fiscal discipline than was required to comply with the budget-balance rules for the general government sector in the Maastricht Treaty and the SGP: given that the social security funds recorded surpluses, it was possible to accumulate large debts at the central-government level despite adhering to the EU rules (cf. Åkerholm, 1995: 13). This reality informed the specification of the country's national numerical rules.

The momentum of the fiscal adjustment effort and the adoption of demanding national numerical rules meant that Finland comfortably satisfied the fiscal convergence criteria for membership of the EMU in 1997: at the time of the assessment, the net balance and the gross debt burden of the general government were -0.9 percent and 55.8 percent of GDP, respectively (cf. Table 3.1 in Chapter 3). The margin between the actual deficit in 1997 and the EMU limit of 3 percent of GDP helped Finland to remain compliant with the annual budget-balance rule from 1998 to 2004 even in years of slower economic growth (e.g. 2001 and 2002). Other countries that achieved high levels of compliance with the two budget-balance rules from 1998 to 2004 – such as Denmark, Ireland and Sweden – also had substantial safety margins in 1998. Conversely, five of the seven countries that had budget deficits of 2.5 percent of GDP or more in 1997 (i.e. France,

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Germany, Greece, Italy and Portugal) transgressed the rule at least once from 1998 to 2002 (cf. Table 3.1 in Chapter 3; European Commission, 2013b: 81-82).[10] Finland had a cyclically adjusted budget deficit of 1.2 percent of GDP in 1997, but it had been improving for several years. This momentum was the basis for adherence to the medium-term budget-balance rule in every year from 1998 to 2004.

Second, the nature of the main numerical rules further enhanced the effectiveness of Finland's fiscal policymaking framework. As indicated earlier, these constraints were medium-term targets based on the policy programmes of governments and tied to their terms of office. Such rules are markedly more flexible than so-called "permanent" rules and therefore less susceptible to common causes of circumvention and breaches (e.g. clashes with short-term macroeconomic imperatives and the policy priorities of some administrations). In the hands of responsible policymakers, such as those Finland had in the period under review, rules of this nature are tools for realising the goals of governments, instead of perceived or real obstacles.

Third, numerical rules were logical additions to the consensus-building mechanisms developed by the Finnish polity to overcome some of the difficulties posed for decision-making by the pervasiveness of fragmented coalition governments. For example, the constitutional requirement that newly elected administrations should submit policy programmes to the legislature after taking office usually has influenced the negotiations among prospective coalition partners (Blöndal et al., 2002: 121-122). The links between coalition agreements, policy programmes and actual policies were tenuous at times in the 1970s and 1980s, when the agreements usually lacked information on costs and schedules of implementation (Nousiainen, 1994: 95).[11] Since the early 1990s, however, coalition agreements have been important harbingers of actual policies and the bases of the most important fiscal rules (cf. Section 4.2). Similarly, Finnish governments were heavily involved in the incomes policy agreements concluded between employer and

[10] The case studies of France (Chapter 5) and Ireland (Chapter 6) confirm that adequate safety margins are vital for punctilious compliance with numerical rules, especially if policymakers want to retain the option of implementing countercyclical fiscal measures during economic downturns.

[11] Nousiainen (1994: 95) describes the coalition agreements of this period as "… a mixture of action program and declaration… prepared in a 'something for everybody' mode".

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employee organisations every two years from 1958 to 2007.[12] These agreements directly affected the budgets of government, because they extended beyond working conditions and remuneration to aspects of tax policies and welfare benefits. Finnish governments used a mixture of negotiations and persuasion to try to align the outcomes with its fiscal and broader economic goals.[13] A clear example can be found in Finland's Stability Programme for 1999, in which the Government states that its commitment to reduce social security contributions and income taxes by 1.5 percent of GDP is conditional on moderate wage settlements and that a final decision on tax cuts was to be deferred until the conclusion of wage settlements (Government of Finland, 1999: 3).

Fourth, at least two comparative studies covering the period from 1998 to 2004 report that fiscal policymaking was relatively transparent in Finland. In a comparison of the informativeness of the budget drafts of the EU-15 countries by Hallerberg et al. (2009: 67-69), Finland obtains the third highest score in 2004, namely 19 out of a possible 20. Finland also obtains the third highest score (31 out of a possible 40) in an analysis of the extent to which 41 countries satisfied 40 key requirements for fiscal transparency in 2003 (Bastida and Benito, 2007: 680).[14] A third study (Alt and Lassen, 2006) draws on information from a 1999 survey of budget practices to construct transparency measures for 19 member countries of the OECD. Although Finland's score of four out of a possible eleven was low in absolute terms, it was the sixth highest in the group as a whole and the third highest among the fourteen EU countries included in the present study (Alt

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[12] The practice of concluding such settlements ended when the main employer body, the Confederation of Finnish Industries, suspended its participation in 2007.

[13] Arter (1987: 211) describes the process as follows:

> Every second year the cabinet strives to set a preliminary agenda for the forthcoming talks and to ensure that the settlement is in line with its fiscal policy… The government, in short, is engaged in a public definition of the broad guidelines of the incomes package and embarks on an intensive socialisation exercise. In important ministerial speeches, television interviews and statements in parliament a tone is set, expectations are tempered and in general an attempt is made to instil a suitably responsible and realistic attitude into the leaders of the main sectoral interests.

[14] This list of requirements was compiled in a document published by the Organisation for Economic Co-operation and Development (2001a).

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and Lassen, 2006: 1415). The reality that widely disseminated agreements among key roleplayers (such political parties and the social partners) are salient features of fiscal policymaking as well as specific features of budgeting (including the existence of a medium-term budgetary framework based on multiyear expenditure ceilings and the disclosure of spending ministers' budget requests) have also contributed to the high degree of fiscal transparency in Finland. It is more than likely that this openness regarding fiscal intentions, activities and outcomes may have enhanced the efficacy of Finland's numerical rules in the same way that fiscal councils purportedly did in other countries.[15]

One aspect of fiscal information disclosure in Finland that may have been improved by a well-functioning fiscal council was the accuracy of official forecasts of fiscal outcomes. Several comparisons show that the Finnish authorities often committed relatively large forecast errors: among the fourteen EU countries included in this study, the absolute value of the mean forecast error for Finland's budget balance was the thirteenth largest from 1995 to 2003 (Brück and Stephan (2006: 8), the twelfth largest from 1998 to 2002 (Strauch, Hallerberg and Von Hagen, 2004: 32) and the eleventh largest from 1994 to 2007 (Pina and Venes, 2011: 537). It should be pointed out, though, that the effects of these errors on the management of the public finances were mitigated to some extent by the conservative approach of the authorities: budget balances turned out to be better than expected in almost every year from 1994 to 2007.

4.4 CONCLUSIONS

The evidence presented in this chapter is consistent with the argument that Finland's avoidance of large budget deficits from 1970 to 1991 indicated a durable preference for fiscal discipline among policymakers and voters. It also seems that this preference was instrumental to the adoption and effectiveness of the country's numerical rules. Hence, the Finnish experience represents promising evidence of the usefulness of the pathway analysis in Section 3.4.3 and the hypotheses formulated in Section 3.5 in Chapter 3. This

[15] Debrun and Kumar (2007b), among others, argue that numerical rules can be made more effective by the transparency-enhancing effects of involving non-partisan bodies in monitoring compliance with the rules (cf. Section 1.5 in Chapter 1).

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experience also affirms the realism of the "reverse causation thesis": the case for the argument that the norm of fiscal discipline was the foundation and the rules-based policymaking framework the capstone of Finland's fiscal achievements seems strong. Hence, Finland's experience confirms the value of incorporating preferences regarding appropriate fiscal outcomes into analyses of the effectiveness of fiscal policymaking frameworks, as well as the importance of the quest for robust quantitative measures of their influence. At the same time, the Finnish case raises doubts about the sufficiency of the combination of numerical rules and a strong preference for fiscal discipline. It is clear that the efficacy of this combination was enhanced in the years from 1998 to 2004 by factors such as the experience of the effects of large fiscal imbalances in the early 1990s, the substantial safety margins on the budget balance and the debt burden when Finland joined the EMU, and the expenditure-restraining effect of the budget process.

Another important finding of this chapter is that key influences on the actual efficacy of elements of the country's fiscal policymaking framework are not reflected in the fuzzy membership scores in Chapter 3. The efficacy of the numerical rules depended not only on the power to constrain policymakers and on coverage, but also on strong political backing and their compatibility with Finland's consensus-oriented approach to fiscal decision-making (the expenditure ceilings, for example, were effective despite a low strength score, because the fiscal authorities conceived them as tools to pursue one of their core goals). Furthermore, the budget process did not jeopardise fiscal discipline despite having several features that Hallerberg et al. (2007; 2009) deem hazardous for country governed mostly by multiparty coalitions. Traditions and formal stipulations not captured in popular indicators of the characteristics of budget processes, such as that of Hallerberg et al. (2007; 2009), counteracted the features of Finland's procedural rules that otherwise might have undermined fiscal discipline. Although it is difficult to quantify the de facto effectiveness of elements of fiscal policymaking frameworks, which depends on various non-tangible factors, this chapter suggests that an exclusive focus on the legal provisions and other formal characteristics of such framework can lead to incorrect inferences. Finally, the experience of Finland suggests that a broader measure of the transparency of fiscal policymaking might be a more meaningful causal condition in the model in Chapter 3 than the less encompassing measure of the efficacy of fiscal councils.

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In practice, the distinction between a contract approach to fiscal policymaking based on strong numerical rules and a delegation approach based on procedural rules is never absolute, because numerical rules invariably shape budget-related decision-making processes by constraining the values of major aggregates. This clearly was the case in Finland, where the core element of the "fiscal contract" was a ceiling on the real value of budgetary outlays that empowered the minister of finance to resist attempts by other participants in the budget process to expand levels of spending.[16] Hence, the Finnish case suggests that the tenuous nature of the distinction between the two approaches might be a reason why the arguments of Hallerberg et al. (2007; 2009) receive weak support from the set-theoretic analysis in Chapter 3. It also stands as a reminder of the importance of assessing the effects of procedural and numerical rules jointly rather than separately.

[16] The connection between the expenditure ceilings and the budget process was formalised in 2003, when the Finnish government introduced a medium-term budgetary framework based on the ceilings (cf. Lundback, 2008: 27).

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CHAPTER 5

FRANCE AND THE SGP RULES (1998-2004)

5.1 INTRODUCTION

With the exception of 1983, France avoided budget deficits in excess of 3 percent of GDP in every year from 1970 to 1991. However, the country's record of compliance with the SGP budget-balance rules from 1998 to 2004 was poor: it satisfied the annual budget-balance rule in only four years and breached the medium-term budget-balance rule in all seven (cf. Appendix Table 1). The information compiled in Chapter 3 for the period 1998 to 2004 shows that France's fiscal policymaking framework consisted of weak national numerical rules coupled with strong procedural rules and highly effective fiscal councils. It transpires from Figure 3.2 in Chapter 3 that three solution pathways provide highly plausible explanations for France's poor outcome score[1], whereas the fourth furnishes a possible explanation.[2]

In-depth study of France's experience with the SGP rules could shed light on two results in Chapter 3. First, the findings in Section 3.4.2 in Chapter 3 challenged the argument of Hallerberg et al. (2007; 2009) that the nature of a country's electoral system determines whether a contract-type fiscal policymaking framework anchored in strong numerical rules or a delegation-type framework anchored in strong procedural rules is best for maintaining fiscal discipline. France is one of the countries that gave rise to this finding. According to Hallerberg et al. (2007; 2009), its combination of a plurality-based voting system and a delegation-type framework was ideal for avoiding large fiscal deficits, yet France's policymakers struggled to such an extent to contain the budget balance that

[1] These pathways are (i) "effective numerical rules AND de facto SGP compliance before 1992", (ii) "effective numerical rules AND effective procedural rules AND effective fiscal councils", and (iii) "effective procedural rules AND not effective fiscal councils AND de facto SGP compliance before 1992".

[2] This pathway is "effective numerical rules AND not effective procedural rules AND not effective fiscal councils".

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breaches of the SGP rules were common. Second, the results of the pathway analysis in Section 3.4.3 in Chapter 3 imply that the absence of strong numerical rules was the most likely reason for France's failure to comply with these rules on a more regular basis. Hence, careful study of France could explain why the results of the set-theoretic analysis contradict the argument of Hallerberg et al. (2007) and produce evidence on the likelihood of maintaining fiscal discipline with policymaking frameworks lacking strong numerical rules.

The remainder of this chapter is organised as follows. Section 5.2 discusses the accuracy of France's fuzzy membership scores on the three causal conditions that represent elements of fiscal frameworks. Section 5.3 shows that political and cyclical economic developments during the 1990s left France ill prepared for the SGP regime, while Section 5.4 argues that the attitude of French governments towards the SGP rules undermined the potential of the country's fiscal policymaking framework to constrain budget balances from 1998 to 2004. Section 5.5 concludes the chapter.

5.2 THE EFFICACY OF FRANCE'S FISCAL POLICYMAKING FRAMEWORK

France's low fuzzy membership score on the causal condition "effective numerical rules" aptly summarises the features and limited influence of the three rules in force from 1998 to 2004 (cf. Table 5.1). First, a current-balance rule prohibited borrowing by local governments unless the proceeds were used to defray the cost of investment projects and dictated that current outlays had to be financed from current revenues (European Commission, 2012: 135-136).[3] The rule applied to the budgeted outlays of local governments; depending on the size of a jurisdiction, their actual expenditures were allowed to exceed their current revenues by either 5 or 10 percent per year. The binding nature of the current-balance rule made it an effective constraint on the budget

[3] The rule applied to the municipalities and departments from 1983 onwards and to the regions from 1988 onwards. The 100 departments and 26 regions are administrative territories responsible for services such as professional and vocational training, social work, poverty alleviation and preventative healthcare, the construction and maintenance of secondary schools and some roads and bridges, and subsidisation of cultural activities (Stevens, 2003: 145-148). The local government sector undertakes about 20 percent of general government spending in France (European Commission, 2012: 135).

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balances and the debt burdens of local governments. In the early 2000s, however, it could not constraint the expenditures of local authorities: fuller exploitation of local tax bases and large increases in intergovernmental transfers provided these authorities with sufficient resources to increase their spending levels markedly while remaining compliant with the rule (cf. European Commission, 2012: 135-136).

Table 5.1

National numerical rules in France (1983-2004)

Type of rule	Coverage	Adopted	Revised	Scrapped	Score[1]
Current balance	Local government	1983	–	–	3.30
Expenditure ceiling	Social security funds (healthcare spending)	1997	–	2005	1.14
Expenditure growth	Central government	1998	2004	–	2.00

Note: 1 The scores are the product of the strength scores (the sums of six strength-related elements) and the coverage scores in Appendix Table 2. Where two numbers appear, the first is the score of the original rule and the second that of the revised rule.

Source: Adapted from European Commission (2012: 134-137).

The second rule, which was adopted in 1997, stipulated that the French parliament should approve an annual target for healthcare spending in nominal terms. Given the scale of such outlays and its rapid growth since the Second World War, this rule could have dealt with a major source of pressure in the French fiscal system.[4] The spending targets were not met in any single year from 1998 to 2004, though, despite monitoring by independent experts tasked with warning the authorities of possible slippages and the legal requirement that policymakers had to respond to such warnings by proposing corrective actions (European Commission, 2012: 135). The rule was scrapped in 2005.

Third, the French fiscal authorities announced three-year rolling targets for the rates of growth in real general government outlays from 1998 onwards. Moulin (2004: 3-4) shows that the actual expenditure growth rates exceeded the targets in every year from 1998 to 2003 (local governments and social security funds recorded the largest overruns relative to the targeted levels). Roughly one-half of the overruns represented

[4] According to the European Commission (2012: 135), expenditures on healthcare account for about 15 percent of general government spending in France.

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discrepancies between the spending growth rates announced earlier as multi-year targets and those set in the annual budgets – a stark illustration of the policymakers' weak commitment to the rule.[5] According to Moulin (2004: 5), the efficacy of the expenditure rule was undermined by design faults (notably the absence of proper monitoring and enforcement mechanisms) and the neglect of complementary reforms to deal with the deeply entrenched upward drift in government spending.

France's procedural fiscal rules score is 24 out of a possible 28 in every year from 1998 to 2004 – the highest such score apart from that of the United Kingdom (cf. Appendix Table 4). The sole aspect of the procedural rules that could have undermined fiscal discipline was the considerable latitude for amending the budget law during the implementation stage, which could have made it easier to exceed the budgeted spending levels. The other elements of the procedural rules scores all suggest that these rules curtailed the powers of the legislature and the spending ministers and allowed finance ministers to dominate the budget process. Assessments by insiders (e.g. Chevauchez, 1992) and independent experts (e.g. Lienert and Jung, 2004: 185-218) confirm the power of French finance ministers, which is underpinned by the large size and ample resources of the Treasury, provisions in the 1958 Constitution that strengthen the executive vis-à-vis the legislature in financial matters, and the highly centralised system of financial control established by the Organic Budget Law of 1959.[6] In fact, one of the reasons for the adoption of a new Organic Budget Law in 2001 was the perceived need to strengthen the role of the legislature in the budget process by improving its access to information and extending its control over extra-budgetary funds and the allocation of excess revenues to earmarked accounts (Lienert and Jung, 2004: 188, 196).[7] Moreover, Burns and Goglio (2004: 20) point out that the fiscal system used in France from 1998

[5] The source of the remaining half of the overruns was the inability to stick to the spending levels envisaged in the annual budgets.

[6] As Chevauchez (1992: 289, 290) puts it: "[T]he Minister of Finance [is] a political heavyweight, the government's de facto second most powerful person… [T]he Minister of Finance has gathered together a diverse and powerful armoury of tools for budgetary control. International comparisons show that he holds, in this respect, an exceptionally strong position compared with his foreign counterparts".

[7] This law was implemented in steps from 2001 until 2006 and had little effect on the distribution of fiscal powers prior to 2004.

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to 2004 contained effective mechanisms for controlling the monies allocated to entities in the central government:

> … [T]he system of managing expenditures in the State Budget is of the highest quality. Stringent controls both ex post and ex ante help ensure that public funds are spent only as authorised, while the central treasury function means that the authorities have a strong sense of fiscal developments, allowing them to employ their significant discretionary powers to counteract any apparent slippage in the State Budget.[8]

Reference was made earlier to the claim that a centralised top-down budget process is effective in "small ideological distance countries" in which single-party governments and coalitions characterised by low levels of political competition and small ideological differences are the rule. Hallerberg et al. (2009: 41-49) use the average values of their chosen indicators for the 1985-2004 period to distinguish between "small ideological distance countries" and "large ideological distance countries", but acknowledge that the resulting classification does not necessarily apply to each year. Hence, the efficacy of a country's fiscal policymaking framework may have differed from that predicted by its fit with the average value of the ideological diversity measure in years when the degree of ideological diversity in its government was atypical. This suggests a reason for France's weak compliance with the SGP rules until 2004: the power of its procedural rules may have been diluted by the unusually high degree of ideological diversity in the government from 1997 to 2002, when a socialist prime minister (Lionel Jospin, who headed the Plural Left coalition) ruled alongside a conservative president (Jacques Chirac).[9] Yet the evidence does not suggest that this "cohabitation" worsened common-pool problems in budgeting or caused gridlocks that undermined compliance with the supranational rules. As will be shown in Section 5.4, adherence to the SGP rules was not a high priority for either of the two leaders.

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[8] This partly reflects the strong emphasis in the budget process on compliance and the management of inputs (Chevauchez, 1992: 291). Burns and Goglio (2004: 20) point out that the fiscal system was less successful at controlling the expenditures of France's local authorities and social security funds.

[9] In 2003 and 2004, President Chirac and Prime Minister Jean-Pierre Raffarin both represented the centrist-right Union for a Popular Movement (UMP).

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While France's fuzzy membership scores on the causal conditions "effective numerical rules" and "effective procedural rules" in Table 3.5 in Chapter 3 seem accurate, the score on "effective fiscal councils" exaggerates the efficacy of the Court of Accounts ("Cour des Comptes") and the Economic Commission of the Nation ("Commission Économique de la Nation").[10] The above-average score for the two bodies reflects their wide-ranging mandates (which span policy analysis, forecasting and recommendations) and their political autonomy, which rests on solid legal foundations and strict criteria for appointments to senior positions. In practice, however, their influence is modest. According to the European Commission (2014c), the work of the Economic Commission of the Nation is of "standard" quality (a score of three on a five-point scale), elicits "modest" media coverage and public interest, and makes "hardly any" contribution to fiscal discipline. The European Commission (2014c) rates the work produced by the Court of Accounts as "well above standard" (a score of five on a five-point scale) and acknowledges that it features prominently in the media and public debate and raises the quality of financial management in the public sector. Yet it stops short of describing its contribution to fiscal discipline as "significant" or even as "definite". The information in Table 5.2, which is taken from a survey paper by Debrun et al. (2009: 71), confirms the perceived weak influence of the two agencies.

The foregoing assessment of the accuracy of France's fuzzy membership scores on three of the causal conditions used in the analysis in Chapter 3 confirms the appropriateness of associating the country's fiscal framework from 1998 to 2004 with the delegation approach to fiscal policymaking. Hence, the experience of France represents a bona fide challenge to the argument of Hallerberg et al. (2007) that requires further study. Sections 4.3 and 4.4 explore this issue in more detail.

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[10] The Court of Accounts was founded in 1807 as an auditing body that has been also assisting the French parliament by monitoring the execution of budgets, assessing policies and making recommendations. The Court's main report on the public finances has been made public since 1936; in addition, it has been producing other reports on challenging fiscal issues since 1991. The Economic Commission of the Nation is a 28-member body that was established in 1952 to provide expert advice to the Minister of Finance on fiscal and broader economic issues. The activities of the Commission include forecasting of some macroeconomic variables as well as the budget balance and debt stock of the general government.

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Table 5.2

The perceived effectiveness of France's fiscal councils

Indicator	France	Other European countries[1]
De jure influence on the budget process	1.5	2.7
Impact of independent forecasts	0.0	0.3
Perceived impact on fiscal discipline	1.3	3.4
Overall (de jure) influence and independence	1.7	3.4
Maximum scores	*10.0*	*10.0*

Note: 1 Average of the scores for Austria, Belgium, Denmark, Estonia, Germany, Greece, Hungary, Italy, the Netherlands, Portugal, Spain and the United Kingdom.

Source: Debrun et al. (2009: 71)

5.3 FRANCE'S READINESS FOR THE SGP RULES

To cope with compliance-threatening shocks, policymakers bound by numerical rules without escape clauses should maintain adequate safety margins by keeping the values of the targeted aggregates well below the limits specified by the rules. France joined the EMU with no or slim safety margins: in 1997, its general government had a net budget deficit of exactly 3.0 percent of GDP and a cyclically adjusted deficit of 2.3 percent of GDP, while the gross debt burden of the general government amounted to 58.0 percent of GDP (cf. Table 3.1 in Chapter 3). This subsection provides an explanation for France's fiscal position circa 1997. It shows that fiscal outcomes evolved in much the same way as in most other Western European countries from the early 1950s until the end of the 1980s and that the inadequacy of the safety margins in 1997 reflected a particular confluence of economic, budgetary and political factors from 1990 onwards.

Long-term analyses of fiscal policy in industrial countries (e.g. Masson and Mussa, 1995; Tanzi and Schuknecht, 2000) document vigorous growth in public spending during the 20th century – in large part because of the expansion of education, health care and social protection services – as well as two distinct periods in the post-war era. The first (1950-1973) was characterised by robust economic growth, prudent budget balances and modest public-debt burdens, while the features of the second (1973 onwards) have included slower and more variable economic growth, persistent budget deficits and

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significant increases in public debt-to-GDP ratios. In France, general government expenditure increased from 12.6 percent of GDP in 1870 to 29.0 percent in 1937 and 55.0 percent in 1996 (Tanzi and Schuknecht, 2000: 6-7). "Benefits and transfers" and "remuneration of employees", which constituted some 75 percent of all expenditures throughout the period from 1949 to 1997, accounted for the bulk of the post-war growth in public spending (cf. Figure 5.1). Despite the vigorous growth in the absolute and relative levels of public spending, the first thirty years after the Second World War yielded "broadly balanced budgets or small surpluses, and declining debt-to-GDP ratios" (Martin, Tytell and Yakadina, 2011: 3). These prudent outcomes reflected the revenue-boosting effects of buoyant economic conditions[11] and tax reforms that included broadening of the income tax base and the adoption of a progressive income tax schedule and a value-added tax (Dormois, 2004: 48).

From 1975 to 1997, the general government recorded budget deficits in every year except 1980, and its debt-to-GDP ratio increased steadily from 1981 onwards (cf. Figure 5.2). Martin et al. (2011: 3) ascribe these trends to "… a steep increase in general government expenditure not matched by higher revenues". The authorities reduced the rate of growth in public spending[12], but failed to arrest the upward trend in the public spending-to-GDP ratio. The slowdown in economic growth after the oil price shock in 1973 and the paucity of unexploited revenue sources prevented commensurate growth in revenues, and the result was the virtual ubiquity of deficits from 1975 onwards.[13]

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[11] According to the National Institute for Statistics and Economic Studies (INSEE, 2013a), the average annual GDP growth rate from 1949 to 1975 was 5.1 percent. The first three decades after the Second World War is known in France as "les trente glorieuses" ("the glorious thirty") because of the resulting improvements in living standards (cf. Dormois, 2004: 17-22).

[12] The average annual rate of growth in real government expenditure fell from 5.0 percent in the 1970s to 3.2 percent in the 1980s and 2.6 percent from 1990 to 1997. These growth rates are derived from own estimates of real expenditure levels obtained by applying the implicit gross domestic expenditure deflator to public spending at current prices (constant-price data are not available). The base data are from the website of the National Institute for Statistics and Economic Studies (INSEE, 2013a; 2013b; 2013c).

[13] The average annual rate of GDP growth decreased from 5.1 percent (1949-1975) to 2.3 percent (1975-1997) (cf. INSEE, 2013a).

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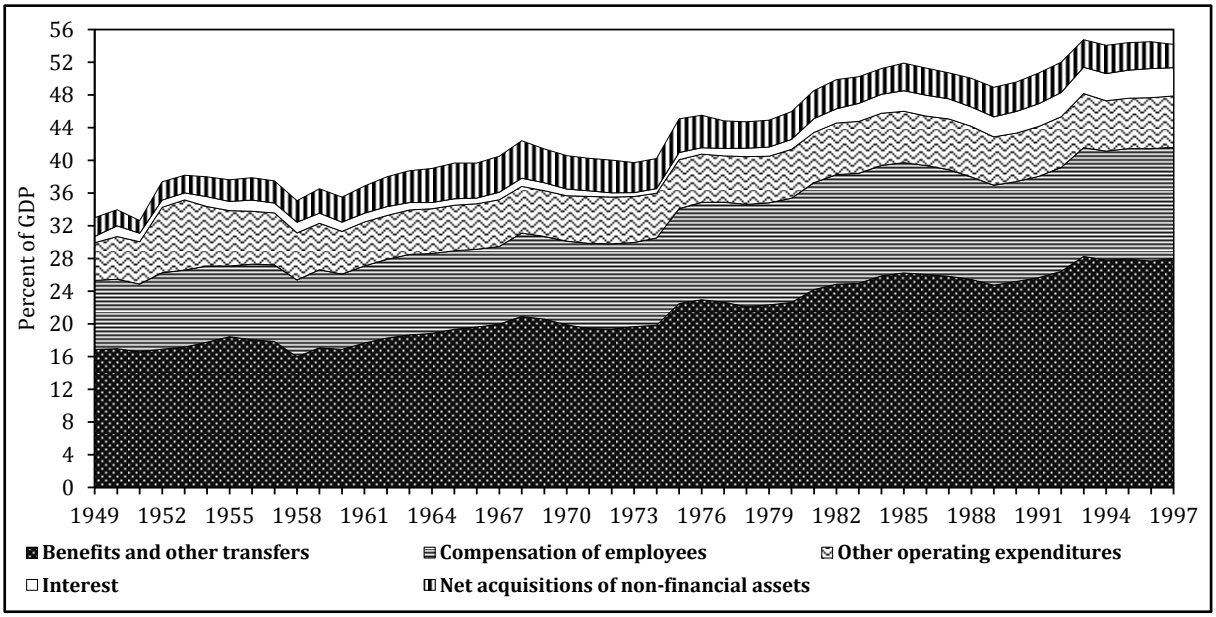
Figure 5.1

The level and composition of general government expenditure in France (1949-1997)



Source: INSEE (2013b)

It transpires that the broad trends in France's main fiscal aggregates from 1950 to 1997 were similar to those in the majority of industrial countries. In most of these countries, the economic problems of the 1970s prompted concern about the efficacy of Keynesian fiscal stabilisation policies and the economic effects of the tax and public-debt burdens required to finance unprecedented levels of public spending (Saunders and Klau, 1985: 11-13). The decisive event in France's shift from a Keynesian fiscal approach to one focusing on structural issues was the "Socialist U-turn" initiated by President Francois Mitterrand in 1983. Following a failed attempt in 1981 and 1982 to boost economic growth and job creation by means of Keynesian macroeconomic and active industrial policies, the Mitterrand administration shifted its focus to external balance, international competitiveness and price stability (Sachs and Wyplosz, 1986). One of the centrepieces of the new policy framework was a fiscal consolidation plan known as the "Virage de la rigueur" (cf. Martin et al., 2011: 7-8). Fiscal discipline remained high on policy agendas until the inception of the EMU, with successive French governments committing themselves to boosting the supply side of the economy by reducing the total tax burden and the government spending-to-GDP ratio.

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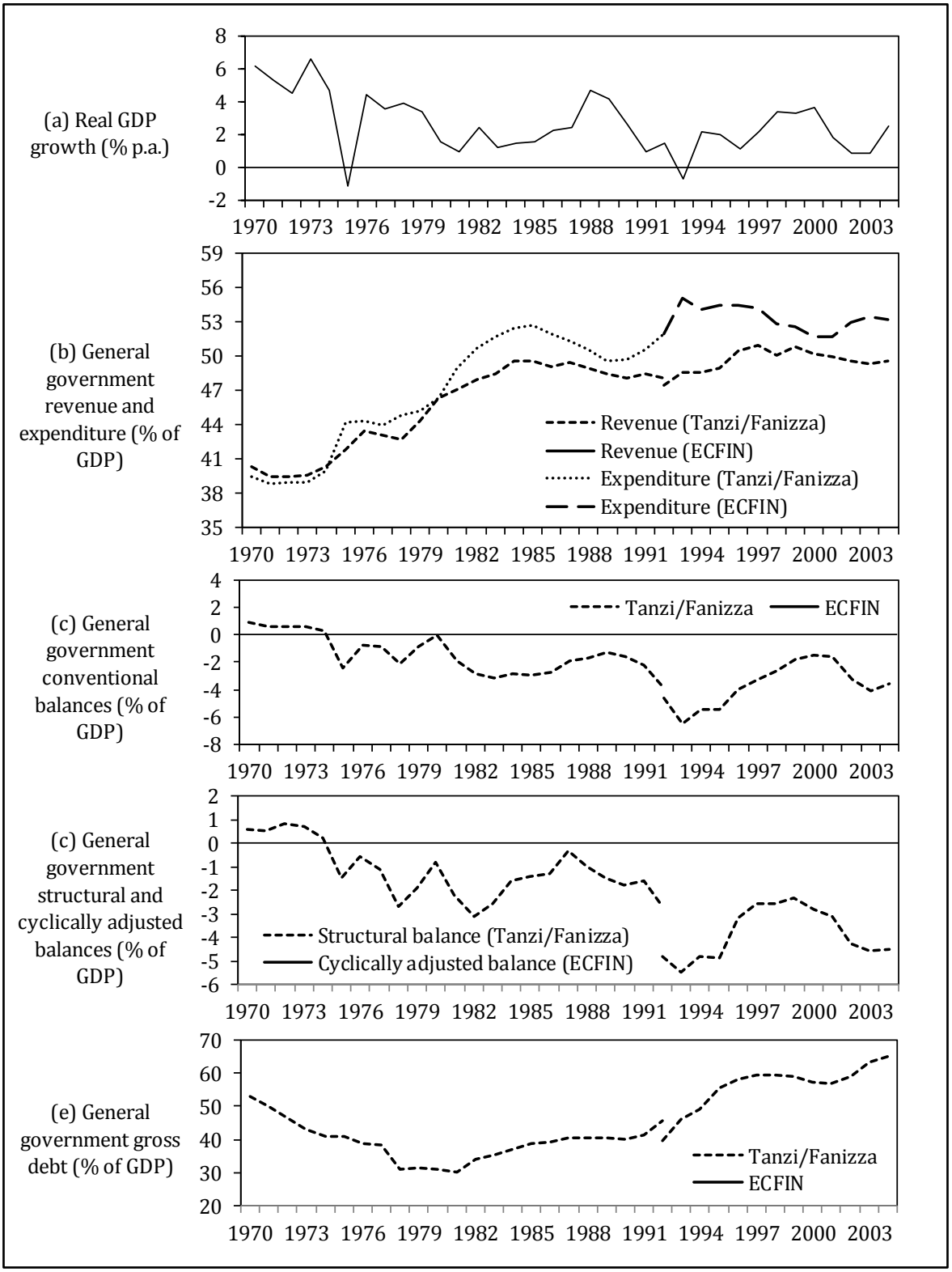
Figure 5.2

Real economic growth and fiscal outcomes in France (1970-2004)



Sources: Tanzi and Fanizza (1995: 2-3, 11, 30-31); European Commission (2013a: 61, 71, 81, 87, 91; 2013b: 184).

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On balance, the French authorities succeeded in maintaining fiscal discipline. Some of the more specific objectives were not achieved, however: general government spending increased from 51.7 percent of GDP in 1983 to 52.8 percent in 1998 (despite the already mentioned slowdown in the rate of growth in public spending at constant prices during the 1980s and the 1990s), while the general government's debt-to-GDP ratio continued its upward trend (cf. Figure 5.2(b) and (e)). Three sets of factors hampered the efforts of the fiscal authorities to realise these objectives.

The first was the existence of strong pressures for further growth in the two largest spending categories. The wage bill of the central government was boosted by annual adjustments in the salaries of public servants, growth in the number of highly skilled workers and regulations that linked pay to length of service, while population ageing, rapidly increasing healthcare costs and growing unemployment sustained the upward momentum in public spending on benefits and transfers (cf. Organisation for Economic Co-operation and Development, 2000: 60-70, 116-121).[14]

A second important constraint to reducing public spending was the influence on French political thought of the "étatiste" tradition, which assigns pivotal political, economic and social roles to a centralised state.[15] To be sure, globalisation, European integration and the evident failure of the state-led development model weakened the hold of this tradition over the political elite from the 1980s onwards. This transpired most clearly in 1983, when the Socialist President Mitterrand abandoned the interventionist approach to planning, regulation and industrial policy known as "dirigisme" (cf. Levy, 2008: 422-

[14] Levy (2008: 424) points out that the pressure on transfer spending was reinforced from 1983 onwards, when labour market and social programmes were extended to soften the impact of a key element of the "Socialist U-turn", namely the withdrawal of support for uncompetitive public and private firms.

[15] This tradition is rooted in the Republican ideas of Montesquieu and Rousseau. According to Dormois (2004: 44), it rests on the following view of the nature of the state:

> The republican *Etat* or state… is not perceived as a mere administrative apparatus providing a number of services to the voting and taxpaying public: it is the highest expression of the nation's collective will and rationality… the state never ceases to guide the nation's destiny and take responsibility for its prosperity and power: it is the bulwark of the French way of life.

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426). Despite this, it retained a strong influence over French politicians' views about the role of the state and the levels of expenditure required to discharge it (Clift, 2006; Howarth, 2002).[16] The clearest example of this influence was the reluctance to secure the longer-term sustainability of the social security system, which depended on overcoming the strong popular resistance to fundamental changes to the benefit structures and financing mechanisms (cf. Palier, 2000).

The third factor, which interacted with the second, was the extent and depth of the population's attachment to the largest social spending programmes (public education, health care and social protection). According to Cole (1999: 169), it widely was believed that the post-war expansion of these programmes was the result of a series of "… social and political conquests" that any government, irrespective of its ideological persuasion, had to safeguard.[17] In a competitive political milieu where loyalty to parties was eroding rapidly[18], incumbent governments ignored these sentiments at their peril. Furthermore, the political risks of tampering with social spending programmes were not confined to the ballot box: public-sector trade unions and the beneficiaries of subsidies and transfer payments also used French governments' aversion to mass demonstrations (a legacy of the student protests and general strike in May 1968) to undermine attempted reforms.

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[16] French socialists have continued to assert the need for and the viability of social democratic policy activism. Former Prime Minister Lionel Jospin (1999: 10), for example, writes: "… we do not give in to the fatalistic idea that the neo-liberal capitalist model is the only one available. On the contrary, we can shape the world according to our values". Similar sentiments have been voiced by centre-right leaders: in 2005, then President Jacques Chirac encouraged his compatriots to endorse the EU Constitution to safeguard a "humanist Europe" and to prevent what he labelled "Anglo-Saxon ultra-liberalism" (British Broadcasting Corporation News, 2005).

[17] Opinion polls conducted in the 1980s, for example, showed that more than 80 percent of the French population believed that attempts to dismantle the social security system would by highly damaging (Palier, 2000: 117).

[18] Voters have rejected the incumbents in every legislative election in France since 1980. Political polls confirm the extent of "political dealignment": in 2001, the levels of trust in the government and political parties were 30 percent and 12 percent, respectively, and almost two-third of those polled in 2002 believed that the concepts of "left" and "right" were irrelevant to politics, compared to one-third in 1981 (Hall, 2006: 15-21).

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The ramification of these forces was a pattern summarised as follows by Cafruny and Ryner (2008: 75): "Since the 1983 Mitterrand 'U-turn', French politics has been characterized by a series of neo-liberalization and welfare retrenchment thrusts that have provoked organized resistance, which has in turn led to reversals… and more cautious retrenchment by stealth." The inadequacy of the fiscal safety margins when France became a member of the EMU was the outcome of the confluence of this complex process and frantic reforms to meet the fiscal convergence criteria in the Maastricht Treaty.

Table 3.1 in Chapter 3 shows that France satisfied both fiscal convergence criteria for EMU membership when the Maastricht Treaty was signed in February 1992: according to the Commission of the European Communities (1993: 59, 63), the budget deficit and gross debt stock of its general government sector were 2.1 percent and 35.5 percent of GDP, respectively, in 1991.[19] The deficit then rocketed to 6.5 percent of GDP in 1993 because of the economic downturn that had started in 1990 and discretionary fiscal measures to counter its effects and improve the prospects of the increasingly unpopular socialist government in that year's legislative elections (Clift and Tomlinson, 2004: 523). The elections were won by a Gaullist Party, the Rally for the Republic (RPR), and the task of reducing the deficit fell to a "cohabitation government" headed by President Francois Mitterrand (the leader of the Socialist Party or PS) and Prime Minister Edouard Balladur from the PRP. Its response was the Guidance Law on Public Finances Control of 1994 – the basis of a medium-term fiscal consolidation programme to lower the debt ratio and to trim the budget deficit of the general government to 2 percent of GDP by 1997 (Martin et al., 2011: 9). Spending restraint by the central government departments was an important aspect of the strategy to achieve this objective: the total outlays of these entities were to remain constant in real terms from 1994 to 1997, while central government revenue was to grow at the same rate as real GDP. In reality, spending overruns threatened to derail the execution of the plan for much of its duration.

[19] Definitional differences explain discrepancies between these ratios and those in Figure 5.2, which are based on the databases of the IMF and the OECD. According to these sources, France's budget deficit and gross public debt stock amounted to 2.2 percent of GDP and 42.2 percent of GDP, respectively, in 1991 (cf. Tanzi and Fanizza, 1995: 2-3, 11).

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Unforeseen factors (e.g. higher-than-expected debt-servicing costs) played a part, but the main setback was the augmentation of some expenditure programmes in the supplementary budgets in 1994 and 1995 (Martin et al., 2011: 10-11).

Subsequent political events also hindered focused and consistent implementation of the deficit-reduction plan (cf. Heipertz and Verdun, 2010: 54-60). The main contenders in the presidential elections in 1995 were Mr Balladur, another PRP candidate, Jacques Chirac, and the new leader of the PS, Lionel Jospin. Mr Chirac distanced himself from the fiscal austerity of the later part of the Mitterrand era, which also tainted the candidacy of Mr Balladur, by promising tax cuts and more welfare spending. He won the presidency, but then reneged on his pre-election promises by reiterating France's commitment to satisfy the fiscal criteria for EMU membership and stepping up efforts to restrain the growth in government spending. This about-turn, the stubbornly high unemployment rate and an attempt to reform the pension system of public-sector workers that led to highly disruptive strikes in the last two months of 1995 severely dented the popularity of Mr Chirac and Prime Minister Alain Juppé. In an attempt to exploit the perceived disorganisation of the opposition parties, Mr Chirac advanced the date of the next parliamentary elections from 1998 to 1997. This gamble backfired, however: the PRP lost its majority in the national assembly and Mr Jospin became prime minister as the leader of a coalition of the PS, the Communist Party and the Green Party. The new "cohabitation government" headed by Messrs Chirac and Jospin immediately faced a crisis, because the platform of the Plural Left coalition had included the promise not to accede to the SGP in the form agreed upon by Mr Chirac and other European leaders in Dublin in 1996. After intense negotiations, Mr Jospin relented and the European Council endorsed the SGP during the Amsterdam Summit in June 1997.

These political events resulted in a haphazard consolidation effort. General government expenditure increased, albeit marginally, from 54.1 percent of GDP at its start in 1994 to 54.2 percent at its conclusion in 1997.[20] Hence, the scope for reducing the deficit came to depend on the extent of revenue increases. A slew of tax measures that boosted

[20] The expenditure containment measures listed by Martin et al. (2011: 11) include short-term fixes that usually have undesirable longer-term effects, such as the curtailment of capital spending by the central government and a temporary freeze of the pay scale of public-sector employees.

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general government revenue from 48.6 percent of GDP in 1994 to 50.9 percent in 1997 (including temporary hikes in the wealth tax, value-added tax and corporate income tax), reduced the shortfall from 6.5 percent of GDP to 3.3 percent. Consequently, the French government resorted to a questionable revenue-raising measure to satisfy the budget-balance requirement of the Maastricht Treaty: when a portion of the shares of France Télécom was sold off in 1997, it obtained €5.7 billion as payment for assuming the company's pension obligations (Clift and Tomlinson, 2004: 523). By reducing the deficit to exactly 3.0 percent of GDP in 1997, this opportunistic measure enabled France to become a founding member of the EMU in 1998. The lack of safety margins, however, meant that automatic fiscal stabiliser effects were likely to result in breaches of the annual budget-balance rule and the public debt-rule during subsequent economic downturns, unless the French authorities effected further fiscal tightening.

5.4 THE WEAK COMMITMENT OF THE AUTHORITIES TO THE SGP RULES

If the post hoc ergo propter hoc fallacy is to be avoided, strong inferences about the fortitude of French leaders' commitment to the SGP rules requires more compelling evidence than their compliance record. However, the conclusion that the country's irregular adherence to these rules from 1998 to 2004 reflected a lack of commitment seems highly plausible in the light of three sets of considerations: its experience with national fiscal rules, its efforts to preserve scope for discretionary action by national governments within the EMU's fiscal policymaking framework, and its fiscal policy choices from 1998 onwards.

France's experience with national numerical fiscal rules until 2004 indicated limited enthusiasm for such constraints.[21] Table 5.1 shows that the first national numerical rule for the central government dates from the same year as the SGP (1998); by then eight of

[21] Having compared fiscal policies and institutions in Germany and France from 1970 to 2010, Wierts (2010) also concludes that French policymakers preferred discretion to rules. Such a preference would have been consistent with another conceptual underpinning of the French tradition of active state intervention in economic activity: the notion of "volontarisme". Clift (2006: 388) defines "volontarisme" as "… an activist, interventionist economic policy approach that places emphasis on the discretionary actions of policy-makers".

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the other thirteen EU countries studied in this dissertation already had such rules (cf. European Commission, 2014b). Moreover, the authorities evidently did not regard the government spending growth rule adopted in 1998 as binding: it was violated in every year from 1998 to 2004, with one-half of the slippages resulting from failures to limit allocations in the annual budgets to these authorities' own medium-term targets (Moulin, 2004: 4). This behaviour was reminiscent of the repeated failure to achieve previously announced spending cuts during fiscal consolidation efforts from the second half of the 1970s onwards (cf. Martin et al, 2011). It seems that the policymakers prioritised the goals of economic growth, job creation and distributional justice, and readily sacrificed fiscal plans and targets when trade-offs arose – especially when political popularity was at stake.[22]

A second reason for doubting the commitment of the French authorities to the SGP rules was the country's obscurantist role in the negotiation thereof. As pointed out in Section 2.2.1 in Chapter 2, the Treaty stipulates that member states should continue to avoid excessive deficits once the EMU has been established, and outlines the Excessive Deficit Procedure (EDP) as a mechanism for dealing with such cases. Disagreement among the negotiating parties precluded the specification of important aspects of the application of the EDP, though. In November 1995, the then German minister of finance, Theo Waigel, initiated debate about a permanent mechanism to give effect to the Treaty's excessive deficit-provision by proposing a Stability Pact for the EMU.[23] While France had readily accepted the fiscal convergence criteria in the Treaty of Maastricht[24], its representatives complicated the creation of such a mechanism by insisting that permanent mechanisms for coordinating fiscal policymaking in the EMU should not restrict the discretionary

[22] Examples from the period after the inception of the EMU are provided elsewhere in this section.

[23] The proposal was an attempt to appease growing negativity regarding further European integration among the German public and concerns within the Bundesbank about macroeconomic stability in a future EMU (cf. Heipertz and Verdun, 2010: 45-54).

[24] French negotiators proposed the 3 percent-of-GDP deficit threshold for EMU membership (Howarth, 2007: 1067). Given France's record in the 1970s and the 1980s, as reflected in the country's high score on the causal condition "de facto SGP compliance before 1992" in Table 3.5, this threshold value may well have seemed innocuous at the time. By the mid-1990s, however, that was no longer the case.

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powers of national governments unduly.[25] One of the most controversial issues was the definition of the "exceptional circumstances" that would allow the Economic and Financial Council of the EU (Ecofin) to refrain from initiating an EDP against a country with a budget deficit in excess of 3 percent of GDP. After initially resisting Germany's demand for an explicit quantitative definition of "exceptional circumstances", France shifted its focus to ensuring that the agreed-upon definition endowed the pan-European authorities with considerable discretion when judging the excessiveness of deficits that breached the annual budget-balance rule (cf. Heipertz and Verdun, 2010: 34-36). Largely to appease France, the final version of the original Pact stipulates two sets of circumstances in which a deficit in excess of 3 percent of GDP was not to be deemed excessive. First, the initiation of an EDP is ruled out when a country breaches the rule while experiencing a severe recession, which is defined as an annual fall in real GDP of at least 2 percent. Second, the European Commission has the option to refrain from initiating an EDP against a country experiencing an annual fall in real GDP of between 0.75 percent and 2 percent if the Commission deems that fall to be exceptional because of its abruptness or its contribution to accumulated output losses (Morris et al., 2006: 13). This vagueness has markedly weakened the constraining power of the SGP, especially given the reality that the authority to judge compliance and apply sanctions is vested in Ecofin, which consists of the finance ministers of the member states.

At the time, many French policymakers believed that a European fiscal framework based on strict numerical rules would imply an excessive focus on macroeconomic stabilisation. Hence, they regarded a degree of fiscal discretion as essential for pursuing

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[25] Two leading French economists put it as follows:

> Economic policy does not boil down to a collection of disciplines and rules of good conduct ... there are times when it is necessary to have the ability to decide and act. [This requires a] definition of principles of economic policy for the euro zone ... [which would] detail how to use economic policy instruments in times of unexpected shocks, and discuss the proper management of budgetary policy in order that it retain its role as an instrument of national economic policy (Pisani-Ferry and Lamy, 2002: 114-115, quoted in Clift, 2006: 395).

At the time, Jean Pisani-Ferry was the chief economic advisor of Prime Minister Lionel Jospin, while Pascal Lamy was the trade commissioner of the EU.

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the policy goals of economic growth, job creation and social protection (Clift, 2006: 392-395).[26] French attempts to link agreement about a fiscal framework for the EMU to the creation of a democratically accountable counterweight to the European Central Bank known as "economic governance" ("gouvernement économique") confirmed this belief (Howarth, 2007). The basis of France's insistence on "economic governance" was the view that formal structures were needed to ensure that economic growth and job creation received adequate emphasis as policy objectives in the EMU alongside price stability.[27] Yet on this issue, the concessions obtained by French politicians and negotiators – the inclusion of an Employment Chapter in the Treaty of Amsterdam in 1997, the insertion of the word "Growth" in the final name of the pact, and the creation of the Eurogroup (a consultative forum consisting of the finance ministers of Eurozone countries) – fell far short of their aspirations (Heipertz and Verdun, 2010: 56, 59).

The behaviour of the policymakers from 1998 to 2004 may well have been the clearest signal of the shallowness of France's commitment to the SGP rules. Policy statements from this period affirm the country's commitment to eliminating the budget deficit by means of public expenditure restraint, yet also provide for the relatively unfettered operation of the automatic fiscal stabilisers in the short run and extensive tax relief for individuals and companies (Organisation for Economic Co-operation and Development, 2001b: 47-49). In practice, tax cuts to boost growth and job creation were prioritised over deficit reduction, as was demonstrated by the failure of the Jospin administration (1997-2002) and the Raffarin administration (2002-2005) to undertake structural fiscal reforms to balance the budget in the medium term (Howarth, 2007: 1067).

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[26] The manifesto under which Mr Jospin fought and won the elections in 1997 formulated it as follows: "[W]e want the relations between participating euro countries to be founded not on an austerity pact, but on a solidarity and growth pact, permitting policies in favour of job creation and social cohesion" (Parti Socialiste, 1997: 12-13, quoted in Clift, 2006: 394).

[27] This perspective reflected the order of priority of macroeconomic policy goals in France alluded to earlier and the belief that the control of monetary and fiscal policy should not be separated. The largest political parties all rejected the notion of central-bank independence at the national and European levels until 1991 (Howarth, 2007: 1073), and the main reason why the Bank of France was granted independence in August 1993 was that the EMU process forced the French government to pass a law to this effect.

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The fiscal strategy of the Jospin government seemed to bear fruit in the years from 1998 to 2000, which were marked by reductions, as percentages of GDP, in the conventional deficit and the debt and tax burdens (cf. Figure 5.2). Yet the increase in the cyclically adjusted deficit from 2.6 percent of GDP to 3.0 percent confirms that the fiscal position remained vulnerable. In 2000, France presented a stability programme to the European Commission that projected a balanced budget by 2004 (Government of France, 2000: 1), but the authorities also announced that the aggregate tax burden was to be reduced by 1.6 percentage points of GDP from 2001 to 2003 and that public employment was to be increased (Heipertz and Verdun, 2010: 117). Given these plans, the feasibility of the deficit-reduction plan depended on the persistence of economic growth rates of at least 3 percent per annum. As Heipertz and Verdun (2010: 117) put it:

> The implicit thinking behind fiscal policy in that period seemed to be that elevated growth rates could be taken almost for granted in the 'new economy', allowing for permanently higher expenditure, lower taxes and less consolidation effort, which in turn would facilitate the political process of implementing structural reforms. With the benefit of hindsight, it can be said that the major misjudgement was to assume temporary revenue windfalls to be permanent increases in the revenue level, giving rise to structural increases in public spending. Hence, the structural position of public finances deteriorated fundamentally, while headline figures still improved as long as revenue outgrew expenditure.

The initiation of the tax reduction programme in 2001 coincided with the first of three years of weak economic growth in the EU. The Jospin government did not flinch from its chosen course despite warnings from the European Commission that France should reduce the deficit more quickly to avoid breaching the SGP rules (Heipertz and Verdun, 2010: 117). Tax cuts continued after Mr Chirac's re-election as president early in 2002 and the victory of Mr Raffarin's UMP in the legislative elections later that year. In addition, the new administration raised expenditures on healthcare, employment-related initiatives and law and order, partly in response to the strong showing in the presidential election of the far-right candidate, Jean-Marié le Pen (Heipertz and Verdun, 2010: 131, 133). The final spur for a rapid deterioration in the fiscal outcomes was that

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the authorities' optimistic growth projections, which had reconciled the elements of the fiscal strategy on paper, did not materialise.

It transpired early in 2003 that France had breached the annual budget-balance rule in 2002. By then, the authorities had already reneged on its commitment in respect of the medium-term budget-balance rule, having announcement in 2002 that the target year for eliminating the budget deficit had been postponed from 2004 to 2007 (Heipertz and Verdun, 2010: 129). The Council of the EU concluded that France had an excessive deficit and initiated an EDP in July 2003. The French government continued to defy the European authorities by refusing to implement remedial steps and by insisting that assessments of EU countries' fiscal situations should focus less on budget deficits and more on growth, unemployment and inflation rates.[28] In fact, the draft budget for 2004 unveiled later that year provided for further tax cuts, a budget deficit amounting to 4.5 percent of GDP and a public debt level in excess of 60 percent of GDP (Heipertz and Verdun, 2010: 144). The European Commission then took the next steps provided for in the EDP by advising the Council to pronounce that France and Germany (which was in a similar situation) had taken inadequate action to correct their excessive deficits and to give notice to the two countries to take decisive action (European Commission, 2005: 36). Taking account of the weak state of the European economies, the Commission recommended that the two countries should be given two years to do so, instead of the usual one year. The French and German governments formed an alliance to thwart the implementation of these recommendations, however, and succeeded in blocking their adoption at a meeting of Ecofin on 25 November 2003. In de facto terms, the decision by Ecofin to put the EDPs against France and Germany in abeyance constituted the temporary suspension of the SGP, which lasted until the adoption of a new and more flexible Pact in 2005.[29] In the midst of the uncertainty regarding the future of the SGP in

[28] Mr Raffarin (quoted in Heipertz and Verdun, 2010: 144), for example, said on French television: "My first duty is to employment and not to solving accounting equations and mathematical problems until some office or other in some country or other is satisfied." Heipertz and Verdun (2010: 128-153) provides several examples of similar, albeit more diplomatic, pronouncements by Mr Chirac and the then minister of finance, Francis Mer.

[29] Morris et al. (2006: 18-24) summarise and assess the most important reforms introduced in 2005.

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2003 and 2004, France breached the annual budget-balance rule as well as the public-debt rule in both years (cf. Figure 5.2(c) and (e)).

In sum, it seems reasonable to conclude that French policymakers were unconvinced of the appropriateness of rigid numerical fiscal rules and regarded the SGP as a needlessly strict constraint to the pursuit of domestic policy priorities (Heipertz and Verdun, 2010: 149-150). Howarth (2007: 1061-1062) puts it succinctly:

> All French governments have defended the broader objectives of the Maastricht Treaty and Stability and Growth Pact (SGP) rules… However, French governments have also refused to accept the binding nature of the precise fiscal policy rules that are meant to reinforce the price stability goals of EU economic governance. These rules are not allowed to constrain French policy-making when they are inconvenient.

5.5 CONCLUSIONS

The narrative suggests three reasons why France's fiscal policymaking framework failed to elicit conscientious adherence to the SGP rules. The first was a complex fiscal milieu: the virtual ubiquity of budget deficits and sustained upward trend in the public debt ratio from the early 1980s onwards show that it had become increasingly difficult to generate enough tax revenue to finance the ever-expanding levels of public spending. At times, these difficulties were compounded by the effects of economic shocks on key fiscal aggregates. France joined the EMU with inadequate safety margins partly because a period of economic weakness from 1991 to 1993 had resulted in large budget deficits and rapid growth in the public debt during the mid-1990s, and the sharp economic downturn from 2001 to 2003 was a leading cause of the breaches of the annual budget-balance rule and the public-debt rule from 2002 onwards. The second reason was the dislike of the SGP among French voters. Although politicians and technocrats sometimes used the SGP rules to justify unpopular austerity measures (Howarth, 2002: 147-148), French leaders failed to develop what Schmidt (2001) calls a "legitimating discourse" to convince the public of the benefits of compliance. Third, the leftist and centre-right governments from 1998 to 2004 were not committed to adhering to the SGP rules, partly because breaches of the rules were deemed smaller domestic political liabilities

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than the measures needed for regular compliance. In addition, French politicians were riled by the subversive influence of the SGP on the style of policymaking they preferred (an activist approach with a strong discretionary bent, rooted in the "étatiste" tradition and "volontarisme") and the constraining effect of the rules on their pursuit of policy priorities (especially economic growth and employment creation). This third reason is consistent with a key theme in Chapter 3, namely the notion that the preferences of policymakers matter greatly for fiscal outcomes and, by implication, the efficacy of fiscal policymaking frameworks. In fact, it is probably the single most important reason for France's weak SGP compliance record, because strongly committed governments might have dealt better with growth shocks (by creating larger safety margins, inter alia) and the political opposition to belt-tightening measures.

These three aspects of the French experience also suggest a plausible explanation why the analysis in Chapter 3 yields weak support for the arguments of Hallerberg et al. (2007): even well designed fiscal policymaking frameworks that suit countries' voting systems may not have ensured compliance with the SGP rules if policymakers were not committed to the rules-based regime. Such commitment was vital for delegation-type fiscal frameworks (such as that of France), which supposedly facilitated compliance with the SGP rules by empowering fiscally responsible ministers of finance to resist the demands of their more spendthrift cabinet colleagues and legislatures. Strong procedural rules were hamstrung when ministers of finance knowingly – and with the consent of the leaders who appointed them – designed budgets that reduced the likelihood of achieving the outcomes prescribed by the supranational rules, as happened in France. In all likelihood, this lack of commitment on the part of the policymakers also would have made a contract-type fiscal framework anchored in strong numerical rules ineffective. This claim casts doubts about the validity of the three pathway-based explanations for France's poor compliance with the SGP rules, which all emphasise the absence of strong numerical rules.

Apart from confirming the link between policymakers' preferences and fiscal outcomes, the case of France also highlights the incomplete manner in which the causal condition "de facto SGP compliance before 1992" quantifies such preferences. As was explained in Section 3.3.6, the assumption behind the specification of this causal condition is that a

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summary measure of budget balances in the past is a valid proxy for societal norms about fiscal prudence that shape the preferences of policymakers. It transpires from the French experience that fiscal outcomes are also influenced by preferences regarding the ranking of fiscal policy objectives, the choice between rules-based and discretionary approaches to fiscal policymaking, and appropriate degrees of flexibility in rules-based regimes, inter alia. The limited usefulness of "de facto SGP compliance before 1992" as an indicator of the preferences of policymakers partly explains why France's high score on this causal condition was a poor predictor of its score on the outcome "full SGP compliance from 1998 to 2004".

In principle, non-partisan fiscal councils can play an important transparency-enhancing role in contract-type and delegation-type fiscal frameworks (for example, by revealing inconsistencies in fiscal policy programmes and attempts to manipulate macroeconomic and fiscal forecasts – cf. Section 1.5 in Chapter 1). Ultimately, however, the value of this role depends on the ability and willingness of voters and financial-market participants to punish irresponsible fiscal policymakers. As was indicated before, most French voters shared their leaders' dislike of the SGP and attached little value to breaches of the rules. Furthermore, breaches of the SGP rules apparently did little to damage the credibility of French policymakers in the eyes of financial-market participants (Clift, 2006: 405). The modest influence of France's fiscal councils probably did not have a material effect on the country's compliance record, but underscores the importance of the distinction between the de jure and the de facto effectiveness of the elements of fiscal policymaking frameworks. As was pointed out before, the reliability of the quantitative indicators in Chapters 3 is limited by their strong focus on the formal characteristics of such elements.

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CHAPTER 6

IRELAND AND THE SGP RULES (1998-2004)

6.1 INTRODUCTION

Ireland has the third highest fuzzy membership score on "full SGP compliance from 1998 to 2004" among the fourteen countries studied in this dissertation, namely 0.89 (cf. Table 3.5 in Chapter 3; Appendix Table 1). This outcome score reflects adherence to the annual budget-balance rule in all seven years and to the medium-term budget-balance rule in five years. Ireland achieved this record of compliance despite a history of large deficits: Appendix Table 8 shows that the general government sector recorded deficits in excess of 3 percent of GDP in 19 of the 22 years from 1970 to 1991. The country did not have a fiscal council in the years from 1998 to 2004 (cf. Table 2.2 in Chapter 2), and the fuzzy membership scores in Table 3.5 in Chapter 3 indicate that its policymaking framework consisted of weak numerical rules and potent procedural rules. As a result of its very low fuzzy membership scores on the causal conditions "effective numerical rules" and "de facto SGP compliance before 1992", Ireland has low fuzzy membership scores on all the solution pathways identified in Section 3.4.3 in Chapter 3. Hence, none of the four pathways suffices for explaining its high fuzzy membership score on the outcome. This makes Ireland unique among the fourteen countries examined in this study, because the solution pathways suggest at least one possible explanation for the SGP compliance scores of each of the other thirteen.

Given the inability of the pathway analysis to explain Ireland's compliance record, there is a non-trivial likelihood that closer study of the country's fiscal history in the run-up to and after the introduction of the SGP rules would enhance interpretation of the results of the set-theoretic analysis in Chapter 3 by revealing relevant measurement and model specification problems. Furthermore, Ireland could be considered an example of the validity of the ideas of Hallerberg et al. (2007; 2009), being a "small ideological distance country" that achieved a high level of compliance with the SGP rules with a fiscal

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policymaking framework consisting of strong procedural rules and weak numerical rules. Hence, studying its experience might contribute to better understanding of the explanatory power of these ideas.

The case study is organised as follows. Section 6.2, which discusses the accuracy of the scores for elements of Ireland's fiscal policymaking framework, deals with the possibility that poor measurement of the effectiveness of these elements affected the results obtained for Ireland in Chapter 3. The effects of economic growth trends and the preferences of policymakers on Ireland's compliance record from 1998 to 2004 are discussed in Sections 6.3 and 6.4, respectively. Section 6.5 concludes the chapter.

6.2 THE EFFICACY OF IRELAND'S FISCAL POLICYMAKING FRAMEWORK

The evidence suggests that the scores depicted in Figure 3.1 in Chapter 3 and displayed in calibrated form in Table 3.5 in Chapter 3 only partially capture the effectiveness of Ireland's fiscal policymaking framework from 1998 to 2004. The dismal fuzzy membership score on "effective fiscal councils" of 0.05 reflects that Ireland did not have such an organisation at the time.[1] Several comparative analyses show that the country's fiscal policymaking was moderately transparent, at best. Ireland obtains the twenty-ninth highest score (20 out of a possible 40) in a comparison of the extent to which 41 countries satisfied 40 key requirements for fiscal transparency in 2003 (Bastida and Benito, 2007: 680). Furthermore, in a study of fiscal transparency in 19 OECD countries, Ireland scores three out of a possible eleven and ranks fifteenth alongside Belgium, Denmark and Italy (Alt and Lassen, 2006: 1415). In a comparison of the informativeness of the budget drafts of the EU-15 countries in 2004 by Hallerberg et al. (2009: 67-69), Ireland obtains the eighth highest score, namely 16 out of a possible 20. Hence, it is unlikely that alternative mechanisms enhanced the transparency of fiscal policymaking in Ireland to the same extent that an effective fiscal council could have done.

Ireland was a latecomer among the original EU countries as far as the adoption of national numerical rules was concerned, and the influence of the rules introduced until

[1] The first entity of this nature, the Irish Fiscal Advisory Council, came into being in 2011 (International Monetary Fund, 2013: 42).

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2004 was every bit as feeble as suggested by the fuzzy membership score on "effective numerical rules" of 0.06 (cf. also the raw scores in Table 6.1).[2] The first rule, which was adopted in 2000 and came into effect in 2001, stipulates that 1 percent of the gross national product (GNP) must be set aside from the budget of the central government every year and paid into the National Pensions Reserve Fund (NPRF) for investment on behalf of the state (European Commission, 2012: 29). The authorities adhered to this rule in the period under review. The other two rules were introduced in 2004; hence, the influence thereof on fiscal outcomes from 1998 to 2004 was slight. The expenditure-ceiling rule follows from a commitment to maintain capital spending by the central government at about 5 percent of GNP and consists of five-year rolling targets for such outlays. The European Commission (2012: 27) points out that neither this rule nor the expenditure-allocation rule is designed to enhance adherence to the SGP rules: "Both hardly represent any constraint in terms of spending containment and should rather be considered as policy instruments for attaining specific resource allocations". The third rule restricts the budget balances of local governments by prohibiting deficits in excess of regularly adjusted nominal amounts.

Table 6.1

National numerical rules in Ireland (2000-2004)

Type of rule	Coverage	Adopted	Revised	Scrapped	Score
Expenditure allocation	Central government	2000	–	–	0.87
Expenditure ceiling	Central government	2004	–	–	1.25
Budget balance	Local government	2004	–	–	2.20

Source: Adapted from European Commission (2012).

Ireland's fuzzy membership score on "effective procedural rules" is 0.85 (cf. Table 3.5 in Chapter 3). Appendix Table 4 shows that this score is derived from a procedural fiscal rules score of 22 out of a possible 28 in every year from 1998 to 2004. Only the United Kingdom (27) and France (24) have higher scores, while Greece also has a score of 22.

[2] Table 2.2 in Chapter 2 shows that thirteen of the fourteen countries studied in this dissertation had such rules by the end of 2004 (the exception was Greece). Apart from Portugal, Ireland was the last of these thirteen to introduce numerical rules (European Commission, 2014b).

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The budgetary powers of the Irish legislature were weak in this period: parliamentary committees had little influence on the preparation of budgets, and the legislature could not amend the budget proposals of the executive (cf. Lienert, 2005: 17).[3] Only two aspects of the Irish budget process did not satisfy the criteria for strong expenditure-constraining frameworks included in the procedural rules scores: it was permissible to transfer allocations from the budget of one minister to that of another (albeit only with the approval of the minister of finance), and voting on the details of budgets preceded voting on the aggregate size thereof.

Given that Ireland counted among the "small ideological distance countries" and had strong procedural rules, the delegation model proposed by Hallerberg et al. (2007; 2009) seems a plausible explanation for its good SGP compliance record from 1998 to 2004.[4] As shown in Section 3.2 in Chapter 3, Hallerberg et al. (2007: 340-341) argue that a delegation approach to fiscal policymaking, which relies on centralised, top-down procedural rules to empower the decision-makers who are most likely to uphold fiscal discipline, is optimal in "small ideological distance countries". Given that budget deficits in excess of 3 percent of GDP were common from 1970 to 1991 (cf. Appendix Table 8) but rare from 1998 to 2004, a comparison of the strength of the country's procedural rules in the two periods is useful for assessing the explanatory power of this argument for Ireland. Table 3.6 in Chapter 3 shows that budget-process reforms implemented in 1993 raised Ireland's fuzzy membership score on "effective procedural rules" from 0.66 to 0.85 (the value thereof throughout the 1998-2004 period). This reflects a net increase in the procedural rules score from 17 to 22 attributable to three changes: (i) a

[3] Ireland's political institutions are based on the Westminster system of government (cf. Collins and Cradden, 2007: 1-2). In countries with Westminster-style institutions, the legislature supplies the leadership of the executive and has a political obligation to support the government. The budgetary roles of the legislatures of such countries tend to be weak (Posner and Park, 2007: 4).

[4] Hallerberg et al. (2009: 49) describe Ireland as a borderline case as far as the distinction between "small ideological distance countries" and "large ideological distance countries" is concerned. Ireland's ideological distance score exhibits considerable instability from 1985 to 1997, but drops and stabilises thereafter (cf. Hallerberg et al., 2009: 47). Hence, Hallerberg et al. classifies Ireland as a "large ideological distance country" prior to 1998 and a "small ideological distance country" thereafter. All the governments from 1998 to 2004 were two-party coalitions.

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strengthening of the authority of the finance minister to determine the budget parameters to be observed by other ministers (a three-point increase in the score), (ii) the granting of authority to the finance minister to block expenditures when the budget balance is deteriorating (a four-point increase in the score), and (iii) a relaxation of the prohibition on transfers of allocations from the budget of one minister to that of another (a two-point decrease in the score) (cf. Hallerberg et al., 2009: 61-66). The question is whether these reforms per se could have caused the significant improvement in general government balances from the first period to the second.

The reality that the restraining powers of the budget process were not thoroughly tested from 1998 to 2004 makes it difficult to answer this question. The Irish economy had been booming since 1994[5], and the concomitant growth in government revenue meant that prudent fiscal outcomes could be achieved while the authorities sharply increased expenditures on social spending programmes and upgraded the country's physical infrastructure. The fiscal authorities accommodated relatively large upwards adjustments of medium-term expenditure projections as resource envelopes became more certain, but generally disallowed large overruns of budgeted spending levels. The International Monetary Fund (2013: 36), for example, summarises the management of public spending from 1998 to 2007 as follows: "[t]he government tended to adhere to its annual expenditure limits for the year ahead… At the same time, the pattern of consistent positive surprises on the revenue side led to a gradual upward drift in the expenditure level from one medium-term forecast to the next". Comparisons of the differences between official medium-term forecasts of public spending and realised spending levels confirm this: according to the European Commission (2007: 177), the degrees to which actual outlays by the Irish general government in the years from 1998 to 2007 exceeded forecasts published two years earlier in the country's stability and convergence programmes were large by the standards of EU countries.

There are indications that the favourable economic environment masked weaknesses in the mechanisms for controlling government expenditure. For example, an Independent

[5] From 1995 to 2004, the average annual rate of growth in expenditure on gross domestic product at constant 2012 market prices was 7.4 percent (Central Statistics Office, 2014). Section 6.3 provides more information about the nature of this boom and the effects thereof on the public finances.

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Review Panel commissioned to study the capacity of the Department of Finance reports that the fiscal authorities accommodated many demands for spending increases during the preparation phase of budgets. In December of every year from 1999 to 2004 apart from 2003, the amounts included in the annual budgets to provide tax relief and to increase public spending markedly exceeded those envisaged six months earlier in the budget-strategy memoranda submitted to Cabinet by the finance minister (Independent Review Panel, 2010: 22-23). In explaining this pattern, the Panel (2010: 22-26) identifies two problems not resolved by the 1993 reforms. First, the hands of the fiscal authorities were tied by the obligation to accommodate commitments in coalition agreements as well as public-sector pay agreements concluded as part of the corporatist Social Partnership process in the annual budgets. Second, the procedural rules did not empower the Department of Finance sufficiently to resist pressure from role-players who demanded to share the fruits of the country's economic boom. The reality that this second problem manifested primarily during the preparation of budgets suggests that the agenda-setting powers of the finance minister remained inadequate. It also could have reflected the weakness of Ireland's numerical rules, though, because the absence of binding constraints at the aggregate level weakens the authority of the finance ministers in negotiations with cabinet colleagues.

It transpires from the above that the fuzzy membership scores used in the set-theoretic analysis in Chapter 3 accurately portray the weakness of the numerical fiscal rules in force in Ireland from 1998 to 2004, but possibly exaggerate the de facto efficacy of the country's procedural rules. Hence, it is unlikely that the ideas of Hallerberg et al. (2007; 2009) explain Ireland's admirable SGP compliance record in this period. Accordingly, Sections 6.3 and 6.4 explores other factors that might have underpinned this record.

6.3 ECONOMIC GROWTH AND IRELAND'S SGP COMPLIANCE RECORD

The twofold purpose of this section is to highlight the exceptional nature of Ireland's macroeconomic outcomes from the mid-1990s onwards and to show that the very high economic growth rates facilitated compliance with the SGP rules from 1998 to 2004.

The so-called "Irish economic miracle" followed upon five decades of anaemic economic growth and a further two of extreme macroeconomic instability. Ireland's economy was

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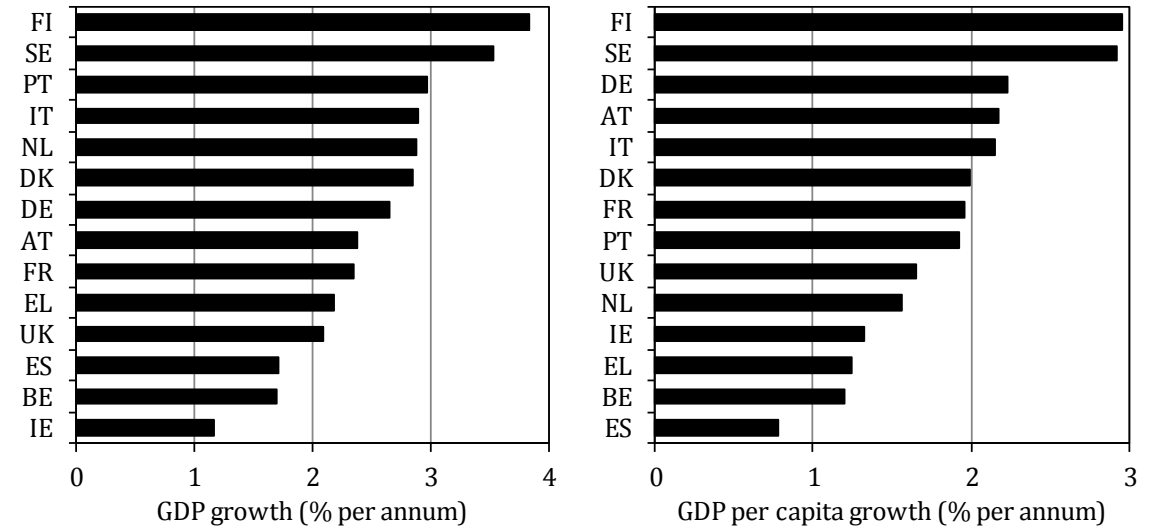
underdeveloped when the country won political independence from Great Britain in 1922: Kennedy, Giblin and McHugh (1988: 130) describe it as a "… a small, late-industrialising, peripheral economy with a long-standing labour surplus". Its small size and openness made the economy vulnerable to external shocks, which manifested in balance of payments problems and extensive emigration, especially to the United States and the United Kingdom.[6] International turbulence and these structural weaknesses constrained Ireland's growth in the first four decades after independence (cf. Gráda and O'Rourke, 1996; Kennedy, Giblin and McHugh, 1988). Figure 6.1 shows that Ireland's average annual rate of growth in real GDP from 1922 to 1960 lagged those of the other thirteen EU countries studied in this dissertation. Because its population decreased from about 3 million to about 2.8 million in this period, Ireland fared better in a similar comparison of growth rates of GDP per capita. Nonetheless, it remained in the bottom third of the fourteen-country group.

Figure 6.1

Average annual growth rates for fourteen EU countries (1922-1960)



Derived from estimates of GDP at constant 1990 international Geary-Khamis dollars

Countries: AT – Austria; BE – Belgium; DK – Denmark; FI – Finland; FR – France; DE – Germany; EL – Greece; IE – Ireland; IT – Italy; NL – Netherlands; PT – Portugal; ES – Spain; SE – Sweden; UK – United Kingdom.

Source: Maddison (2003: 50-51, 56, 62-63, 68).

[6] More than 4.5 million men and women emigrated from Ireland between 1850 and 1913 (Hatton and Williamson, 1993: 575).

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Compared to the 1950s, Ireland's economic outcomes improved markedly in the 1960s. The estimates of Maddison (2003: 56-57, 68-69) show that the average annual rate of GDP growth at 1990 prices increased from 1.7 percent from 1950 to 1960 to 4.2 percent from 1960 to 1970, while the average annual real rate of growth in GDP per capita increased from 2.2 percent to 3.8 percent. Yet Ireland continued to lag the majority of the other thirteen countries studied in this dissertation: eleven of these countries recorded higher average real GDP growth rates and nine higher average real GDP per capita growth rates (cf. Maddison, 2003: 50-51, 56, 62-63, 68).

The Irish government followed its counterpart in the United Kingdom by responding to the oil price crisis in 1973-1974 with strong countercyclical fiscal measures (Honohan, 1992:287). According to Honohan and Walsh (2002: 12), this response was the first of "… a sequence of short-termist demand management responses that kept the economy out of equilibrium and inhibited job creation for almost two decades" (cf. also Section 6.4). In combination with the oil-price shock in 1979 and the subsequent tightening of monetary policy in the United Kingdom and elsewhere, these policy mistakes plunged Ireland into severe macroeconomic instability. It transpires from Table 6.2 that the economy was in particularly poor shape from the mid-1970s until the mid-1980s, when high unemployment and inflation rates as well as extreme fiscal imbalances and large deficits on the current account of the balance of payments were the order of the day. In 1982, the government of the day launched a macroeconomic stabilisation programme with four main components: (1) maintenance of consistently positive and high real interest rates, (2) a fixed exchange-rate policy nested in Ireland's membership of the European Monetary System, (3) a steady reduction in the unsustainable budget deficit, and (4) a slowdown in labour remuneration growth (Dornbusch, 1989: 184). By 1988, this programme and a series of successors had reduced inflation and budget deficits and had stabilised the current account of the balance of payments (cf. Table 6.2). Yet the reliance on a strong, fixed exchange rate, high real interest rates and a significant increase in the aggregate tax burden had prevented the programme from restoring the international competitiveness of Irish firms and stimulating job creation. Furthermore, the public debt burden remained large and costly (Dornbusch, 1989: 200-201).

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Table 6.2

Selected economic indicators for Ireland and the EU-15 countries (1974-2005)[1]

	1974-1985	1986-1990	1991-1995	1996-2000	2001-2005
Real GDP growth (period averages in percent per annum)					
Ireland	3.8	4.6	4.7	10.3	4.9
Average for the EU-15	2.1	3.3	1.6	2.8	1.8
Unemployment rate (period averages as percentages of the labour force)					
Ireland	10.6	15.5	14.5	7.8	4.4
Average for the EU-15	–	–	9.4	9.3	7.9
GDP deflator (period averages in percentage changes)					
Ireland	12.8	3.2	2.9	3.8	4.0
Average for the EU-15	9.7	4.7	3.6	1.5	2.2
Current account of the balance of payment (period averages in percentages of GDP)					
Ireland	-7.9	-1.2	1.8	1.2	-0.6
Average for the EU-15	-0.5	0.0	-0.5	0.4	0.3
General government net borrowing (period averages in percentages of GDP)					
Ireland	-9.7	-5.7	-2.5	2.1	0.8
Average for the EU-15	-3.6	-3.2	-5.0	-1.8	-2.4
General government debt (end of period in percentages of GDP)					
Ireland	99.3	92.0	80.1	37.0	27.2
Average for the EU-15	–	52.5	61.2	67.8	63.0

Note: 1 Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Source: European Commission (2013a: 189, 217).

Only a few years after this incomplete stabilisation process, the Irish economy entered an extended period of exceptionally good economic performance. The second half of the 1990s was marked by remarkable rates of output and employment growth, modest inflation, and dramatic improvements in fiscal balances and the public debt burden (cf. Table 6.2; Figure 6.2(a), (c), (d) and (e)). Barry (2002: 36-39) discusses two sets of explanations for the so-called "Irish economic miracle". According to him, proponents of the "delayed convergence hypothesis" (e.g. Honohan and Walsh, 2002) claim that Ireland had long had the potential to catch up to the richer OECD countries, but had been held back by policy errors. Their view is that the achievement of macroeconomic stability in the 1980s and contemporaneous and subsequent structural reforms (such as the sharp reduction in the corporate tax burden and the establishment of a corporatist

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wage determination system) released the shackles on the Irish economy and allowed it to prosper from the early to mid-1990 onwards. By contrast, Krugman (1997) and other adherents of the "regional boom hypothesis" claim that the stabilisation programme and structural reforms strongly boosted the demand for labour in Ireland by making the country an attractive destination for export-oriented foreign direct investment flows. The exceptionally open nature of the Irish economy, so the argument goes, enabled it to attain output and employment growth rates usually restricted to regions within national economies. A detailed discussion of the two sets of arguments falls outside the scope of this study. It is notable, though, that both regard the fiscal consolidation effort in the 1980s as one of the keys to understanding the turnaround in Ireland's economic performance (cf. also Section 6.4).

After having contributed to the revitalisation of the Irish economy by stabilising key fiscal aggregates, Ireland's fiscal policymakers became major beneficiaries of its success. The high economic growth rates depicted in Figure 6.2(a) assisted the fiscal authorities in preparing for and in achieving compliance with the SGP rules from 1998 to 2004 by boosting tax revenues and restricting budget balance-to-GDP ratios and the public debt-to-GDP ratio. After more than a decade of improving fiscal outcomes, Ireland was well prepared for compliance with the SGP rules by 1997 (cf. Table 3.1 in Chapter 3). The conventional balance of the general government was in surplus, while the cyclically adjusted balance was close to surplus (at the time, it was estimated by the European Commission to have been a deficit of 0.1 percent of GDP). General government gross debt was approaching the 60 percent-of-GDP limit, having dropped from 92.9 percent in 1993 to 66.3 percent in 1997. The Irish economy maintained its stellar growth performance from 1998 to 2000, and key fiscal aggregates improved further as general government revenue tracked and general government spending lagged the extraordinary growth in nominal GDP (cf. Figure 6.2(a) and (b)). In 2000, Ireland had a conventional budget surplus of 4.9 percent of GDP and a cyclically adjusted budget surplus of 3.3 percent of GDP, while the public debt amounted to only 35.1 percent of GDP. These large safety margins markedly reduced the risks that adverse shocks or failure to reach fiscal targets usually pose for policymakers in rules-based policymaking environments.

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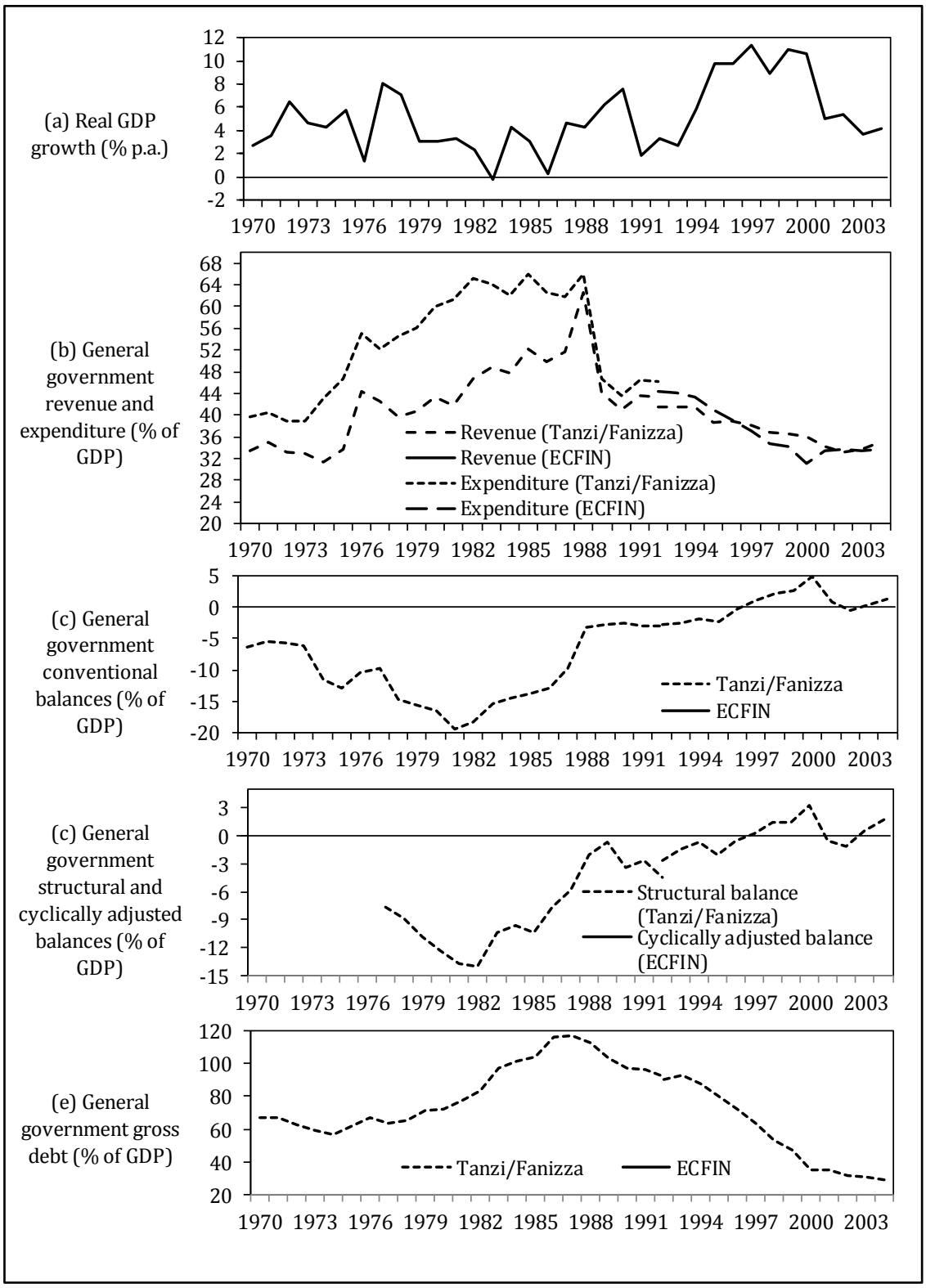
Figure 6.2

Real economic growth and fiscal outcomes in Ireland (1970-2004)



Sources: Tanzi and Fanizza (1995: 2-3, 11, 30-31); European Commission (2013a: 61, 71, 81, 87, 91; 2013b: 184).

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Data for 2001 illustrate the margins at the disposal of the authorities in that era. The budget, which was presented in December 2000, provided for nominal increases in GDP, exchequer revenues and exchequer outlays of 13.8 percent, 7.1 percent and 7.7 percent, respectively, on the estimated outcomes for 2000 and a surplus of 2.8 percent of the projected GDP (Irish Department of Finance, 2014a). The preliminary outcomes announced in December 2001 included lower-than-expected nominal GDP and exchequer revenue figures (the respective estimated growth rates of the aggregates were 12.5 percent and 0.4 percent) and higher-than-expected exchequer expenditures (the estimated growth rate was 10.7 percent). Despite these forecasting errors and the expenditure overrun, the authorities achieved a surplus of 0.3 percent of the estimated GDP (Irish Department of Finance (2014b). In contrast to the preceding two decades, there was little pressure on the policymaking framework to constrain public spending and other key aggregates during this period. In fact, the evidence is consistent with the claim that the growth performance of the economy eclipsed the constraining effects of the fiscal policymaking framework as far as buttressing compliance was concerned.

6.4 IRISH POLICYMAKERS' COMMITMENT TO FISCAL DISCIPLINE

Ireland's record of relatively large budget deficits and a hefty public debt burden from 1970 to 1991 suggests that the country lacked a tradition of fiscal discipline when the SGP rules came into force. The reality is more complex. In the first fifty or so years after independence, successive groups of policymakers achieved high levels of adherence to an overall-balance rule and later a current-balance rule. In fact, it could be argued that the only period since independence in which Irish fiscal policymakers' commitment to fiscal discipline wavered was the second half of the 1970s and the first half of the 1980s.

Doyle (1983: 64), a former secretary of the Irish Department of Finance, states that the country's fiscal policymaking was dominated until the late 1940s by the notion that "… budgets should be both balanced and as small as possible".[7] The Irish government abandoned the principle of overall budget balance in 1949, when it introduced separate

[7] In 1933, for example, the governing Fianna Fáil party rejected John Maynard Keynes's recommendation that the Irish government should borrow more to finance urban renewal and other projects (Gráda and O'Rourke, 1996: 400).

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current and capital spending plans in the national budget (Doyle, 1983: 64; Gráda and O'Rourke, 1996: 400-401). Henceforth, fiscal policymaking was guided by the "golden rule" of fiscal policymaking (cf. Section 1.2 in Chapter 1). In most years in the 1950s and the 1960s, the authorities satisfied this rule by financing current outlays from current revenues (Doyle, 1983: 64). However, hefty increases in capital expenditures in the 1960s resulted in large budget deficits and a steadily growing debt burden that reached 67.4 percent of GDP in 1970 (cf. Figure 6.2(e)).[8] According to Doyle (1983: 66), the view within the government was that productive capital spending would generate sufficient resources to meet future debt obligations without requiring a higher tax burden.

The current-balance rule was abandoned, albeit tacitly, in 1973-1974, when the Irish authorities opted for a large fiscal stimulus to counter the effects of the oil price shock. In 1977, the stubbornly high unemployment rate prompted another set of expansionary measures consisting of new expenditure programmes, the expansion of public-sector employment and increases in social security-related transfer programmes (Honohan and Walsh, 2002: 13).[9] With hindsight, it is clear that these policies were misguided. Many countries reacted in the same way to the first oil-price shock, however, including the United Kingdom (Honohan, 1992: 287). Be that as it may, the 1977 stimulus initiated a period of ten years described by Hunt (2005: 300) as one of "irresponsible fiscal policy management… characterised by excessive spending growth, burdensome fiscal deficits, and an escalating public debt" (cf. Figure 6.2). From 1977 to 1981, general government spending jumped from 52.3 percent of GDP to 61.2 percent, whereas general government revenue decreased slightly from 42.5 percent to 41.8 percent.

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[8] The deficit of 6.3 percent of GDP in 1970 depicted in Figure 6.2(c) was typical of this era. According to Doyle (1983: 65) and the Organisation for Economic Co-operation and Development (1982: 40), the main drivers of government spending in Ireland in the 1960s were capital expenditures on housing, physical infrastructure and industrial development and the expansion of the social security, education and healthcare systems. General government expenditure increased from 28.0 percent of GDP in 1960 to 39.6 percent in 1970 (Tanzi and Fanizza, 1995: 30; Tanzi and Schuknecht, 2000: 7).

[9] According to Honohan and Walsh (2002: 9), three erroneous premises led the policymakers to adopt these measures. These were the beliefs that real interest rates would remain very low, that a "buy Irish" campaign would counteract the effects of the fiscal stimulus on the balance of payments and that the effects of the stimulus would markedly reduce the unemployment rate.

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Hence, the conventional deficit grew from 9.7 percent of GDP in 1977 to 19.4 percent in 1981, while the gross debt ratio increased from 63.7 percent to 77.2 percent. At that stage, it was evident that fiscal policy had become unsustainable.

While ultimately successful in reducing the budget deficit and stabilising the public debt ratio, the first phase of fiscal consolidation (1982-1987) was hampered by a high turnover of insecure coalition and minority governments.[10] In addition, the imperative of maintaining the provision of public services and income support programmes – especially in times of economic contraction[11] – meant that the authorities relied heavily on two growth-inhibiting mechanisms for reducing the deficit, namely a hefty increase in the tax burden and sharp cutbacks in public investment programmes (Honohan and Walsh, 2002: 10; cf. also Honohan, 1992: 293-298). The consolidation effort gained substantial momentum after the 1987 election when Charles Haughey, the leader of the Fianna Fáil party, formed a stable government and secured the support of the leader of the opposition for his fiscal plans. Over the next ten years, successive governments built on this foundation to put Ireland in a favourable position to comply with the SGP rules when these constraints came into force in 1998 (cf. Table 3.1 in Chapter 3).

To be sure, the state of the economy in the 1980s and, later, the imperative of joining the EMU left Irish policymakers with no feasible alternative to drastic fiscal reforms.[12] In addition, as pointed out in Section 6.3, the steadily improving economic milieu that culminated in the boom period from the mid-1990s onwards greatly eased the fiscal consolidation process. From 1989 onwards, the resources at the disposal of the fiscal authorities were augmented further by large increases in structural grants from the EU budget.[13] Nonetheless, the successful execution of the abnormally large consolidation

[10] As stated in Section 6.2, Ireland was included among the "large ideological distance countries" in this period (cf. Hallerberg et al., 2009: 50).

[11] The Labour Party refused to participate in coalitions unless the governments in question committed themselves to preserving the real value of income maintenance grants (Honohan and Walsh, 2002: 10).

[12] Hay, Riiheläinen, Smith and Watson (2008) provide an informative discussion of the widespread support for EMU membership in Ireland.

[13] Barry (2000: 1390) shows that these grants usually exceeded 2 percent of Ireland's GNP. It peaked at more than 3 percent from 1991 to 1993.

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effort confirmed the authorities' renewed commitment to fiscal discipline This commitment manifested in the achievement of reductions, in real terms or as percentages of GDP, in various types of spending, including purchases of goods and services and politically sensitive items such as the wage bill of the government sector (achieved by reducing the number of employees and by instituting a recruitment freeze) and income transfers (achieved by improving the targeting of recipients) (International Monetary Fund, 2000: 30-31). The authorities also exploited favourable conditions in a skilful manner. The growth-induced buoyancy of revenues, for example, enabled them to maintain and refine Ireland's investment-friendly corporate tax regime (cf. Walsh, 2000) and to reduce personal income tax rates sharply from 1990 onwards.[14] These reductions were used successfully in collective bargaining forums to secure modest multiyear wage agreements that complemented the competitiveness-enhancing effects of the devaluation of the Irish pound in January 1993 (Honohan and Walsh, 2002: 23). Similarly, the structural grants from the EU budget were used to offset the potentially damaging effects of further postponements of and cuts to public investment projects (Honohan and Walsh, 2002: 23).

The abnormal economic conditions from 1998 to 2004 make assessing the preferences of Irish fiscal policymakers as complicated as attempts to judge the effectiveness of the country's fiscal policymaking framework. Responding to growing pressure for higher wages in the public sector and better physical infrastructure and healthcare services from a population that had become used to budget surpluses and tax cuts (cf. Barry and Fitzgerald, 2001: 4-5), the fiscal authorities tolerated rapid growth in government spending from 2000 onwards. According to the Organisation for Economic Co-operation and Development (2006: 140), general government expenditure increased by almost 70 percent from 2000 to 2005 – an increase of 31 percent in real terms. In addition, actual expenditure exceeded the budgeted levels in most years from 1995 to 2003 (International Monetary Fund, 2005: 5). The expenditure overruns were smaller than the corresponding revenue windfalls, though, and the International Monetary Fund

[14] From 1985 to 2001, the top marginal income tax rate decreased from 65 percent to 42 percent, the standard rate for corporations from 50 percent to 16 percent and the tax rate on capital gains from 60 percent to 20 percent (Honohan and Walsh, 2002: 18).

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(2005: 17) interprets this pattern as an indication of fiscal prudence. Nonetheless, it is hard to escape the conclusion that the fiscal policymakers dropped their guard. In 2001 and 2002, for example, Ireland recorded its first cyclically adjusted general government deficits since 1996 as a sharp slowdown in the economic growth rate distorted the outcomes of seemingly prudent budgets (cf. Figure 6.2(a) and (d)). Honohan and Walsh (2002: 11) concur that the fiscal position had begun to deteriorate in 2001, and the European Commission (2001) issued a reprimand to Ireland for allegedly coming up with expansionary and pro-cyclical budget plans in an overheating economy. However, the improvements in fiscal outcomes in 2003 and 2004 indicate that the policymakers' underlying commitment to fiscal discipline remained intact.

6.5 CONCLUSIONS

Section 6.1 states that this case study has two objectives. The first is to establish why the solution pathways identified in Section 3.4.3 in Chapter 3 cannot explain Ireland's admirable record of compliance with the SGP rules from 1998 to 2004. The second objective, which is common to all the case studies, is to gain insight into the usefulness of the set-theoretic analysis in Chapter 3. Hence, the case study explores the experience of Ireland to obtain a sense of the adequacy of the set-theoretic model and the measures constructed for the analysis.

As far as the first objective is concerned, this chapter finds that the solution pathways cannot explain Ireland's SGP compliance record because the model omits a critical determinant thereof, namely the exceptional growth performance of the Irish economy from the mid-1990s to 2004 and beyond. The connection between short- and long-term aspects of the growth performance of an economy and the degree to which its fiscal authorities comply with the SGP rules has featured in the other case studies as well, but not as vividly as in the case of Ireland. Hence, one important finding of this chapter is that an appropriately specified indicator of economic growth might be an important causal condition in set-theoretic analyses of the effectiveness of fiscal policymaking frameworks. With regard to one of the core themes of this dissertation, namely the link between fiscal outcomes and the preferences of policymakers, this chapter suggests that a commitment to fiscal discipline did play a role in the case of Ireland. This role,

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however, consisted mainly of preparing the way for regular compliance with the SGP rules by underpinning a large and politically tricky fiscal consolidation process. The preference for fiscal prudence remained after the introduction of the SGP rules – even though the authorities erred from time to time, most notably in 2001 – but the success of the consolidation process meant that the policymakers' preferences played a secondary role from 1998 onwards.

As stated in Section 6.1, Ireland has a very low fuzzy membership score on the causal condition "de facto SGP compliance before 1992" because its general government sector often ran deficits amounting to 3 percent of GDP or more from 1970 to 1991. In Chapter 3 and elsewhere in this dissertation, a low score on this causal condition is interpreted as indicative of the absence of a strong preference for fiscal prudence. It transpires from Section 6.4 that this interpretation is sometimes inadequate. In the Irish case, the period of fiscal laxity was the second half of the 1970s and a few years early in the 1980s. Deficit remained large during the 1980s, though, even after the policymakers had recommitted themselves to fiscal prudence and had implemented various measures to bring it under control. Hence, the Irish experience suggests that binary measures of the preferences of policymakers based on budget balances can be misleading, especially during fiscal consolidation efforts.

With the exception of "de facto SGP compliance before 1992" and, possibly, "effective procedural rules", Ireland's fuzzy membership scores on the causal conditions seem accurate. The uncertainty surrounding the score on "effective procedural rules" is unfortunate, because this prevents a proper assessment of the validity of a possible explanation for Ireland's SGP compliance record, namely the ideas of Hallerberg et al. (2007; 2009) about the appropriateness of delegation-type policymaking frameworks in "small ideological distance countries". As pointed out in Section 6.3, however, the period from 1998 to 2004 reveals little about the connection between Ireland's strong procedural rules and fine SGP compliance record, because the restraining powers of the rules were not tested during this time of exceptionally rapid economic growth.

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CHAPTER 7

SUMMARY AND CONCLUSIONS

7.1 SUMMARY

Growing numbers of countries are assembling multifaceted fiscal policymaking frameworks consisting of numerical rules, fiscal councils and centralised, top-down procedural rules. The basis of this trend is the increasingly popular view that complementary mechanisms aimed at correcting the perverse incentives that cause chronic deficit bias and procyclical tendencies in fiscal policymaking enhance the usefulness of numerical rules as policy anchors and devices for holding policymakers accountable. While a sizable body of empirical studies has linked the presence of these three elements of fiscal policymaking frameworks to sound fiscal outcomes, empirical analysis of the overall effectiveness of multifaceted fiscal policymaking regimes remains scant. This dissertation contributes to the body of literature on the effectiveness of fiscal policymaking frameworks by exploring the potential of independent fiscal councils and centralised, top-down procedural rules to complement numerical rules as mechanisms for preventing fiscal profligacy. The following hypothesis guides this endeavour:

> The potential of numerical rules to prevent fiscal profligacy is enhanced by combining such rules with centralised, top-down procedural rules and non-partisan fiscal councils.

The dissertation studies the experiences of fourteen EU countries from 1998 to 2004. It exploits the reality that member states of the EU have retained the authority to design national fiscal policymaking frameworks after the supranational numerical rules of the SGP came into force in 1998. This set-up has resulted in an array of frameworks consisting of distinct configurations of numerical rules, procedural rules and fiscal councils. It has also provided a clear yardstick for comparing their effectiveness in the form of differences in the degrees to which the countries have complied with the SGP rules. The premise of the analysis is that evidence of systematic connections between the details of the countries' fiscal policymaking frameworks and differences in their

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records of compliance with the SGP rules represents support for the argument that the broader details of these frameworks influence the efficacy of the numerical rules chosen by the countries themselves as mechanisms for preventing violations of the SGP rules.

The analysis consists of two parts. The first is a cross-sectional analysis of all fourteen countries. It uses a set-theoretic technique known as fuzzy-set qualitative comparative analysis (fsQCA) to identify connections between various configurations of the elements of fiscal policymaking frameworks and degrees of compliance with the SGP rules. This technique is well suited to the task: it is configurational in nature, is capable of dealing with the possibility that a particular degree of SGP compliance may result from several types of fiscal policymaking frameworks and yields results that can be verified using in-depth country studies that account for the effects of contextual factors. The decision to opt for fsQCA instead of regression analysis was based on these factors, various practical considerations and the belief that a study using case-oriented methods can complement the existing regression-based literature. The connections identified during the course of the set-theoretic analysis are interpreted in terms of sufficiency and necessity and used to identify pathways to consistent compliance with the SGP rules.

The set-theoretic analysis yields some evidence of the efficacy of multifaceted fiscal policymaking frameworks. While broadly supportive of the hypothesis guiding this study, the evidence is tentative. None of the configurations of policymaking framework elements was necessary or sufficient for full compliance with the SGP rules from 1998 to 2004. Moreover, the results reveal strong connections between the countries' SGP compliance records and a proxy for the degree of political commitment to fiscal discipline. Although possible endogeneity problems preclude such a strong conclusion, the results per se suggest that a strong commitment of this nature might render fiscal councils and strong procedural rules superfluous as complements to numerical rules. In the spirit of the hypothesis-generating approach, the findings of the set-theoretic analysis are used to refine the initial hypothesis. Hence, the following two new hypotheses are proffered for empirical testing in future research.

- Numerical rules, though valuable as institutions for preventing fiscal profligacy, are insufficient unless a country has a record of fiscal prudence that reflects a strong commitment to fiscal discipline on the part of the fiscal authorities.

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- In the absence of a record of fiscal prudence that reflects a strong commitment to fiscal discipline on the part of the fiscal authorities, independent and influential fiscal councils and centralised, top-down procedural rules enhance the efficacy of numerical rules as institutions for preventing fiscal profligacy.

Following common practice in fsQCA-based research, the second part of the analysis consists of case studies of three of the fourteen countries, namely Finland, France and Ireland. The main purpose of the case studies is to verify aspects of the set-theoretic analysis, namely the specification of the model (especially the influence of preferences and norms on compliance with the SGP rules), the accuracy of the summary measures of the efficacy of elements of fiscal policymaking frameworks, the explanatory value of the solution pathways and the country-level relevance of the two hypotheses derived from results of the set-theoretic analysis.

The case studies yield several valuable insights. The most important of these is confirmation of the critical role of the preferences of policymakers as determinants of compliance with the SGP rules. To be sure, elements of the policymaking frameworks of the three countries also influenced compliance. However, the influence thereof hinged on congruence with the preferences of policymakers and voters. The experience of Finland exemplified the benign effects of mutually supportive relationships between policymaking frameworks and preferences, while that of France illustrated the subtle nature of such preferences and the effects of subversive relationships. The case study of Ireland suggests that the influence of fiscal policymaking frameworks on fiscal outcomes (such as degrees of compliance with the SGP rules) is easily exaggerated. Furthermore, it highlights that the omission of a measure of economic conditions (especially the growth performance of economies) reduced the ability of the set-theoretic model to explain differences in SGP compliance records.

It transpires from the case studies that the quantitative measures used in the set-theoretic analysis accurately represent the efficacy of most of the elements of the three countries' fiscal policymaking frameworks. The exceptions include the exaggeration of the effectiveness of France's fiscal councils and the understatement of the effectiveness of Finland's procedural rules. The most important sources of such measurement errors are differences between the de jure and de facto effectiveness of framework elements.

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The case studies do not give a consistent impression of the relevance of the solution pathways and the two hypotheses. For example, they confirm that one of the solution pathways and the first hypothesis provided highly plausible explanations for Finland's exemplary SGP compliance record from 1998 to 2004, but refute the notion – which is implied by two solution pathways – that the absence of strong numerical rules per se explains France's poor SGP compliance record in the same period. Nonetheless, the narratives yields useful insights, such as an explanation for the inability of all the solution pathways to account for the SGP compliance record of Ireland. Section 7.2 returns to the broader implications of these diverse perspectives about the findings of the set-theoretic analysis.

7.2 CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Four important conclusions follow from this study.

- The case studies confirm the tentative evidence from the set-theoretical analysis that the preferences of policymakers and voters were critical determinants of the effectiveness of all types of fiscal policymaking frameworks. The importance of preferences for and commitments to fiscal prudence are now acknowledged in most policy-focused writings on fiscal policymaking frameworks, but often as an obiter dictum or in a footnote. It should be stated more explicitly and more often that such commitments are the foundations without which fiscal policymaking frameworks cannot be effective, no matter how well they are designed.
- The potential of multifaceted fiscal policymaking frameworks should not be exaggerated. Mirroring the findings for the individual policymaking framework elements, the results of the set-theoretic analysis and the case studies suggest that combinations of strong numerical rules, independent and influential fiscal councils and centralised, top-down procedural rules are neither necessary nor sufficient for preventing fiscal profligacy (assuming, that is, that adherence to the SGP rules was a valid proxy for fiscal discipline). Apart from the pivotal effect of commitments to fiscal prudence, the efficacy of fiscal policymaking framework is influenced by economic conditions, political imperative and, in all likelihood, other factors as well.

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- More generally, the quest for an ideal fiscal policymaking framework for all times and countries is likely to be futile. EU countries with varied frameworks achieved high levels of compliance with the SGP rules, and the compliance records of some pairs of countries with very similar frameworks differed markedly. Hence, it is far from clear that the cause of fiscal discipline is served best by the uncritical advocacy of a "one size fits all" solution consisting of a multifaceted fiscal policymaking framework. A stronger emphasis on the salience of an unwavering commitment to fiscal prudence complemented by framework elements chosen to overcome specific incentive distortions seem a more promising approach.
- There is considerable scope for using case-oriented techniques such as fsQCA in analyses of the effectiveness of fiscal policymaking frameworks (and, for that matter, other institutions). Such techniques have limitations of their own, but are potentially valuable complements to regression-based techniques and deserve more attention from economists.

Empirical testing of the two hypotheses formulated in Section 3.5 in Chapter 3 is an important topic for future research. The study also highlights several other research possibilities. First, better understanding of the nature and determinants of strong commitments to fiscal discipline should yield high returns in academic research into and policy advocacy about fiscal policymaking frameworks. Second, valid quantitative measures of such commitments and other intangible determinants of the de facto effectiveness of policymaking frameworks are urgent priorities for further progress in empirical study of these issues. Third, the evidence base should be widened by more studies of the connections between fiscal policymaking frameworks and outcomes in other parts of the world, including more developing countries outside of Latin America. And finally, a puzzling aspect of the results of this study is the weak support for the intuitively appealing ideas of Hallerberg et al. (2007; 2009), which elicited promising results in their own empirical studies of EU countries. Further study of the reasons for the divergent results might yield useful insights into the policy issues as well as the strengths and weaknesses of regression-based and fsQCA-based techniques.

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APPENDIX

TABLES

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Appendix Table 1

General government balances as percentages of GDP (1998-2004)[1]

Country	1998	1999	2000	2001	2002	2003	2004	Compliance
Conventional balances:								
Austria	-2.4	-2.3	-1.7	0.0	-0.7	-1.5	-4.4	6
Belgium	-0.9	-0.6	0.0	0.4	-0.1	-0.1	-0.1	7
Denmark	0.0	1.3	2.3	1.5	0.4	0.1	2.1	7
Finland	1.7	1.7	7.0	5.1	4.2	2.6	2.5	7
France	-2.6	-1.8	-1.5	-1.6	-3.3	-4.1	-3.6	4
Germany	-2.3	-1.6	1.1	-3.1	-3.8	-4.2	-3.8	3
Greece	-3.9	-3.1	-3.7	-4.5	-4.8	-5.7	-7.6	0
Ireland	2.2	2.6	4.7	0.9	-0.4	0.4	1.4	7
Italy	-2.7	-1.9	-0.8	-3.1	-3.1	-3.6	-3.5	3
Netherlands	-0.9	0.4	2.0	-0.2	-2.1	-3.1	-1.7	6
Portugal	-3.9	-3.1	-3.3	-4.8	-3.4	-3.7	-4.0	0
Spain	-3.0	-1.2	-0.9	-0.5	-0.2	-0.3	-0.1	7
Sweden	0.7	0.9	3.6	1.5	-1.3	-1.0	0.6	7
United Kingdom	-0.1	0.9	3.6	0.5	-2.1	-3.4	-3.5	5
Cyclically adjusted balances:								
Austria	-2.5	-2.8	-2.6	-0.3	-0.7	-0.9	-4.0	0
Belgium	-0.8	-1.0	-1.0	0.0	-0.1	0.3	-0.4	2
Denmark	-0.6	0.6	0.8	0.7	0.2	0.5	1.8	6
Finland	0.6	0.8	5.5	4.3	4.2	3.3	2.5	7
France	-2.6	-2.4	-2.9	-3.1	-4.3	-4.6	-4.5	0
Germany	-2.2	-1.6	0.4	-3.8	-3.8	-3.2	-2.8	1
Greece	-4.1	-3.3	-4.0	-4.6	-4.3	-5.6	-7.8	0
Ireland	1.4	1.2	2.8	-0.5	-1.2	0.3	1.6	5
Italy	-2.8	-2.1	-1.8	-4.3	-3.8	-3.7	-3.9	0
Netherlands	-1.1	-0.5	0.7	-1.1	-1.7	-1.8	-0.8	1
Portugal	-4.8	-4.3	-4.8	-6.1	-4.1	-3.3	-3.7	0
Spain	-3.0	-1.8	-2.0	-1.6	-0.9	-0.8	-0.5	0
Sweden	1.6	0.7	2.5	1.4	-1.1	-0.6	0.1	5
United Kingdom	-0.3	0.8	3.0	0.0	-2.3	-4.1	-4.3	3

Note: 1 Positive numbers (+) signify net lending and negative numbers (—) net borrowing.

Sources: European Commission (2012a: 154-155; 2012b: 84-85).

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Appendix Table 2

Scores for the elements of the numerical fiscal rules indices (1998-2004)

Statutory basis	Adjustment margin	Moni-Toring	Enforcement: Body	Enforcement: Mechanism	Escape clauses	Coverage
Austria:						
Budget balance as a % of GDP (1999-2000):						
4.00	4.00	1.00	2.00	1.33	4.00	0.75
Budget balance as a % of GDP (2001-2004)						
4.00	4.00	1.00	2.00	4.00	4.00	0.75
Belgium:						
Real expenditure growth rate (1998):						
2.00	2.00	4.00	2.00	0.00	0.00	0.23
Revenue growth relative to GDP growth (1998-1999):						
2.00	2.00	0.00	2.00	0.00	0.00	0.23
Nominal budget balance (1998-2004):						
4.00	4.00	3.00	2.00	2.66	0.00	0.13
Nominal budget balance (1998-2004):						
2.00	2.00	4.00	4.00	2.66	0.00	0.30
Nominal budget balance (1998-2004):						
2.00	4.00	2.00	2.00	1.33	0.00	0.35
Real expenditure growth rate (1998-2004):						
4.00	2.00	2.00	2.00	4.00	0.00	0.13
Denmark:						
Structural balance as a % of GDP (1998-2004):						
2.00	2.00	2.00	2.00	0.00	0.00	1.00
Real public consumption expenditure growth (1998-2004):						
0.00	2.00	2.00	2.00	4.00	0.00	0.45
Direct/indirect tax rate limits (2001-2004):						
0.00	4.00	2.00	2.00	0.00	4.00	0.90
Finland:						
Nominal budget balance (1998-2001):						
4.00	2.00	3.00	4.00	1.33	4.00	0.35
Change in the debt/GDP ratio (1998-2004):						
0.00	2.00	2.00	2.00	1.33	4.00	0.55
Structural balance as a % of GDP (1999-2002):						
0.00	4.00	2.00	2.00	0.00	0.00	0.55
Real public expenditure ceiling (1999-2004):						
0.00	0.00	2.00	2.00	1.33	0.00	0.30
Allocation of revenue surpluses (1999-2004):						
4.00	2.00	2.00	4.00	0.00	0.00	0.13

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Appendix Table 2 (continued)

Scores for the elements of the numerical fiscal rules indices (1998-2004)

Statutory basis	Adjustment margin	Moni-toring	Enforcement		Escape clauses	Coverage
			Body	Mechanism		
Finland (continued):						
Nominal budget balance (2001-2004):						
4.00	2.00	3.00	4.00	2.66	4.00	0.35
Budget balance as a % of GDP (2003-2004):						
0.00	2.00	2.00	2.00	0.00	0.00	0.55
France:						
Budget balance (1998-2004):						
4.00	4.00	3.00	2.00	1.33	0.00	0.23
Real expenditure growth (1998-2004):						
0.00	2.00	3.00	0.00	0.00	0.00	0.40
Volume ceiling for public spending growth (1998-2004):						
0.00	0.00	3.00	2.00	1.33	0.00	0.18
Germany:						
Nominal budget balance (1998-2004):						
4.00	0.00	3.00	0.00	0.00	4.00	0.30
Nominal budget balance (1998-2004):						
4.00	0.00	1.00	2.00	4.00	0.00	0.13
Nominal budget balance (1998-2004):						
4.00	0.00	1.00	0.00	0.00	4.00	0.35
Nominal debt ceiling (1998-2004):						
4.00	2.00	2.00	2.00	2.66	0.00	0.13
Nominal expenditure growth rate (1998-2004):						
2.00	2.00	1.00	2.00	0.00	0.00	0.55
Ireland:						
Allocation of expenditure (2000-2004):						
4.00	4.00	2.00	2.00	1.33	4.00	0.05
Nominal budget balance (2004):						
2.00	2.00	1.00	2.00	4.00	0.00	0.20
Nominal expenditure ceiling (2004):						
4.00	2.00	2.00	2.00	0.00	0.00	0.13
Italy:						
Nominal expenditure growth (1999-2004):						
4.00	2.00	1.00	2.00	4.00	0.00	0.30
Nominal budget balance (2001-2004):						
4.00	0.00	3.00	2.00	0.00	4.00	0.35
Nominal budget balance (2001-2004):						
4.00	2.00	2.00	2.00	4.00	0.00	0.07

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Appendix Table 2 (concluded)

Scores for the elements of the numerical fiscal rules indices (1998-2004)

Statutory basis	Adjustment margin	Moni-toring	Enforcement		Escape clauses	Coverage
			Body	Mechanism		
Italy (continued):						
Nominal expenditure ceiling (2001-2004):						
4.00	2.00	2.00	2.00	2.66	0.00	0.05
Netherlands:						
Real public expenditure ceiling (1998-2004):						
2.00	2.00	2.00	2.00	2.66	0.00	1.00
Allocation of excess revenues (1998-2004):						
2.00	2.00	2.00	2.00	2.66	0.00	1.00
Portugal:						
Nominal budget balance (2002-2004):						
4.00	0.00	1.00	2.00	0.00	0.00	0.13
Net borrowing ceiling (2003-2004):						
4.00	2.00	1.00	2.00	0.00	4.00	0.13
Spain:						
Debt ceiling (1998-2004):						
4.00	4.00	2.00	2.00	2.66	0.00	0.35
Debt ceiling as a % of current revenue (1998-2004):						
4.00	4.00	2.00	2.00	2.66	0.00	0.13
Budget balance as a % of GDP (2002-2004):						
4.00	2.00	2.00	2.00	4.00	0.00	1.00
Nominal debt ceiling (2003-2004):						
2.00	4.00	2.00	2.00	2.66	4.00	0.35
Sweden:						
Nominal expenditure ceiling (1998-2004):						
4.00	2.00	4.00	2.00	4.00	0.00	0.65
Budget balance (2000-2004):						
4.00	2.00	3.00	0.00	0.00	0.00	0.45
Structural balance as a % of GDP (2000-2004):						
2.00	2.00	4.00	0.00	0.00	0.00	1.00
United Kingdom:						
Budget balance as a % of GDP (1998-2004):						
4.00	2.00	3.00	2.00	2.66	4.00	1.00
Debt ceiling as a % of GDP (1998-2004):						
4.00	2.00	4.00	2.00	2.66	4.00	1.00

Source: European Commission (2012c).

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Appendix Table 3

Numerical fiscal rules indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Austria	0.00	12.25	12.25	14.25	14.25	14.25	14.25	11.64
Belgium	15.67	13.42	12.07	12.07	12.07	12.07	12.07	12.78
Denmark	12.50	12.50	12.50	23.30	23.30	23.30	23.30	18.67
Finland	12.65	20.15	20.15	27.03	20.61	19.51	19.51	19.94
France	6.33	6.33	6.33	6.33	6.33	6.33	6.33	6.33
Germany	13.26	13.26	13.26	13.26	13.26	13.26	13.26	13.26
Greece	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ireland	0.00	0.00	0.87	0.87	0.87	0.87	4.32	1.11
Italy	0.00	3.90	3.90	10.06	10.06	10.06	10.06	6.86
Netherlands	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32
Portugal	0.00	0.00	0.00	0.00	0.91	2.60	2.60	0.87
Spain	6.96	6.96	6.96	6.96	20.96	26.79	26.79	14.63
Sweden	10.40	10.40	22.45	22.45	22.45	22.45	22.45	19.00
United Kingdom	36.32	36.32	36.32	36.32	36.32	36.32	36.32	36.32

Source: Calculated from data in Appendix Table 2.

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Appendix Table 4

Scores for the elements of the procedural fiscal rules indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Agenda-setting powers in the budget-negotiation stage:								
Austria	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Belgium	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Denmark	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Finland	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Greece	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Ireland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Italy	4.00	4.00	4.00	1.00	1.00	1.00	1.00	2.29
Netherlands	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Portugal	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Spain	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Sweden	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
United Kingdom	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Scope for amendment of budget proposals in the approval stage:								
Austria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Belgium	0.00	0.00	0.00	0.00	0.00	4.00	4.00	1.14
Denmark	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greece	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Ireland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Italy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Sequence of voting on budget proposals in the approval stage:								
Austria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Belgium	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Denmark	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

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Appendix Table 4 (continued)

Scores for the elements of the procedural fiscal rules indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Sequence of voting on budget proposals in the approval stage (continued):								
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Netherlands	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Sweden	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Political implications of budget disputes in the approval stage:								
Austria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Belgium	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Denmark	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Finland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Ireland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Italy	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Netherlands	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Portugal	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Scope for budget-law changes in the execution stage:								
Austria	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Belgium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Denmark	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Germany	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greece	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ireland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Italy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

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Appendix Table 4 (concluded)

Scores for the elements of the procedural fiscal rules indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Scope for transferring allocations between ministerial budgets:								
Austria	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Belgium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Denmark	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Finland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Greece	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Ireland	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Italy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Sweden	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Procedures for reacting to budget-balance deteriorations:								
Austria	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Belgium	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Denmark	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Ireland	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Italy	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Sources: Hallerberg et al. (2009: 58-67); Fabrizio and Mody (2010: 384-386).

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Appendix Table 5

Procedural fiscal rules indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Austria	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Belgium	14.00	14.00	14.00	14.00	14.00	18.00	18.00	15.14
Denmark	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Finland	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
France	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Germany	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Greece	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Ireland	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Italy	16.00	16.00	16.00	13.00	13.00	13.00	13.00	14.29
Netherlands	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Portugal	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Spain	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Sweden	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
United Kingdom	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00

Source: Calculated from data in Appendix Table 4.

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Appendix Table 6

Scores for the elements of the fiscal councils indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Councils providing fiscal policy analysis – Status and independence:								
Austria	0.00	0.00	0.00	0.00	4.00	4.00	4.00	1.71
Belgium	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Denmark	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	4.00	4.00	4.00	4.00	4.00	4.00	3.43
Netherlands	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Portugal	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Spain	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Sweden	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
United Kingdom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Councils providing fiscal policy analysis – Other characteristics:								
Austria	0.00	0.00	0.00	0.00	2.00	2.00	2.00	0.86
Belgium	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Denmark	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	3.00	3.00	3.00	3.00	3.00	3.00	2.57
Netherlands	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Portugal	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Spain	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Sweden	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
United Kingdom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Councils providing macroeconomic or fiscal forecasts – Status and independence:								
Austria	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Belgium	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Denmark	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

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Appendix Table 6 (continued)

Scores for the elements of the fiscal councils indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Councils providing macroeconomic or fiscal forecasts – Status and independence (continued):								
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	4.00	4.00	4.00	4.00	4.00	4.00	3.43
Netherlands	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
United Kingdom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Councils providing macroeconomic or fiscal forecasts – Other characteristics:								
Austria	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Belgium	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Denmark	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	3.00	3.00	3.00	3.00	3.00	3.00	2.57
Netherlands	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
United Kingdom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Councils providing normative assessments/recommendations – Status and independence:								
Austria	0.00	0.00	0.00	0.00	4.00	4.00	4.00	1.71
Belgium	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Denmark	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Germany	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Greece	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Spain	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Sweden	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
United Kingdom	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

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Appendix Table 6 (concluded)

Scores for the elements of the fiscal councils indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Councils providing normative assessments/recommendations – Other characteristics:								
Austria	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.43
Belgium	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Denmark	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Germany	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Greece	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Spain	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Sweden	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
United Kingdom	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Source: European Commission (2012c).

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Appendix Table 7

Fiscal councils indices (1998-2004)

Country	1998	1999	2000	2001	2002	2003	2004	Average
Austria	5.00	5.00	5.00	5.00	16.00	16.00	16.00	9.28
Belgium	15.00	15.00	15.00	15.00	15.00	15.00	15.00	14.00
Denmark	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
France	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Germany	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Greece	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	14.00	14.00	14.00	14.00	14.00	14.00	7.78
Netherlands	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Portugal	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.17
Spain	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Sweden	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.11
United Kingdom	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00

Source: Calculated from data in Appendix Table 6.

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Appendix Table 8

General government conventional balances (1970-1991)

Country	1970	1971	1972	1973	1974	1975	1976	1977
Austria	-0.5	0.1	-0.2	-1.6	-1.6	-4.0	-4.7	-2.4
Belgium	-1.6	-2.8	-4.3	-3.4	-2.2	-4.7	-5.6	-5.9
Denmark	2.4	3.9	3.9	5.3	3.2	-1.4	-0.2	-0.6
Finland	0.9	0.7	1.2	2.9	0.8	-2.2	0.0	-1.5
France	0.9	0.6	0.6	0.6	0.3	-2.4	-0.7	-0.8
Germany	0.2	-0.2	-0.5	1.2	-1.3	-5.6	-3.4	-2.4
Greece	-1.7	-1.9	-2.6	-2.3	-3.2	-3.9	-3.8	-3.7
Ireland	-6.3	-5.4	-5.6	-6.2	-11.6	-13.0	-10.5	-9.7
Italy	-4.8	-6.6	-7.4	-8.3	-7.3	-11.9	-8.5	-7.1
Netherlands	-1.1	-1.2	-0.1	0.0	0.0	-2.8	-2.4	-3.0
Portugal	-1.7	-1.1	-2.4	-1.3	-2.6	-8.4	-11.5	-6.5
Spain	-0.7	-1.6	-0.5	-0.3	-1.2	-1.8	-0.9	-2.2
Sweden	-1.7	-1.3	-1.2	-1.4	-3.0	-2.5	-0.3	-1.6
United Kingdom	3.0	1.3	-1.3	-2.7	-3.8	-4.5	-4.9	-3.2
Country	1978	1979	1980	1981	1982	1983	1984	1985
Austria	-2.8	-2.4	-1.7	-1.8	-3.4	-4.0	-2.6	-2.5
Belgium	-6.8	-8.8	-11.5	-16.0	-14.1	-14.6	-11.7	-8.9
Denmark	-0.3	-1.7	-3.3	-6.9	-9.1	-7.2	-4.1	-2.0
Finland	-1.8	-2.5	-2.2	-0.9	-2.1	-2.9	-1.0	0.1
France	-2.1	-0.8	0.0	-1.9	-2.8	-3.2	-2.8	-2.9
Germany	-2.4	-2.6	-2.9	-3.7	-3.3	-2.6	-1.9	-1.2
Greece	-3.7	-3.6	-3.1	-8.6	-6.8	-9.2	-13.6	-16.5
Ireland	-14.6	-15.5	-16.6	-19.4	-18.4	-15.4	-14.5	-13.7
Italy	-8.5	-8.3	-8.5	-11.6	-11.3	-10.6	-11.6	-12.5
Netherlands	-3.0	-4.5	-3.9	-5.4	-6.9	-6.2	-6.1	-4.6
Portugal	-11.8	-10.1	-9.7	-11.8	-11.0	-14.5	-11.6	-9.6
Spain	-2.4	-3.5	-2.6	-3.9	-5.6	-4.8	-5.5	-7.0
Sweden	-4.9	-7.1	-4.0	-5.2	-7.0	-5.0	-2.9	-3.6
United Kingdom	-4.4	-3.3	-3.4	-2.6	-2.5	-3.3	-3.9	-2.9
Country	1986	1987	1988	1989	1990	1991		Compliance
Austria	-3.7	-4.3	-3.0	-2.8	-2.2	-2.5		16
Belgium	-11.1	-9.3	-7.8	-6.4	-5.8	-6.6		3
Denmark	3.4	2.4	0.6	-0.5	-1.5	-2.1		17
Finland	-0.1	-0.5	1.3	2.9	5.3	-1.5		22
France	-2.7	-1.9	-1.7	-1.3	-1.6	-2.2		21
Germany	-1.3	-1.9	-2.1	0.1	-2.0	-3.4		17
Greece	-12.3	-13.5	-15.3	-20.0	-15.2	-13.1		4

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Appendix Table 8 (concluded)

General government conventional balances (1970-1991)

Country	1986	1987	1988	1989	1990	1991	Compliance
Ireland	-12.8	-9.8	-3.3	-2.7	-2.5	-2.9	3
Italy	-12.0	-11.3	-11.2	-10.5	-11.4	-10.7	0
Netherlands	-5.9	-5.9	-4.6	-4.7	-5.1	-2.5	10
Portugal	-6.9	-7.9	-6.1	-4.8	-6.5	-6.5	5
Spain	-6.0	-3.1	-3.3	-2.8	-3.9	-5.0	11
Sweden	-1.2	4.2	3.5	3.4	4.2	-1.1	15
United Kingdom	-2.4	-1.3	1.0	0.9	-1.2	-2.7	13

Source: Tanzi and Fanizza (1995: 2-3).

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REFERENCES

ÅKERHOLM, J. (1995): Finland's convergence programme. *Bulletin of the Bank of Finland*, 69(10): 12-14.

ALESINA, A., R. HAUSMANN, R. HOMMES AND E.H. STEIN (1999): Budget institutions and fiscal performance in Latin America. *Journal of Development Economics*, 59(2): 253–73.

ALT, J.E. AND D.D. LASSEN (2006): Fiscal transparency, political parties, and debt in OECD countries. *European Economic Review*, 50: 1403-1439.

ARGY, V. (1988): A post-war history of the rules vs discretion debate. *Banca Nazionale del Lavoro Quarterly Review*, 165: 147-177.

ARTER, D. (1987): *Politics and policy-making in Finland*. Brighton: Wheatsheaf Books.

ARTIS, M.J. AND M. BUTI (2000): "Close-to-balance or in surplus": A policy-maker's guide to the implementation of the Stability and Growth Pact. *Journal of Common Market Studies*, 38(4): 563-591.

AYUSO-I-CASALS, J., D. GONZALEZ HERNANDEZ, L. MOULIN AND A. TURRINI (2007). Beyond the SGP: features and effects of EU national-level fiscal rules. In *Fiscal policy: current issues and challenges* (Proceedings of the Bank of Italy workshop held in Perugia from 29-31 March 2007): 651-701.

BALASSONE, F. AND D. FRANCO (2001): EMU fiscal rules: a new answer to an old question? In *Fiscal Rules* (Proceedings of the Bank of Italy workshop on fiscal rules held in Perugia from 1-3 February 2001): 33-58.

BALASSONE, F. AND M.S. KUMAR (2007): Cyclicality of fiscal policy. In *Promoting fiscal discipline* (edited by M.S. Kumar and T. Ter-Minassian). Washington, DC: The International Monetary Fund: 19-35.

BARRO, R.J. (1974): Are government bonds net wealth? *Journal of Political Economy*, 82: 1095-1117.

BARRO, R.J. AND D. GORDON (1983a): A positive theory of monetary policy in a natural rate model. *Journal of Political Economy*, 91(4): 589-610.

BARRO, R.J. AND D. GORDON (1983b): Rules, discretion and reputation in a model of monetary policy. *Journal of Monetary Economics*, 12: 101-121.

BARRY, F. (2000): Convergence is not automatic: lessons from Ireland for Central and Eastern Europe. *The World Economy*, 23(10) 1379–1394.

Stellenbosch University http://scholar.sun.ac.za

BARRY, F. (2002): The Celtic Tiger era: Delayed convergence or regional boom? *Economic and Social Research Institute Quarterly Economic Commentary*, Summer: 84-91.

BARRY, F. AND J. FITZGERALD (2001): Irish fiscal policy and the Brussels-Dublin controversy. Paper prepared for presentation to the Swedish Committee on Stabilisation Policy in EMU in Stockholm on 3 May 2001. Dublin: University College Dublin and the Economic and Social Research Institute.

BASTIDA, F. AND B. BENITO (2007): Central government budget practices and transparency: an international comparison. *Public Administration*, 85(3): 667-716.

BEETSMA, R.M.W.J. AND M. GIULIODORI (2010): The macroeconomic costs and benefits of the EMU and other monetary unions: an overview of recent research. *Journal of Economic Literature*, 48: 603-641.

BEETSMA, R.M.W.J., M. GIULIODORI AND P. WIERTS (2009): Planning to cheat: EU fiscal policy in real time. *Economic Policy*, 24(60): 753–804.

BERGANZA, J.C (2012): Fiscal rules in Latin America: a survey. *Bank of Spain Occasional Paper No. 1208*. Madrid: Bank of Spain.

BERG-SCHLOSSER, D., G. DE MEUR, B. RIHOUX AND C.C. RAGIN (2009): Qualitative comparative analysis (QCA) as an approach. In *Configurational comparative methods: qualitative comparative analysis (QCA) and related techniques* (edited by B. Rihoux and C.C. Ragin). Thousand Oaks, CA: Sage Publishers: 1-18.

BLACKBURN, K. AND M. CHRISTENSEN (1989): Monetary policy and policy credibility: theories and evidence. *Journal of Economic Literature*, 27(1): 1-45.

BLINDER, A.S. (1987): The rules-versus-discretion debate in the light of recent experience. *Weltwirtschafliches Archiv*, 123(3): 399-413.

BLÖNDAL, J., J.K. KRISTENSEN AND M. RUFFNER (2002): Budgeting in Finland. *OECD Journal on Budgeting*, 2(2): 119-152.

BOVENBERG, A.L., J.J.M. KREMERS AND P.R. MASSON (1991): Economic and monetary union in Europe and constraints on national budgetary policies. *IMF Staff Papers*, 38(2): 374-398.

BRAMBOR, T., W.R. CLARK AND M. GOLDER (2005): Understanding interaction models: improving empirical analyses. *Political Analysis*, 13: 1–20.

BRAUN, M. AND N. GADANO (2007): What are fiscal rules for? A critical analysis of the Argentine experience. *Cepal Review*, 91: 53-65.

Stellenbosch University http://scholar.sun.ac.za

BRITISH BROADCASTING CORPORATION NEWS (2005):

BRÜCK, T. AND A. STEPHAN (2006): Do Eurozone countries cheat with their budget deficit forecasts? *Kyklos*, 59(1): 3-15.

BRUNILA, A. (2000): Public finances in the twenty-first century: limitations, challenges and directions of reform in Finland. In *Fiscal sustainability* (Proceedings of the Bank of Italy workshop on fiscal sustainability held in Perugia from 20-22 January 2000): 589-611.

BRZOZOWSKI, M. AND J. SIWÍNSKA-GORZELAK (2010): The impact of fiscal rules on fiscal policy volatility. *Journal of Applied Economics*, 13(2): 205-231.

BUITER, W.H. AND U.R. PATEL (2010): Fiscal rules in India: are they effective? *NBER Working Paper No. 15934*. Cambridge, MA: National Bureau of Economic Research.

BUITER, W.H., G. CORSETTI AND N. ROUBINI (1993): Excessive deficits: sense and nonsense in the Treaty of Maastricht. *Economic Policy*, 8(16): 57-100.

BURNS, A. AND A. GOGLIO (2004): Public expenditure management in France. *OECD Economics Department Working Paper No. 409*. Paris: Organisation for Economic Co-operation and Development.

BUTI, M. AND G. GIUDICE (2002): Maastricht's fiscal rules at ten: an assessment. *Journal of Common Market Studies*, 40(5): 823-848.

CAFRUNY, A. AND M. RYNER (2008): Is the SGP crisis also the crisis of the EU? Assessing the EMU from a structural, transatlantic perspective. In *Between growth and stability: the demise and reform of the European Union's Stability and Growth Pact* (edited by L.S. Talani and B. Casey). Cheltenham: Edward Elgar: 60-84.

CALMFORS, L. AND S. WREN-LEWIS (2011): What should fiscal councils do? *Economic Policy*, 26(68): 649–695.

CENTRAL STATISTICS OFFICE (2014): Expenditure on gross national income at constant market prices (chain linked annually and referenced to year 2012) by item and year. Accessed on 5 July 2014. Available online at: http://www.cso.ie/px/pxeirestat/Database/eirestat/National%20Income%20and%20Expenditure%20Annual%20Results%202013/National%20Income%20and%20Expenditure%20Annual%20Results%202013_statbank.asp?SP=National

Stellenbosch University http://scholar.sun.ac.za

%20Income%20and%20Expenditure%20Annual%20Results%202013&Plangua ge=0.

CHEVAUCHEZ, B. (1992): Government budgeting and accounting reforms in France. In *Models of public budgeting and accounting reform* (edited by J.L. Chan and C. Xiaoyue). Paris: Organisation for Economic Co-Operation and Development: 285-303. Published as a supplement to volume 2 of the *OECD Journal on Budgeting*.

CLARK, W.R., M.J. GILLIGAN AND M. GOLDER (2006): A simple multivariate test for asymmetric hypotheses. *Political Analysis*, 14(3): 311-331.

CLIFT, B. (2006): The new political economy of *dirigisme*: French macroeconomic policy, unrepentant sinning and the Stability and Growth Pact. *British Journal of Politics and International Relations*, 8(3): 388-409.

CLIFT, B. AND J. TOMLINSON (2004): Fiscal policy and capital mobility: the construction of economic policy rectitude in Britain and France. *New Political Economy*, 9(4): 515-537.

COLE, A. (1999): The *service public* under stress. *West European Politics*, 22(4): 166-184.

COLLINS, N. AND T. CRADDEN (2007): Introduction: the basics of Irish government. In *Modernising Irish government: the politics of administrative reform* (edited by N. Collins, P. Butler and T. Cradden). Dublin: Gill and Macmillan: 1-10.

COMMISSION OF THE EUROPEAN COMMUNITIES (1993): Broad economic policy guidelines and convergence report. *European Economy No. 55*. Brussels: Commission of the European Communities (Directorate-General for Economic and Financial Affairs).

CORBACHO, A. AND G. SCHWARTZ (2007): Fiscal responsibility laws. In *Promoting fiscal discipline* (edited by M.S. Kumar and T. Ter-Minassian). Washington, DC: The International Monetary Fund: 58-105.

CORSETTI, G. AND N. ROUBINI (1996): Budget deficits, public sector solvency and political biases in fiscal policy: a case study of Finland. *Finnish Economic Papers*, 9(1): 18-36.

COUNCIL OF THE EUROPEAN UNION (2005): *Presidency conclusions*. Brussels (22-23 March 2005).

Stellenbosch University http://scholar.sun.ac.za

COUNCIL OF THE EUROPEAN UNION (2011): Directive on requirements for budgetary frameworks of the Member States. *Council Directive No. 2011/85/EU*. Brussels (8 November 2011).

DEBRUN, X. AND M.S. KUMAR (2007a): Fiscal rules, fiscal councils and all that: commitment devices, signaling tools or smokescreens? In *Current issues and challenges in fiscal rules* (Proceedings of the Bank of Italy workshop held in Perugia from 29-31 March 2007): 479-512.

DEBRUN, X. AND M.S. KUMAR (2007b): The discipline-enhancing role of fiscal institutions: theory and empirical evidence. *IMF Working Paper No. 07/171*. Washington, DC: The International Monetary Fund.

DEBRUN, X., D. HAUNER AND M.S. KUMAR (2007a): Discretion, institutions, and fiscal discipline. In *Promoting fiscal discipline* (edited by M.S. Kumar and T. Ter-Minassian). Washington, DC: The International Monetary Fund: 9-18.

DEBRUN, X., D. HAUNER AND M.S. KUMAR (2007b): The role for fiscal agencies. In *Promoting fiscal discipline* (edited by M.S. Kumar and T. Ter-Minassian). Washington, DC: The International Monetary Fund: 106-134.

DEBRUN, X., D. HAUNER AND M.S. KUMAR (2009): Independent fiscal agencies. *Journal of Economic Surveys*, 23(1): 44-81.

DEBRUN, X., T. KINDA, T. CURRISTINE, L. EYRAUD, J. HARRIS AND J. SEIWALD (2013): The functions and impact of fiscal councils. *IMF Policy Paper*. Washington, DC: The International Monetary Fund.

DEBRUN, X., L. MOULIN, A. TURRINI, J. AYUSO-I-CASALS AND M.S. KUMAR (2008): Tied to the mast? National fiscal rules in the European Union. *Economic Policy*, 23(54): 299–362.

DE GRAUWE, P. (1992): *The economics of monetary integration*. Oxford: Oxford University Press.

DELONG, J.B. AND L.H. SUMMERS (2012): Fiscal policy in a depressed economy. *Brookings Papers in Economic Policy*, 44(1): 233-297.

DORMOIS, J-P. (2004): *The French economy in the twentieth century*. Cambridge: Cambridge University Press.

DORNBUSCH, R. (1989): Credibility, debt and unemployment: Ireland's failed stabilization. *Economic Policy*, 4(8): 173-201, 208-209.

Stellenbosch University http://scholar.sun.ac.za

DORNBUSCH, R., S. FISCHER AND R. STARTZ (2004): *Macroeconomics*. Ninth edition. New York: McGraw-Hill.

DOYLE, M.F. (1983): Management of the public finances in Ireland since 1961. *Public Budgeting and Finance*, 3(2): 64-78.

DRAZEN, A. (2004): Fiscal rules from a political economy perspective. In *Rules-based fiscal policy in emerging markets: background, analysis and prospects*, edited by G. Kopits. Basingstoke: Palgrave Macmillan: 15-29.

DUVERGER, M. (1954): *Political parties: their organisation and activity in the modern state*. New York: Wiley.

EICHENBAUM, M.S. (1997). Some thoughts on practical stabilization policy. *American Economic Review*, 87(2): 236-239.

EPSTEIN, J., D. DUERR, L. KENWORTHY AND C.C RAGIN (2008): Comparative employment performance: a fuzzy-set analysis. In *Method and substance in macrocomparative analysis* (edited by L. Kentworthy and A. Hicks). Basingstoke: Palgrave Macmillan: 67-90.

EUROPEAN COMMISSION (1998): Commission's recommendation concerning the third stage of economic and monetary union. *European Economy No. 65*. Brussels: European Commission (Directorate General for Economic and Financial Affairs).

EUROPEAN COMMISSION (2002): Coordination of economic policies in the EU: a presentation of the key features of the main procedures. *Euro Papers No. 45*. Brussels: European Commission (Directorate General for Economic and Financial Affairs).

EUROPEAN COMMISSION (2005): Public finances in EMU (2005). *European Economy 3/2005*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

EUROPEAN COMMISSION (2006): Public finances in EMU (2006). *European Economy 3/2006*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

EUROPEAN COMMISSION (2007): Public finances in EMU (2007). *European Economy 3/2007*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

Stellenbosch University http://scholar.sun.ac.za

EUROPEAN COMMISSION (2012): Fiscal frameworks across Member States. *European Economy Occasional Paper No. 91*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

EUROPEAN COMMISSION (2013a): *Statistical annex to European Economy – Autumn 2013*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

EUROPEAN COMMISSION (2013b): *Cyclical adjustment of budget balances – Autumn 2013.* Brussels: European Commission (Directorate General: Economic and Financial Affairs).

EUROPEAN COMMISSION (2014a): EU economic governance. Accessed on 7 February 2014. Available online at: http://ec.europa.eu/economy_finance/economic_governance/index_en.htm.

EUROPEAN COMMISSION (2014b): Fiscal rules database. Accessed on 7 February 2014. Available online at: http://ec.europa.eu/economy_finance/db_indicators/fiscal_governance/documents/fiscal_rules_2012_final_200114.xlsx.

EUROPEAN COMMISSION (2014c): Fiscal institutions database. Accessed on 7 February 2014. Available online at: http://ec.europa.eu/economy_finance/db_indicators/fiscal_governance/documents/fiscal_institutions_2012_final.xlsx.

FABRIZIO, S. AND A. MODY (2010): Breaking the impediments to budgetary reforms: evidence from Europe. *Economics and Politics*, 22(3): 362-391.

FATÁS, A. AND I. MIHOV (2003a): On constraining fiscal policy discretion in EMU. *Oxford Review of Economic Policy*, 19(1): 112-131.

FATÁS, A. AND I. MIHOV (2003b): The case for restricting fiscal policy discretion. *Quarterly Journal of Economics*, 118(4): 1419-1447.

FISCHER, S. (1988): Rules versus discretion in monetary policy. *NBER Working Paper No. 2518*. Cambridge, MA: National Bureau of Economic Research.

FISS, P.C. (2011): Building better causal theories: a fuzzy set approach to typologies in organization research. *Academy of Management Journal*, 54(2): 393–420.

FRANKEL, J.A. (2011): A lesson from the South for fiscal policy in the US and other advanced countries. *Comparative Economic Studies*, 53(3): 407-430.

Stellenbosch University http://scholar.sun.ac.za

FRIEDMAN, M. (1948): A monetary and fiscal framework for economic stability. *American Economic Review*, 38: 245-264.

FRIEDMAN, M. (1957): *A theory of the consumption function*. Princeton, NJ: Princeton University Press.

FRIEDMAN, M. (1968): The role of monetary policy. *American Economic Review*, 58(1): 1-17.

FRIEDMAN, M. (1970): Comments on the critics: a theoretical framework for monetary analysis. *Journal of Political Economy*, 80(5): 906-950.

GALÍ, J. (2005): Modern perspectives on fiscal stabilization policies. *CESifo Economic Studies*, 51(4): 587–599.

GALÍ, J. AND R. PEROTTI (2003): Fiscal policy and monetary integration in Europe. *Economic Policy*, 18(37): 533-572.

GLEICH, H. (2003): Budget institutions and fiscal performance in Central and Eastern European Countries. *ECB Working Paper No. 215*. Frankfurt am Main: European Central Bank.

GOLLWITZER, S. (2010): Budget institutions and fiscal performance in Africa. *Journal of African Economies*, 20(1): 111–152.

GOVERNMENT OF FINLAND (1999): *Stability programme for Finland, September 1999*. Helsinki: Ministry of Finance.

GOVERNMENT OF FRANCE (2000): *French multiyear public finance programme up to 2004*. Paris: Ministry of Finance and Public Accounts.

GOVERNMENT OF FINLAND (2001): *Stability programme for Finland, November 2001*. Helsinki: Ministry of Finance.

GRÁDA, C.O. AND K. O'ROURKE (1996): Irish economic growth, 1945-88. In *Economic growth in Europe since 1945* (edited by N.F.R. Crafts and G. Toniolo). Cambridge: Cambridge University Press and the Centre for Economic Policy Research: 388-426.

HALL, P.A. (2006): Introduction: the politics of social change in France. In *Changing France: the politics that markets make* (edited by P.D. Culpepper, P.A. Hall and B. Palier), Basingstoke: Palgrave Macmillan: 1-26.

Stellenbosch University http://scholar.sun.ac.za

HALLERBERG, M., R. STRAUCH AND J. VON HAGEN (2007): The design of fiscal rules and forms of governance in European Union countries. *European Journal of Political Economy*, 23: 338-359.

HALLERBERG, M., R. STRAUCH AND J. VON HAGEN (2009): *Fiscal governance in Europe*. Cambridge: Cambridge University Press.

HARTWICK, J. AND H. BARKI (1994): Hypothesis testing and hypothesis generating research: an example from the user participation literature. *Information Systems Research*, 5(4): 446-449.

HATTON, T.J. AND J.G. WILLIAMSON (1993): After the famine: emigration from Ireland, 1850-1913. *Journal of Economic History*, 53(3): 575-600.

HAY, C., J.M. RIIHELÄINEN, N.J. SMITH AND M. WATSON (2008): Ireland: the outlier inside. In *The Euro at ten: Europeanization, power and convergence* (edited by K.F. Dyson). Oxford: Oxford University Press: 182-203.

HEIPERTZ, M. AND A. VERDUN (2004): The dog that would never bite? What we can learn from the origins of the Stability and Growth Pact. *Journal of European Public Policy*, 11(5): 765–780.

HEIPERTZ, M. AND A. VERDUN (2010): *Ruling Europe: the politics of the Stability and Growth Pact*. Cambridge: Cambridge University Press.

HEYNS, J. V.D. SPUY (1991): Begrotingsnorme in Suid-Afrika: retoriek, werklikheid en integriteit. *South African Journal of Economics*, 59(4): 384-404.

HITAJ, E. AND Y.K. ONDER (2013): Fiscal discipline in WAEMU: rules, institutions, and markets. IMF Working Paper No. 13/216. Washington, DC: The International Monetary Fund.

HOLM-HADULLA, F., S. HAUPTMEIER AND P. ROTHER (2011): The impact of expenditure rules on budgetary discipline over the cycle. *Applied Economics*, 44(25): 3287-3296.

HONOHAN, P. (1992): Fiscal adjustment in Ireland in the 1980s. *Economic and Social Review*, 23(3): 285-314.

HONOHAN, P. AND B. WALSH (2002): Catching up with the leaders: the Irish hare. *Brookings Papers on Economic Activity*, 2002(1): 1-57, 75-77.

HONKAPOHJA, S. AND E. KOSKELA (1999): The economic crisis of the 1990s in Finland. *Economic Policy*, 14(29): 401-424.

Stellenbosch University http://scholar.sun.ac.za

HOWARTH, D. (2002): The French state in the Euro-zone: "modernization" and legitimizing *dirigisme*. In *European states and the Euro* (edited by K. Dyson). Oxford: Oxford University Press: 145-172.

HOWARTH, D. (2007): Making and breaking the rules: French policy on EU "government économique". *Journal of European Public Policy*, 14(7): 1061-1078.

HOWARTH, D. (2008): Using Europe to keep the world at bay: French policy on EU economic governance. In *France on the world stage* (edited by M. Maclean and J. Szarka). Basingstoke: Palgrave Macmillan: 127-143.

HUBER, E. AND J.D. STEPHENS (1998): Internationalization and the social democratic model: crisis and future prospects. *Comparative Political Studies*, 31(3): 353-397.

HUNT, C. (2005): Discretion and cyclicality in Irish budgetary management, 1969-2003. *Economic and Social Review*, 36(3): 295-321.

INDEPENDENT REVIEW PANEL (2010): Strengthening the capacity of the Department of Finance. Report prepared for the Minister of Finance, Mr Brian Lenihan, by a Panel chaired by Mr Rob Wright. Dublin (3 December 2010).

INSEE (INSTITUT NACIONAL DE LA STATISTIQUE ET DES ETUDES ÉCONOMIQUES) (2013a): Gross domestic product and its components in volume at chained prices (billions of 2005 Euros). Accessed on 16 June 2013. Available online at: http://www.insee.fr/en/themes/comptes-nationaux/tableau.asp?sous_theme = 1&xml=t_1102.

INSEE (INSTITUT NACIONAL DE LA STATISTIQUE ET DES ETUDES ÉCONOMIQUES) (2013b): Expenditures and receipts of general government (billions of Euros). Accessed on 16 June 2013. Available online at: http://www.insee.fr/en/themes/comptes-nationaux/tableau.asp?sous_theme = 1&xml=t_3.201.

INSEE (INSTITUT NACIONAL DE LA STATISTIQUE ET DES ETUDES ÉCONOMIQUES) (2013c): Gross domestic product and its components in volume at current prices (billions of Euros). Accessed on 16 June 2013. Available online at: http://www.insee.fr/en/themes/comptes-nationaux/tableau.asp?sous_theme = 1&xml=t_1101.

INTERNATIONAL MONETARY FUND (1999): Finland – Selected issues. *IMF Staff Country Report No. 99/122*. Washington, D.C.: The International Monetary Fund.

Stellenbosch University http://scholar.sun.ac.za

INTERNATIONAL MONETARY FUND (2000): Ireland – Selected issues and statistical appendix. *IMF Staff Country Report No. 00/99*. Washington, D.C.: The International Monetary Fund.

INTERNATIONAL MONETARY FUND (2005): Ireland – Selected issues. *IMF Staff Country Report No. 05/370*. Washington, D.C.: The International Monetary Fund.

INTERNATIONAL MONETARY FUND (2013): Ireland – Fiscal transparency assessment. *IMF Country Report No. 13/209*. Washington, D.C.: The International Monetary Fund.

IRISH DEPARTMENT OF FINANCE (2014a): Budget 2000 statistics and tables. Accessed on 5 July 2014. Available online at: http://budget.gov.ie/Budgets/2000/Tables.aspx.

IRISH DEPARTMENT OF FINANCE (2014b): Budget 2001 statistics and tables. Accessed on 5 July 2014. Available online at: http://budget.gov.ie/Budgets/2001/Tables.aspx.

JONUNG, L., L. SCHUKNECHT AND M. TUJULA (2005): The boom-bust cycle in Finland and Sweden in 1984-1995 in an international perspective. *ECFIN Economic Papers No. 237*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

JOSPIN, L. (1999): *Modern socialism*. Paris: The Fabian Society.

KENNEDY, K.A., T. GIBLIN AND D. MCHUGH (1988): *The economic development of Ireland in the twentieth century*. London: Routledge.

KOPITS, G. (2001): Fiscal rules: useful policy framework or unnecessary ornament? *IMF Working Paper No. 01/145*. Washington, DC: The International Monetary Fund.

KOPITS, G. AND S. SYMANSKY (1998): Fiscal policy rules. *IMF Occasional Paper No. 162*. Washington, DC: The International Monetary Fund.

KRUGMAN, P. (1997): Good news from Ireland: a geographical perspective. In *International perspectives on the Irish economy* (edited by A.W. Gray). Dublin: Indecon Economic Consultants: 38-53.

KUFA, P., A. PELLECHIO AND S. RIZAVI (2013): Fiscal sustainability and policy issues in the Eastern Caribbean Currency Union. *IMF Working Paper No. 03/162*. Washington, DC: The International Monetary Fund.

Stellenbosch University http://scholar.sun.ac.za

KUMAR, M.S. AND T. TER-MINASSIAN (2007): Fiscal discipline: key issues and overview. In *Promoting fiscal discipline* (edited by M.S. Kumar and T. Ter-Minassian). Washington, DC: The International Monetary Fund: 1-8.

KUMAR, M., E. BALDACCI, A. SCHAECHTER, C. CACERES, D. KIM, X. DEBRUN, J. ESCOLANO, J. JONAS, P. KARAM, I. YAKADINA AND R. ZYMEK (2009): *Fiscal rules — anchoring expectations for sustainable public finances*. Washington, DC: The International Monetary Fund.

KVIST, J. (1999): Welfare reform in the Nordic countries in the 1990s: using fuzzy-set theory to assess conformity to ideal-types. *Journal of European Social Policy*, 9(3): 231-252.

KYDLAND, F.E. AND E.C. PRESCOTT (1977): Rules rather than discretion: the inconsistency of optimal plans. *Journal of Political Economy*, 85: 473-492.

LAGONA, F. AND F. PADOVANO (2007): A nonlinear principal component analysis of the relationship between budget rules and fiscal performance in the European Union. *Public Choice*, 130: 401–436.

LARCH, M., P. VAN DEN NOORD AND L. JONUNG (2010): The Stability and Growth Pact: lessons from the Great Recession. *ECFIN Economic Papers No. 429*. Brussels: European Commission (Directorate General: Economic and Financial Affairs).

LEEPER, E.M. (2009): Anchoring fiscal expectations. *Sveriges Riksbank Economic Review*, 3/2009: 73-114.

LEVY, J.D. (2008): From the dirigiste state to the social anaesthesia state: French economic policy in the longue durée. *Modern and Contemporary France*, 16(4): 417-435.

LIENERT, I. (2005): Who controls the budget: the legislature of the executive? *IMF Working Paper No. 05/115*. Washington, DC: The International Monetary Fund.

LIENERT, I. (2010): Should advanced countries adopt a Fiscal Responsibility Law? *IMF Working Paper No. 10/254*. Washington, DC: The International Monetary Fund.

LIENERT, I. AND M-K. JUNG (2004): France. In *The legal framework for budget systems: an international comparison* (edited by J. Blöndal). Paris: Organisation for Economic Co-Operation and Development: 185-218. Published as a special issue of the *OECD Journal on Budgeting*.

Stellenbosch University http://scholar.sun.ac.za

LJUNGMAN, G. (2008): Expenditure ceilings – a survey. *IMF Working Paper No. 08/282*. Washington, D.C.: International Monetary Fund (Fiscal Affairs Department).

LUCAS, R.E. (1976): Econometric policy evaluation: a critique. *Carnegie-Rochester Conference Series on Public Policy*, 1: 19-46.

LUCAS, R.E. AND T.J. SARGENT (1994): After Keynesian macroeconomics. In *The rational expectations revolution*, edited by P.J. Miller. Cambridge, MA: The MIT Press: 6-30. (Originally published in 1979.)

LUNDBACK, E.J. (2008): Medium-term budgetary frameworks – lessons for Austria from international experience. *IMF Working Paper No. 08/163*. Washington, D.C.: International Monetary Fund (European Department).

MCCALLUM, B.T. (1999): Issues in the design of monetary policy rules. In *Handbook of macroeconomics* (volume 1C, edited by J.B. Taylor and M. Woodford). Amsterdam: Elsevier Science: 1483-1530.

MCCALLUM, B.T. (2004): Misconceptions regarding rules vs. discretion for monetary policy. *Cato Journal*, 23(3): 365-372.

MCCRACKEN, P.W., G. CARLI, H. GIERSCH, R. MARJOLIN, R.C.O. MATTHEWS, A. KARAOSMANAGLU, R. KOMIYA AND A. LINDBECK (1977): *Toward full employment and price stability: a report to OECD by a group of independent experts*. Paris: Organisation for Economic Co-operation and Development.

MADDISON, A. (2003): *The world economy: historical statistics*. Paris: Organisation for Economic Co-operation and Development (The Development Centre).

MADISON, J. (1987a): Paper No 51 — The same subject continued with the same view and concluded. In *The federalist papers* (edited by J. Madison, A. Hamilton and J. Jay). London: Penguin Books: 318-322. (Originally published in 1788.)

MADISON, J. (1987b): Paper No 57 — The same subject continued in relation to the supposed tendency of the plan of the Convention to elevate the few above the many. In *The federalist papers* (edited by J. Madison, A. Hamilton and J. Jay). London: Penguin Books: 343-347. (Originally published in 1788.)

MAGGETTI, M. (2009): The role of independent regulatory agencies in policy-making: a comparative analysis. *Journal of European Public Policy*, 16(3): 450-470.

MAHONEY, J. AND G. GOERTZ (2006): A tale of two cultures: contrasting quantitative and qualitative research. *Political Analysis*, 14(3): 227-249.

Stellenbosch University http://scholar.sun.ac.za

MARNEFFE, W., B. VAN AARLE, W. VAN DER WIELEN AND L. VEREECK (2010): The impact of fiscal rules on public finances: theory and empirical evidence for the Euro area. *CESifo Working Paper No. 3303*. Munich: Centre for Economic Studies and IFO Institute.

MARTIN. E., I. TYTELL AND I. YAKADINA (2011): France: lessons from past fiscal consolidation plans. *IMF Working Paper No. 11/89*. Washington, DC: The International Monetary Fund.

MASSON, P.R. AND M. MUSSA (1995): Long-term tendencies in budget deficits and debt.

MILL, J.S. (1974) [1843]: *A system of logic: ratiocinative and inductive*. London: Routledge.

MJOSET, L. (1987): Nordic economic policies in the 1970s and 1980s. *International Organization*, 41(3): 403-456.

MORRIS, R., H. ONGENA AND L. SCHUKNECHT (2006): The reform and implementation of the Stability and Growth Pact. *ECB Occasional Paper No. 47*. Frankfurt am Main: European Central Bank.

MOULIN, L. (2004): Expenditure rules à la française: an assessment after five years. *ECFIN Country Focus*, 1(5): 1-7.

MOUTON, J. AND H.C. MARAIS (1988): *Basic concepts in the methodology of the social sciences*. Pretoria: Human Sciences Research Council.

MUTH, J. (1961): Rational expectations and the theory of price movements. *Econometrica*, 29(3): 315-335.

NERLICH, C. AND W.H. REUTER (2012): The design of national fiscal frameworks and their budgetary impact. Paper delivered at the European Central Bank-International Monetary Fund conference on the reform of fiscal governance in the EU. Frankfurt am Main: The European Central Bank.

NOUSIAINEN, J. (1994): Finland: ministerial autonomy, constitutional collectivism, and party oligarchy. In *Cabinet ministers and parliamentary government* (edited by M. Laver and K.A. Shepsle). Cambridge: Cambridge University Press: 88-105.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (1982): *Economic survey – Ireland*. Paris: Organisation for Economic Co-Operation and Development.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (1991): *Economic survey – Finland*. Paris: Organisation for Economic Co-Operation and Development.

Stellenbosch University http://scholar.sun.ac.za

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2000): *Economic survey – France*. Paris: Organisation for Economic Co-Operation and Development.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2001a): *Best practices for budget transparency*. Paris: Organisation for Economic Co-Operation and Development.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2001b): *Economic survey – France*. Paris: Organisation for Economic Co-Operation and Development.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2006): *Economic survey – Ireland*. Paris: Organisation for Economic Co-Operation and Development.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2013): International budget practices and procedures database. Accessed on 4 April 2013. Available online at: http://www.oecd.org/governance/budgeting/internationalbudgetpracticesand-proceduresdatabase.htm.

PAJUNEN, K. (2008): Institutions and inflows of foreign direct investment: a fuzzy-set analysis. *Journal of International Business Studies*, 39(4): 652-669.

PALIER, B. (2000): "Defrosting" the French welfare state. *West European Politics*, 23(2): 113-136.

PARTI SOCIALISTE (1997): Changeons d'avenir: nos engagements pour la France. Paris: PS Presse.

PÉREZ, J.J. (2012): Comments on Session 3. In *Rules and institutions for sound fiscal policy after the crisis* (Proceedings of the Bank of Italy workshop held in Perugia from 31 March to 2 April 2011): 537-541.

PERSSON, T. (1988): Credibility of macroeconomic policy: an introduction and a broad survey. *European Economic Review*, 32: 519-532.

PINA, A.M. AND N.M. VENES (2011): The political economy of EDP fiscal forecasts: an empirical assessment. *European Journal of Political Economy*, 27: 534-546.

PISANI-FERRY, J. (2002): Fiscal discipline and policy coordination in the Eurozone: assessment and proposals. Unpublished paper. Paris: University of Paris-Dauphine.

PLATO (1892a): Statesman. In *The dialogues of Plato* (volume 4), translated by B. Jowett. Third edition. Oxford: Clarendon Press. (Original date of publication unknown.)

Stellenbosch University http://scholar.sun.ac.za

POPLAWSKI RIBEIRO, M. (2009): New evidence on the effectiveness of Europe's fiscal restrictions. *CEPII Working Paper No. 2009-13*. Paris: CEPII.

POSNER, P. AND C-K. PARK (2007): Role of the legislature in the budget process: recent trends and innovations. *OECD Journal on Budgeting*, 7(3): 1-26.

PRESCOTT, E.C. (2006): The transformation of macroeconomic policy and research. *Journal of Political Economy*, 114(2): 203-235.

RAGIN, C.C. (1987): *The comparative method: moving beyond qualitative and quantitative strategies*. Berkeley, CA: University of California Press.

RAGIN, C.C. (2000): *Fuzzy-set social science*. Chicago: University of Chicago Press.

RAGIN, C.C. (2008): *Redesigning social inquiry: fuzzy sets and beyond*. Chicago: University of Chicago Press.

RAGIN, C.C. AND C. RUBINSON (2009): The distinctiveness of comparative research. In *The Sage handbook of comparative politics* (edited by T. Landman and N. Robinson). London: Sage Publishers: 13-34.

RIHOUX, B. (2003): Bridging the gap between the qualitative and quantitative worlds? A retrospective and prospective view on qualitative comparative analysis. *Field Methods*, 15: 351-365.

RIHOUX, B. (2006): Qualitative comparative analysis (QCA) and related systematic comparative methods: recent advances and remaining challenges for social science research. *International Sociology*, 21(5): 679-706.

RIHOUX, B. AND C.C. RAGIN (2009): Qualitative comparative analysis using fuzzy sets. In *Configurational comparative methods: qualitative comparative analysis (QCA) and related techniques* (edited by B. Rihoux and C.C. Ragin). Thousand Oaks, CA: Sage Publishers: 87-122.

RUEDA, D. AND J. PONTUSSON (2000): Wage inequality and varieties of capitalism. *World Politics*, 52(3): 350-383.

SACHS, J. AND C. WYPLOSZ (1986): The economic consequences of President Mitterrand. *Economic Policy*, 1(2): 261-322.

SAUNDERS, P. AND F. KLAU (1985): The role of the public sector. *OECD Economic Studies*, 4 (Special edition): 11-239.

Stellenbosch University http://scholar.sun.ac.za

SCHAECHTER, A., T. KINDA, N. BUDINA AND A. WEBER (2012): Fiscal rules in response to the crisis — toward the 'next-generation' rules. A new dataset. *IMF Working Paper No. 12/187*. Washington, DC: The International Monetary Fund.

SCHMIDT-HEBBEL, K. (2012): Fiscal institutions in resource-rich economies: lessons from Chile and Norway. *Documento de Trabajo No. 416*. Santiago: Pontificia Universidad Catolica de Chile (Instituto de Economia).

SCRUGGS, L. (2007): What's multiple regression got to do with it? *Comparative Social Research*, 24: 309-323.

SIEBRITS, F.K. AND E. CALITZ (2004): Should South Africa adopt numerical fiscal rules? *South African Journal of Economics*, 72(4): 759-783.

SIMONS, H. (1936): Rules versus authorities in monetary policy. *Journal of Political Economy*, 44(1): 1-30.

STATISTICS FINLAND (2013): Seats gained by party in parliamentary elections in 1945-2003. Accessed on 6 May 2013. Available online at: http://www.vaalitutkimus.fi/en/eduskuntavaalien_tulokset.html.

STEVENS, A. (2003): *Government and politics of France*. Third edition. Basingstoke: Palgrave Macmillan.

STRAUCH, R., M. HALLERBERG AND J. VON HAGEN (2004): Budgetary forecasts in Europe – the track record of the stability and convergence programmes. *ECB Working Paper No. 307*. Frankfurt am Main: European Central Bank.

TAAGEPERA, R. AND M. SOBERG SHUGART (1989): *Seats and votes: the effects and determinants of electoral systems*. New Haven: Yale University Press.

TALVI, E. AND C. VÉGH (2005): Tax base variability and procyclicality of fiscal policy. *Journal of Development Economics*, 78: 156-190.

TANZI, V. AND D. FANIZZA (1995): Fiscal deficits and public debt in industrial countries, 1970-1994. *IMF Working Paper No. 95/49*. Washington, D.C.: International Monetary Fund (Fiscal Affairs Department).

TANZI, V. AND L. SCHUKNECHT (2000): *Public spending in the 20th century*. Cambridge: Cambridge University Press.

TAPSOBA, R. (2012): Do national numerical fiscal rules really shape fiscal behaviours in developing countries? A treatment effect evaluation. *Economic Modelling*, 29(4): 1356–1369.

Stellenbosch University http://scholar.sun.ac.za

TARKKA, H. AND S. TULLA (2001): Re-allocation: aligning political priorities and budgetary funding – Finland. *OECD Journal on Budgeting*, 1(2): 85-99.

TAYLOR, J.B. (1986): An appeal for rationality in the policy activism debate. In *The monetary versus fiscal policy debate: lessons from two decades* (edited by R.W. Hafer). Totowa, NJ: Rowman and Allanheld: 151-163.

TAYLOR, J.B. (1993): Discretion versus policy rules in practice. *Carnegie-Rochester Conference Series on Public Policy*, 39: 195-214.

TAYLOR, J.B. (2000): Reassessing discretionary fiscal policy. *Journal of Economic Perspectives*, 14(3): 21-36.

TIIHONEN, P. (1990): Legal, political and practical aspects of budgetary decision-making in Finland. *Scandinavian Political Studies*, 13(4): 327-344.

TORNELL, A. AND P. LANE (1999): The voracity effect. *American Economic Review*, 89(1): 22-46.

TURRINI, A. (2008) Fiscal policy and the cycle in the Euro area: the role of government revenue and expenditure. *EC Economic Paper No. 323*. Brussels: European Commission.

VELASCO, A. (1999): A model of endogenous fiscal deficits and delayed fiscal reforms. In *Fiscal institutions and fiscal performance* (edited by J.M. Poterba and J. von Hagen). Chicago: National Bureau of Economic Research/University of Chicago Press: 37–58.

VIS, B. (2007): States of welfare or states of workfare? Welfare state restructuring in 16 capitalist democracies, 1985-2002. *Policy and Politics*, 35(1): 105-122.

VIS, B. (2011): Under which conditions does spending on active labor market policies increase? An FsQCA analysis of 53 governments between 1985 and 2003. *European Political Science Review*, 3(2): 229-252.

VIS, B., J. WOLDENDORP AND H. KEMAN (2007): Do miracles exist? Analysing economic performance comparatively. *Journal of Business Research*, 60: 531-538.

VON HAGEN, J. (1992): Budgeting procedures and fiscal performance in the European communities. *Economic Papers No. 96*. Brussels: Commission of the European Communities.

VON HAGEN, J. (2002): Fiscal rules, fiscal institutions, and fiscal performance. *Economic and Social Review*, 33(3): 263-284.

Stellenbosch University http://scholar.sun.ac.za

VON HAGEN, J. AND G. WOLFF (2006): What do deficits tell us about debt? Empirical evidence on creative accounting with fiscal rules in the EU. *Journal of Banking and Finance*, 30: 3259–3279.

WALSH, B.M. (2000): The role of tax policy in Ireland's economic renaissance. *Canadian Tax Journal*, 48(3): 658-673.

WIERTS, P. (2008): How do expenditure rules affect fiscal behaviour? *DNB Working Paper No. 166*. Amsterdam: Bank of the Netherlands.

WIERTS, P. (2010): Preferences for fiscal rules or discretion: a case study on Germany and France. Paper prepared for the German Ministry of Finance. Amsterdam: Bank of the Netherlands.

WINDELBAND, W. (1980) [1894]: History and natural science. *History and Theory*, 19(2): 165-184.

WOLDENDORP, J., B. VIS AND H. KEMAN (2012): Economic performance and institutions: capturing the dependent variable. *European Political Science Review*, 4(1): 73-96.

WOODFORD, M. (1999): How should monetary policy be conducted in an era of price stability? In *Fiscal policy: current issues and challenges* (Proceedings of the economic policy symposium of the Federal Reserve Bank of Kansas City in Jackson Hole, Wyoming, from 26-28 August 1999): 277-316.

WREN-LEWIS, S. (2010): Macroeconomic policy in light of the credit crunch: the return of counter-cyclical fiscal policy? *Oxford Review of Economic Policy*, 26(1): 71–86.

WREN-LEWIS, S. (2011): Lessons from failure: fiscal policy, indulgence and ideology. *National Institute Economic Review*, 217: R31-R46.

WYPLOSZ, C. (2005): Fiscal policy: institutions versus rules. *National Institute Economic Review*, 191: 64-78.

ZADEH, L. (1965): Fuzzy sets. *Information and Control*, 8: 338-353.