BUDGET INSTITUTIONS IN THE EURO AREA

Quality of budget institutions, legislative budgetary power and implications for fiscal discipline

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Abstract

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This study assesses the quality of national budget institutions and legislative budgetary power in the Euro Area (EA) and examines their implications on fiscal discipline. Following the sovereign debt crises, common EA requirements have been introduced for national budget institutions, most notably for fiscal rules and independent fiscal councils. Meanwhile, the legislature has a key role to ensure that budgetary decisions are democratically legitimate, but strong legislative budgetary power is generally associated with less fiscal restraint. Two comprehensive composite indices are produced, based on recent data which captures reforms implemented after the Crisis. The findings show that overall, budget institutions in the EA are of medium quality, whilst legislative budgetary power is weak. Notwithstanding the thrust for a 'one-size-fits-all' approach, the specific characteristics of budget institutions differ considerably among the EA countries. Furthermore, results from a two-way fixed effects panel model for 2006-2015 show a positive relationship between the quality of budget institutions and the budget balance, but, in contrast to previous studies, the effect is rather weak. Being supra-nationally mandated, recent reforms to budget institutions in EA member states may suffer from a lack of ownership, thus impinging on their effectiveness to instil fiscal discipline. A qualitative case study on Malta provides further insight into the limitations of centrally-mandated institutional reforms. Finally, the findings suggest that stronger legislative budgetary power does not necessarily jeopardise fiscal discipline, if this involves a broad role of the legislature in the budgetary process, beyond amendment powers.

Acknowledgements and Dedication

All doctoral studies require commitment and hard work. My PhD journey has been particularly long and difficult. It required considerable strength and courage to pursue my studies, given the medical problems that I faced during this period. It is thus a great personal satisfaction to complete this thesis, but I would not have been able to do so without the help and support of others.

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This thesis is dedicated to my beloved children, Eric and Elisa. May it inspire you to always believe in yourselves, to never give up and to work hard to achieve your goals.

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List of Abbreviations

AMECO	Annual Macro-Economic database of the European Commission’s Directorate General for Economic and Financial Affairs
CEECs	the Central and Eastern European Countries that joined the EU in 2004 and 2007 (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia)
CBM	Central Bank of Malta
CION	European Commission
DBP	Draft Budgetary Plan
DG Ecfin	Directorate General for Economic and Financial Affairs
EA	Euro Area (Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia and Spain)
ECB	European Central Bank
Ecofin	Economic and Financial Affairs Council
EDP	Excessive Deficit Procedure
EEC	European Economic Community
EMU	Economic and Monetary Union
ESA	European System of Accounts
ESM	European Stability Mechanism
EU	European Union
EU15	the 15 countries that were members of the EU between 1995 and 2003 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom)

EU27	the 27 countries that were members of the EU between 2007 and 30 June 2013 (EU15 plus the 10 CEECs, Malta and Cyprus)
EU28	the 28 countries that were members of the EU in 2018 (EU27 plus Croatia)
FRA	Fiscal Responsibility Act
GDP	Gross Domestic Product
GMM	Generalised Methods of Moments
IFI	Independent Fiscal Institution
IMF	International Monetary Fund
MFAC	Malta Fiscal Advisory Council
MFIN	Ministry for Finance
MTBF	Medium-term budgetary framework
MTO	Medium-term budgetary objective
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PAC	Public Accounts Committee
SGP	Stability and Growth Pact
SP	Stability Programme
TFEU	Treaty on the Functioning of the European Union
TSCG	Treaty on Stability, Coordination and Governance in the Economic and Monetary Union

List of Country Acronyms

AT	Austria
BE	Belgium
CY	Cyprus
EE	Estonia
FI	Finland
FR	France
DE	Germany
EL	Greece
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL	Netherlands
PT	Portugal
SK	Slovakia
SI	Slovenia
ES	Spain

Chapter 1:

Introduction

1st January 2019 marked the 20th anniversary of Europe's Economic and Monetary Union (EMU). The second half of the Euro's young history has been characterised by deep financial and economic turmoil, with sovereign debt crises and bail-outs of a number of Euro Area (EA) countries[1]. These developments led to an "existential crisis" of the monetary union (Buti et al. 2019: 1). Subsequently, financial stability has been gradually restored and the EA economy has slowly recovered[2]. But the bailed-out countries continue to suffer from the aftermath of the austerity response to the EA crisis[3], in terms of persistently high unemployment, especially among youths and increased poverty (Darvas et al. 2014), as well as the rise of populist political parties (Guiso et al. 2018). It is therefore not surprising that in contrast to the 10th EMU anniversary, when the former president of the European Central Bank (ECB), Jean-Claude Trichet boldly stated that "the euro has been a remarkable success" (ECB 2008: 2), a more cautionary stance was adopted during the 20th anniversary of the Euro, with emphasis on the need to conclude the ongoing work to complete the EMU (European Commission 2018a).

Indeed, the Great Crisis has brought to the fore fundamental weaknesses in the monetary union's architecture. Although there have been important developments, including the establishment of the European Stability Mechanism (ESM) to provide assistance to EA countries in financial difficulties and the initiation of a Banking Union in 2012[4], completing the EMU remains work in progress. The European Commission (CION)'s (2017a) roadmap presents various proposals to complete the financial, fiscal and economic union and to strengthen EMU's democratic accountability and governance[5].

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[1] Greece was the first country to receive financial support from EA member states and the International Monetary Fund (IMF) in 2010. It was followed by Ireland, Portugal, Spain and Cyprus. Latvia received support from the European Union (EU) balance of payments assistance programme in 2008, prior to joining the EA. Further details are available at: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance_en.

[2] In its October 2018 World Economic Outlook, the IMF (2018a) expects economic growth in the EA at around 2% in 2019.

[3] The EA crisis refers to the financial crisis which hit Europe in 2008 and the subsequent economic recession and sovereign debt crises. Thereafter, these are jointly referred to as the Great Crisis.

[4] Further details are available at: https://www.esm.europa.eu and https://www.consilium.europa.eu/en/policies/banking-union/.

[5] This roadmap is based on the CION's (2015a) report for completing Europe's EMU by the Presidents of the CION, the Euro Summit, the Eurogroup, the ECB and the European

But the Great Crisis has caused deep rifts and a lack of mutual trust among the EA member states, so that a common, unified approach on the future of EMU remains elusive (Buti et al. 2019). At a more general level, the increasing Euroscepticism[6] and the prospect of Brexit[7] have also hampered further integration efforts within the EA.

Meanwhile, the sovereign debt crises have clearly shown that a lack of fiscal restraint in any member state can have grave repercussions on the rest of the monetary union. Thus, subsequently, there has been an increased emphasis on the need to ensure fiscal discipline within the EA. The institutional set-up of the EA is unique in that, whilst characterised by a single currency and a single monetary policy entrusted to the ECB, fiscal policy is decentralised with the budget determined and implemented at the national level, but subject to supra-national constraints imposed by the Stability and Growth Pact (SGP). The SGP, which is monitored and enforced centrally by the CION and the Economic and Financial Affairs Council (Ecofin), comprises both a corrective and a preventive arm. The corrective arm involves the Excessive Deficit Procedure (EDP), which is launched when a country's budget deficit exceeds 3% of its Gross Domestic Product (GDP) and/or its government debt ratio exceeds 60% of GDP. On the other hand, the preventive arm requires member states to present annual Stability Programmes (SP) outlining their plans to achieve the medium-term budgetary objective (MTO), which for many countries is close to a balanced budget situation in cyclically adjusted terms[8]. The SGP has been subject to persistent academic criticism[9]. Its problems of lack of enforcement are also well known, as shown by the situations in 2004

Parliament (Five Presidents' Report), available at https://ec.europa.eu/commission/publications/five-presidents-report-completing-europes-economic-and-monetary-union_en.

[6] See, for example, Brack and Startin (2015).

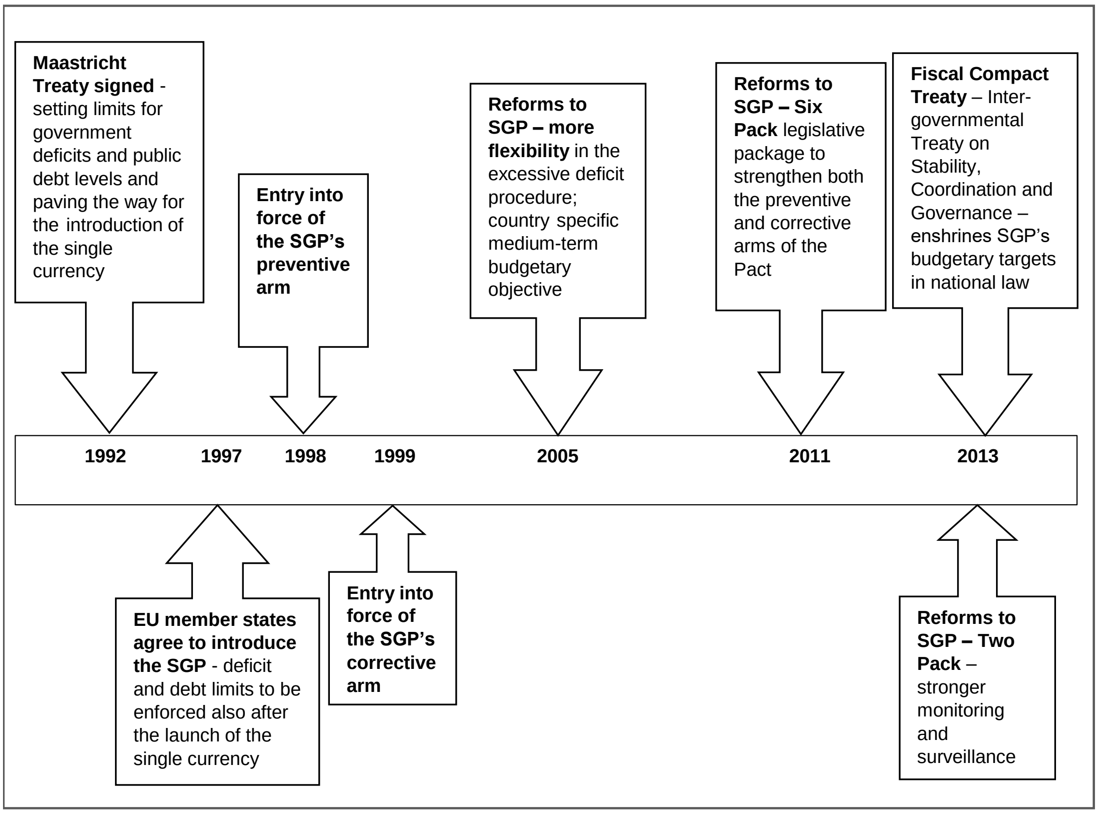
[7] At the time of writing, the United Kingdom was expected to exit the EU in the first half of 2019.

[8] Further details on the SGP are available at: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/stability-and-growth-pact_en.

[9] See for example, De Grauwe (2003) and Wyplosz (2013).

vis-à-vis France and Germany and more recently, in respect of Spain and Portugal in 2016[10].

Figure 1.1: The Stability and Growth Pact and its reforms



Source: Adapted from History of the Stability and Growth Pact (European Commission no date)

Nevertheless, the Pact remains at the core of the EA fiscal governance framework and it has been considerably tightened, with various reforms implemented since the Crisis (see Figure 1.1). In December 2011, a first legislative package, commonly referred to as the 'Six-Pack', entered into force, which includes stricter and clarified rules, stronger and more automatic sanctions which set in early in the surveillance process and common minimum standards for budgetary procedures in the member states. This was followed by a second legislative package in 2013 – the 'Two-Pack' – which includes a common budgetary timeline, the assessment of draft budgetary plans by the CION before the budget is approved by national parliament, as well as the

[10] For a brief discussion of these cases, see, for example, Gros (2016). Wyplosz (2010) provides a broader discussion on the difficulties for EU institutions to impose sanctions on sovereign member states.

requirement to set up independent fiscal councils[11]. Also in 2013, the Fiscal Compact[12] entered into force requiring the introduction of fiscal rules at the national level.

Through these reforms, the supra-national approach of enforcing fiscal discipline in the EA (through the SGP) has thus been complemented by an alternative decentralised approach, which recognises the importance of national budget institutions (Hallerberg 2011). Since fiscal policy in the EA is a national prerogative (though subject to the SGP's constraints), Wyplosz (2010: 4) strongly argues that country-level mechanisms represent the "correct solution" to achieve fiscal discipline in the EA. However, it is relevant to note that this approach involving domestic fiscal discipline mechanisms is centrally-mandated, as the reforms involve common requirements, in particular for national fiscal rules and fiscal councils, for all the EA member states.

Motivated by these developments, this thesis investigates national budget institutions in the EA and their implications on fiscal discipline. The focus on the 19 member states of the EA provides for more analytical relevance since they are subject to a common fiscal governance framework, which has become more differentiated following the abovementioned reforms[13]. At this juncture, it is relevant to highlight that, reflecting the main SGP rules, fiscal[14] performance is assessed through indicators of the size of the budget balance and of government debt, with smaller budget deficits (or larger budget surpluses) and lower levels of government debt (both in terms of GDP) considered as showing more fiscal discipline.

[11] Further details on the legal basis of the SGP, including the 'Six-Pack' and the 'Two-Pack' legislations are available at: https://ec.europa.eu/info/node/4318.

[12] The Fiscal Compact is contained within the Inter-Governmental Treaty on Stability, Coordination and Governance (TSCG) in the Economic and Monetary Union. All the EU member states, except the United Kingdom and the Czech Republic are parties to the Treaty. The Treaty is available at:
http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:1403_3.

[13] For example, Regulation (EU) No 1173/2011 on the sanctions applicable in the SGP and Regulation No 473/2013 on the monitoring and assessment of the draft budgetary plans and the correction of the excessive budget deficits only apply to the members of the EA.

[14] A fine distinction can be made between the terms 'fiscal', which covers all decisions related to government finances, and 'budgetary' which has a narrower scope, comprising those fiscal activities implemented through the budget (Yläoutinen 2004). However, as in the literature on budget institutions, the two terms are used as synonyms in this thesis.

Furthermore, it is pertinent to point out at the outset that this research is focused on analysing the influence of budget institutions on fiscal discipline and it does not discuss the merits of fiscal discipline *per se*. There has been considerable debate, also at an academic level, on the austerity response to the sovereign debt crises in the EA, and it has been blamed for the deep and long economic recession in some of the bailed-out countries[15]. Furthermore, the emphasis in the EA governance framework on fiscal discipline has also been subject to significant criticism as it inhibits the use of national fiscal policy for economic stabilisation purposes and also constrains economic growth in countries with low government debt[16]. However, these macroeconomic implications and other effects of fiscal discipline go beyond the scope of this study.

Rather the focus of this thesis is on how national budget institutions[17] can contribute to fiscal discipline. The literature on the political economy of budget deficits, reviewed in Chapter 2, shows that there is a tendency for policy-makers to run excessive deficits. This deficit bias can be attributed to electoral motives, as the incumbent uses the budget to improve the chance of being re-elected, and to the common pool resource problem, whereby due to fragmented budgetary decision-making, the full costs of government spending, including deficit-financing, are not internalised. In the context of the EA, international debt externalities exacerbate the deficit bias arising from domestic political conflicts.

This study is carried out from a “fiscal institutionalists” perspective, whereby budget institutions are considered as important to contain this tendency of a deficit bias (Yläoutinen 2004: 4). Budget institutions are defined as:

> “all the rules and regulations according to which budgets are drafted, approved and implemented” (Alesina and Perotti 1995: 21).

[15] For a discussion of the effects of austerity on the economy, see, for example, Holland and Portes (2012). Corsetti (2012) provides a broader discussion on austerity and the EA crisis.
[16] See, for example, De Grauwe (2009).
[17] The direct effects of the supra-national fiscal rule (the SGP) on fiscal discipline in the EA are outside the scope of this thesis, but its connectedness with the national budget institutions is also analysed in this study.

They include both the formal rules and provisions pertaining to the budget process which are written into law, as well as informal ones which are not legally binding but which are followed in practice. Following Alesina and Perotti (1996), the literature distinguishes between three different types of budget institutions: numerical fiscal constraints, such as fiscal rules and binding medium-term fiscal frameworks (MTBF) or targets; procedural rules which govern the budgetary process; and rules concerning budget transparency. This study also covers the role of independent fiscal institutions (IFI) or councils, which have recently become a more prominent aspect of budget institutions (Ayuso-i-Casals et al. 2009).

One important way in which budget institutions can contribute to more fiscal discipline is through more centralised decision-making, which induces a more comprehensive view of the budget, thus addressing the common pool resource problem. This can be achieved by assigning strong decision-making powers to the finance minister during budget negotiations and implementation and by restricting legislative budget amendment powers during the approval stage (Alesina and Perotti 1999). An alternative approach achieves fiscal discipline through strong commitment by policy-makers with similar decision-making powers to fiscal rules or medium-term budgetary targets (von Hagen and Harden 1995). Meanwhile, budget transparency also facilitates a more comprehensive view of the budget and can also mitigate against an electoral budget cycle by addressing information asymmetries between voters and the incumbent. It can also strengthen other aspects of budget institutions, for instance by reducing the possibility of circumventing fiscal rules. Similarly, independent fiscal councils can strengthen fiscal rules by increasing the reputational costs of breaching such constraints and can also improve budget transparency, for instance by producing or endorsing the economic forecasts underpinning the budget (Ayuso-i-Casals et al. 2009). Using a simple model of the budgetary process in EA countries, in Chapter 3, it is shown how these different types of budget institutions contribute to reduce the deficit bias during the three different stages of the budgetary process – formulation, approval and implementation[18].

The influence of budget institutions on fiscal discipline is well established in the literature. It has been confirmed by various empirical studies for EU countries, which use composite indices to capture the overall quality of budget institutions. An early contribution was made by von Hagen (1992) for the 12 members of the then European Economic Community (EEC), whilst more recent examples include Hallerberg et al. (2007, 2009) for the EU15 (the 15 countries that were members of the EU before 2004) and Gleich (2003) and Yläoutinen (2004) for the 10 central and eastern European countries (CEECs) that joined the EU since 2004.

At the same time, Wyplosz (2012) emphasises that there are different models of budget institutions and their effectiveness depends on how well they are embedded in a country's political and social arrangements and on the political commitment to the constraints involved. Similarly, drawing on the successful experience with fiscal rules and IFIs in Netherlands and Sweden in Europe and Brazil and Chile in Latin America, Kopits (2012: 152) notes how these effective fiscal frameworks were "home-grown" and "home-owned" and were thus both well-designed to fit the countries' respective institutional context and also supported by broad-based political ownership.

Meanwhile, whilst there is a vast literature on the quality of budget institutions, the role of the legislature in the budgetary process is less studied. However, the legislature, as the representative body of citizens, has a key role to ensure that budgetary decisions are democratically legitimate. Budgetary decisions involve the redistribution of income among a country's population and reflecting the "no taxation without representation" principle, such decisions are only legitimate if they are the result of a democratic process (Wyplosz 2012: 505). Legislative budgetary power is defined as:

> "the power to scrutinise and influence budget policy and to ensure its implementation" (Wehner 2006: 768).

[18] A fourth stage, concerning budgetary oversight and control (von Hagen 2002), is not considered in this study since it mainly involves *ex-post* financial scrutiny.

But, in many countries, especially parliamentary systems, the legislature tends to have a marginal role in the budgetary process (Posner and Park 2007). In the EA, democratic accountability of budgetary decisions is complex because whilst fiscal policy decisions are taken by national governments, at the same time these are increasingly constrained at the supra-national level by the SGP (Crum 2018). The recent reforms have further limited the role and relevance of the legislature in the budgetary process: for instance, the CION assesses and issues an opinion on the draft budget before this is approved by the country's national parliament. Whilst these reforms introduced a system of economic dialogue involving the European Parliament and EU institutions as well as national parliaments, the European Parliament does not have any effective power on national budgetary matters (Crum 2018)[19]. Thus, democratic legitimacy for budgetary decisions remains within national parliaments.

At the same time, emphasising the common pool resource problem among legislators, the literature on budget institutions considers that strong legislative budgetary power, especially amendment powers, result in larger budget deficits (von Hagen 2002). Alesina and Perotti (1996: 7) explicitly refer to a "trade-off" between fiscal discipline and democratic accountability of the budget process. However, as shown in the simple model of the budgetary process in EA countries, presented in Chapter 3, this may not apply to all aspects of legislative budgetary power. Rather, some characteristics of legislative budgeting, such as legislative approval of numerical budgetary constraints can improve their credibility, thus contributing to more fiscal restraint. Within this context, this thesis also analyses legislative budgetary power in the EA.

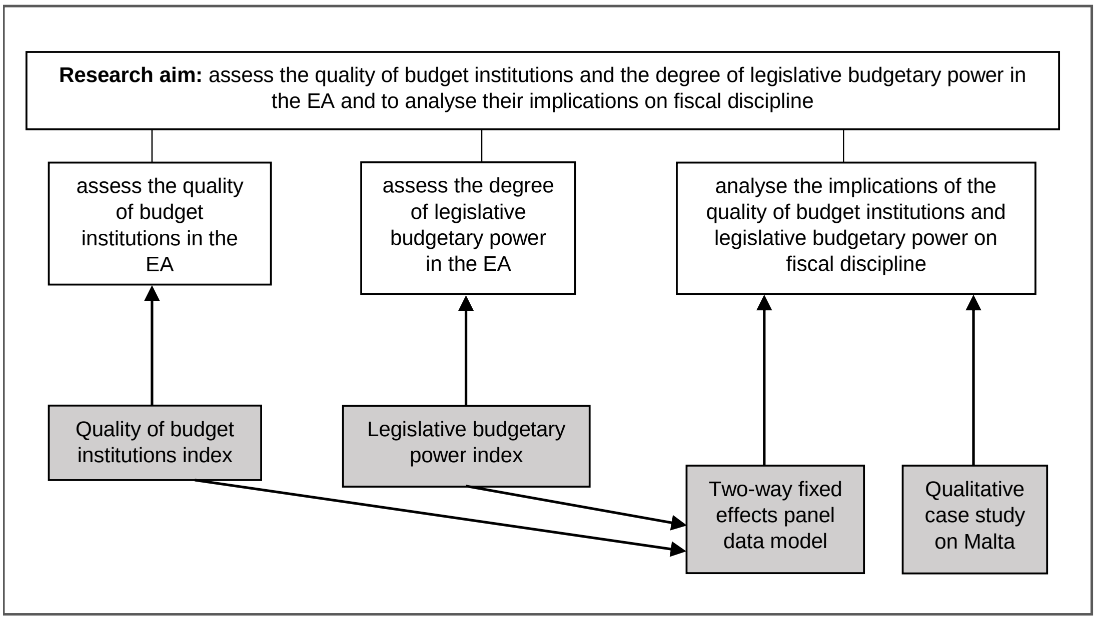
Overall, the aim of this thesis is to assess the quality of budget institutions and the degree of legislative budgetary power in EMU and to analyse their implications on fiscal discipline. As shown in Figure 1.2, this study comprises

[19] The European Parliament is thus not considered within the scope of this study. Furthermore, this thesis concerns national parliaments, which are responsible for the approval of a country's budget, rather than other elected bodies at a regional or local level. For countries with bicameral legislatures, only the chambers with budgetary powers are considered (generally, the lower house).

four components which all contribute to achieve this research aim. The first two components are of a descriptive nature, whilst the third and fourth components involve explanatory research.

The first two components, presented in Chapters 4 and 5, involve the construction of composite numerical indices to assess the overall quality of budget institutions and the budgetary power of national parliaments in the EA, respectively. The quality of budget institutions index contributes to the literature by providing a comparable, recent and comprehensive measure for all the 19 EA countries, whilst the legislative budgetary power index makes a similar contribution to the scant literature on legislative budgeting.

Figure 1.2: Research aim and research components



Source: Figure drawn by author

On the other hand, the third and fourth components of this study examine the relationship between budget institutions and fiscal discipline, using different methodological approaches. In Chapter 6, a two-way fixed effects panel data model is used to examine the impact of the quality of budget institutions and legislative budgetary power on fiscal discipline in the EA during 2006-15. This constitutes new evidence on the effects of budget institutions on the budget balance using the recent, comprehensive constructed indices as explanatory variables. Moreover, a qualitative case study on one of the EA countries – Malta – is presented in Chapter 7. This research component focuses on the influence of fiscal rules and fiscal councils, which constitute important elements of the common EA requirements and which have been recently introduced in Malta. This case study contributes to the literature through its alternative qualitative approach which enables an in-depth analysis of how budget institutions affect fiscal discipline. It also adds to the knowledge on budget institutions in the EA through its geographical focus, since Malta’s budget institutions have hardly been studied.

The results show that overall budget institutions in the EA are of medium quality. The findings show an overall strengthening of the quality of budget institutions in the EA since the Great Crisis, with a more marked improvement among the bailed-out countries. The overall improvement in the EA is mainly due to reforms relating to fiscal rules and fiscal councils triggered by the common requirements, rather than more broad-based nationally-driven reforms. On the other hand, a similar general improvement is not discernible for legislative budgetary power. Overall, legislative budgetary power in the EA is rather weak, particularly as regards formal powers vis-à-vis the national budgetary process. But, legislatures fare better in terms of engagement in the SGP procedures and organisational budgetary capacity.

Whilst there is limited variation in the overall indices’ scores among the EA countries, there is more diversity in the specific institutional characteristics. Thus, legislatures obtain budgetary power from different components of formal powers and organisational capacity. Moreover, the results show that there can be different models for achieving good quality budget institutions, which contrasts with the general thrust for a ‘one-size-fits-all’ approach in the common EA requirements. The findings also show considerable variation in the strength of fiscal rules and fiscal councils among the member states. Moreover, despite the rules-based nature of the common EA requirements, in some member states, a strong finance minister remains an important element of their fiscal governance framework.

Meanwhile, in contrast to the findings in previous empirical studies, the results of the two-way fixed effects model show a weak, but still positive relationship between the quality of budget institutions and the budget balance. This contrast with the findings in previous studies may be attributable to the more recent timeframe of the empirical analysis presented in this thesis, which captures reforms to budget institutions implemented since the Great Crisis. Thus, the long-term impact of certain reforms may have not been captured. This applies in particular to the influence of fiscal councils, which constitute a recent institutional development in various EA countries. Furthermore, the recent reforms in budget institutions were largely supra-nationally imposed, rather than being driven by a domestic policy agenda, which can affect their national ownership and effectiveness. The empirical results also show that strong legislative budgetary power does not necessarily conflict with fiscal discipline. This suggests that democratic legitimacy of the budget can be secured without jeopardising fiscal discipline, through a broader involvement of the legislature in the budgetary process beyond amendment powers.

The qualitative case study on Malta provides insight into how fiscal rules and fiscal councils contribute to fiscal discipline. It also shows how they are adapted to the national context and identifies limitations of supra-nationally mandated institutional reforms. Thus, whilst fiscal rules have been introduced in national legislation and an independent fiscal council has been established, government's fiscal policy stance continues to be largely determined by the SGP obligations and the CION's assessments. On the other hand, the legally required assessment and endorsement of the budgetary forecasts by the fiscal council has resulted in more prudent budgetary forecasts. The case study findings also show that the institutional reforms have not resulted in a broad political commitment to fiscal discipline beyond the Ministry for Finance (MFIN). Finally, in Malta, the fiscal rules and the assessments by the CION did not replace the role of the finance minister to instil fiscal discipline in the budgetary process; rather they constitute 'external anchors' to reinforce its position.

This thesis is organised as follows. After this introduction, Chapter 2 reviews theoretical work as well as empirical studies on sources of political conflict which give rise to a deficit bias. Chapter 3 presents a simple model of the budgetary process in EA countries, which explains how these political motivations result in larger budget deficits and how this can be mitigated by budget institutions. Subsequently, Chapters 4 and 5 present the quality of budget institutions and legislative budgetary power indices, respectively. Chapter 6 analyses empirically the relationship between budget institutions and fiscal discipline, using a two-way fixed effects panel data model, whilst Chapter 7 presents further investigation on this relationship through a qualitative case study on Malta. Finally, Chapter 8 provides general conclusions for the key findings of the entire thesis and also suggests areas for future research.

Chapter 2:

Literature Review -

The Political Economy of Budget Deficits

2.1 Introduction

There is a rich and vast literature which seeks political explanations for government's tendency to run persistent budget deficits and accumulation of government debt. These political economy models[20] refer to a deficit bias, which results from governments pursuing sub-optimal fiscal policies. Optimal fiscal policy is that set by a benevolent social planner who aims to maximise the welfare of a representative consumer (Alesina and Perotti 1995). Therefore, a deficit bias implies that the budget deficit (and government debt accumulation) is higher than it would be if a social planner sets fiscal policy. It is outside the scope of this Chapter to review in detail the literature on optimal fiscal policy[21]; rather a brief outline of optimal fiscal policy is hereby presented to provide a benchmark against which political economy explanations of departures from optimality can be discussed.

Optimal fiscal policy involves tax smoothing: to minimise the deadweight loss associated with taxation, the tax rate should be held constant at the level of permanent spending (Barro 1979). This tax smoothing theory thus predicts a rise in government debt when a country's current government income or expenditure departs from its respective trend values, such as during an economic recession or war. According to this theory, a change in current taxation would only be required if these transitory factors become permanent. This is consistent with countercyclical fiscal policy, as prescribed by Keynesian theories, because spending increases during recessions would be compensated for by discretionary cuts during economic booms (Alesina and Passalacqua 2015)[22], so that the budget would be balanced over the business cycle. However, the general accumulation of government debt in EA countries as well as the recurring budget deficits in some countries[23] are inconsistent

[20] Political economy concerns the effects of politics on economic outcomes (Drazen 2000). The literature reviewed in this Chapter focuses on the political effects on fiscal outcomes.
[21] See for example, Alesina and Tabellini (1990) and Velasco (2000).
[22] It is outside the scope of this Chapter to critically analyse the effectiveness of fiscal policy for economic stabilisation purposes. For a recent discussion in the context of the fiscal stimulus during the Great Crisis, see, for example Auerbach and Gale (2009).
[23] See Section 6.1 in Chapter 6 for an overview of fiscal performance in the EA during 1999-2017.

with this optimal fiscal policy setting, thus suggesting the influence of political considerations on fiscal policy making.

In a survey of the literature on the political economy of fiscal deficits, Eslava (2011) identifies three main sources of political conflict during the budgetary process which lead to a deficit bias: heterogeneity in fiscal preferences between policymakers and voters; across politicians; and across social groups or regions. These different preferences correspond to conflicts between the interests of the incumbent government and voters, between alternating governments or within the same government, respectively. Wierts (2008) adopts a slightly different categorisation, grouping the first two categories under “time fragmentation”, being related to the limited time horizon of the incumbent and differences in preferences between different political parties that alternate in power; and referring to the third category as “size fragmentation”[24].

The aim of the literature review presented in this Chapter is to explain how political conflict affects decision-making during the budgetary process and results in a deficit bias[25]. Then, the next Chapter, which presents a simple model of the budgetary process in EA countries, examines how budgetary institutions can influence the incentives of policy makers and address the deficit bias. Furthermore, this literature review also aims to identify the more relevant political variables which influence the budget balance, thus guiding the selection of the political explanatory variables in the empirical analysis, presented in Chapter 6. This literature review focuses on two sources of political conflict, namely heterogeneity of interests between the incumbent and voters and heterogenous fiscal preferences within government.

[24] Wierts (2008) explains that degree of heterogeneity within society determines a country’s electoral rules, which in turn affect the conflicts of interest within government and these affect fiscal outcomes. This Chapter focuses on the latter part of this process. For a detailed analysis of the impact of electoral rules (majoritarian or proportional) on fiscal outcomes, see Persson and Tabellini (2004).

[25] Cukierman and Meltzer (1989) present an alternative model where the deficit bias results from intergenerational redistribution, where the current generation favours deficit-financing since this enables it to increase its lifetime income, whereas future generations have no voice in current fiscal policy decisions. However, this negative bequest model is not considered further in this study since it does not directly involve political conflict in budgetary decision-making.

The other category of political economy models, focusing on different preferences across politicians, is not analysed in this literature review. This group of models involve traditional partisan differences in fiscal preferences, with left-wing governments associated with larger budget deficits and higher levels of government debt than right-wing governments, as originally described in the seminal contribution of Hibbs (1977). However, such partisan differences have become less accentuated over time (Cusack 1999), reflecting the decrease in the degree of ideological polarisation with modernisation and the convergence of the main political parties to more centrist policies[26]. Within the EU context, economic and financial integration processes can also contribute to weaken distinct partisan differences (Efthyvoulou 2011)[27]. Furthermore, empirical evidence supporting the traditional partisan model is rather weak (Eslava 2011). Finally, even theoretically, the implications of heterogenous fiscal preferences across political parties on fiscal outcomes is not clear, as strategic motives may lead political parties to act opposite to the traditional partisan view, as outlined in the strategic use of debt models developed by Persson and Svensson (1989) and Tabellini and Alesina (1990).

The rest of this Chapter reviews theoretical and empirical work on the effect of heterogenous preferences between the incumbent and the voter and within government itself on the deficit bias. This review does not attempt to cover the vast literature in this area systematically. Rather, it focuses on key works in the different branches of this literature. In particular, the empirical studies reviewed mainly comprise European countries, reflecting the geographical focus of this study[28]. Furthermore, the emphasis is on studies where the electoral cycle involves fluctuations in the budget balance (or debt), rather than the composition of spending, since the aim of this study is to assess the

[26] For a discussion of these issues from a political science perspective, see, for example Le Duc et al. (2010). However, the recent rise in radical, extremist and anti-establishment political parties in various EU countries in recent years constitutes an exception to this general trend for more centrist ideology.
[27] Using a timeseries analysis on the political budget cycle for Cyprus during 1978-2006, the partisan impact on the annual change in the government public debt ratio to GDP was found to have been weakened by a higher degree of globalisation and the run-up to joining the EA.
[28] Studies involving countries members of the Organisation for Economic Development and Co-operation (OECD) are also included, since they include also several EA member states.

relationship between budget institutions and fiscal discipline[29]. A more comprehensive summary and analysis of the contributions developed in this field, including the partisan models, is found, amongst others, in the seminal critical literature review by Alesina and Perotti (1995) and more recently by Eslava (2011) and Alesina and Passalacqua (2015). Finally, this Chapter concludes with a discussion of the deficit bias in the specific context of a monetary union.

2.2 Models based on different fiscal preferences between policymakers and voters

In the early political economy models of fiscal deficits, voters are characterised by fiscal illusion. This concept originated in Puviani (1903) from the Italian school of public finance at the turn of the twentieth century (Mourão 2008). It was then further developed by the public choice school, in particular by Buchanan and Wagner (1977). Fiscal illusion basically centres around:

> "a wrong perception of budget aggregates from the voters' and taxpayers' perspectives" (Mourão 2008: 50).

Thus, in this model, voters value public spending, including its expansionary macroeconomic effects but they do not take into account the full cost (in terms of the required tax burden) of financing it. This model also involves opportunistic politicians, rather than the benevolent social planner under optimal fiscal policy. Instead of aiming to maximise social welfare, opportunistic politicians take advantage of voters' fiscal illusion by increasing public spending to please voters and thus improve their re-election chances (Alesina and Perotti 1995). These outlays are financed through borrowing, because the future taxation required to finance current spending does not generate constituency pressures comparable to those resulting from a hike in current taxation (Buchanan and Wagner 1977). This effect was reinforced with Keynesianism as politicians implement asymmetric economic stabilisation policies: they are eager to increase discretionary spending and run budget

[29] An example of an empirical study on the electoral cycle in the composition of spending is Bove et al. (2017), who find a significant shift from military expenditure to social expenditure during election times in a sample of 22 OECD countries during 1988-2009.

deficits during recessions, but then do not counterbalance it with budget surpluses during economic good times (Eslava 2011; Alesina and Passalacqua 2015). This model thus involves incentives for the incumbent to generate a budget deficit as elections approach in order to increase its popularity among voters and improve its chances of remaining in office, only to reduce it again immediately after an election, when faced with rising indebtedness. These periodic fluctuations in fiscal policy, which are induced by the timing of elections, are referred to as an electoral or political budget cycle (Mink and De Haan 2006; Efthyvoulou 2012)[30].

Whilst this model presents a simple yet pervasive view of the conduct of fiscal policy in democratic societies, the notion of fiscal illusion has been criticised as it implies that voters repeatedly fail to recognise the future tax burden implied by pre-election spending increases (Eslava 2011). There is no reason to expect that voters will systematically and always underestimate the future tax burden of current public spending (Alesina and Perotti 1995) and Alesina and Passalacqua (2015: 14) describe the fiscal illusion argument as “overly simplistic”.

Indeed, in the late 1980s, the electoral cycle model was adapted with two important contributions by Rogoff and Sibert (1988) and Rogoff (1990). In their model, the electoral cycle in fiscal policy results from temporary information asymmetries about the incumbent’s competence. A competent policy-maker is able to provide a given level of government services with less revenue than a less competent one. Voters cannot observe the candidate’s competence directly and they have full information on the budget with a delay. They thus infer politicians’ competence from the part of government spending that they observe before an election. Incumbents have an incentive to signal their competency during an election year to improve their re-election prospects and they do this by lowering the tax bill, resulting in a budget deficit, which voters

[30] The early literature derived an electoral economic cycle, with relatively low unemployment and inflation during electoral periods and high unemployment and low inflation after an election (Nordhaus 1975, Lindbeck 1976, MacRae 1977). However, this model was adapted so as to be consistent with a theoretical approach based on rational expectations, and predicting an electoral budget cycle, with higher spending and budget deficits around elections, but without specific clear implications for output and employment (Drazen 2000).

do not observe immediately (Rogoff and Sibert 1988). Rogoff (1990) develops a variation of this model, where competency is signalled through higher levels of public spending and a change in the composition of public spending towards transfers and more visible public projects[31]. These models thus predict short run cycles of budget deficits and transfers around elections, which depend on the fact that voters do not have full information on and understanding of the budget. These models thus predict that electoral budget cycles are more likely when budget transparency is weak[32] (Eslava 2011; Alesina and Passalacqua 2015).

2.2.1 Electoral budget cycles: empirical evidence

There is a rich array of empirical studies on electoral budget cycles, largely involving cross-country studies but there are also some studies focusing on individual countries. Evidence of an electoral budget cycle has been found in studies covering samples of OECD countries[33]. For instance, Alesina et al. (1991) find confirming results in a sample of 18 OECD countries during 1960-1987. For a largely comparable sample, Franzese (1998) presents similar findings also when taking into account of more factors that affect the budget balance, but the timing and extent of the cycle differs. More recently, Tujula and Wolswijk (2004), using a sample of 22 OECD countries during 1970-2002, also find that the fiscal balance deteriorates in general election years. On the other hand, more limited evidence is found by Katsimi and Sarantides (2012) for a similar sample, but using a wider array of control variables, with an electoral influence on direct tax revenue and the composition of spending, but not on the aggregate fiscal variables.

Focusing on studies with a more relevant geographical scope, two early studies by von Hagen (2003) and Buti and van der Noord (2004) find evidence

[31] Ironically, these models predict larger electoral budget cycles with more competent politicians. But in the adapted version by Shi and Svensson (2006), all incumbents, irrespective of their competency level, face the same incentives to increase public spending before an election.
[32] The implications of budget transparency on the electoral budget cycle is discussed in Section 2.2.2 and also in Section 3.3.3 in Chapter 3.
[33] These findings contrast with other literature which claims that electoral budget cycles are largely a phenomenon restricted to less-developed countries or new democracies - see, for example, Schuknecht (1994) and Shi and Svensson (2006); and Brender and Drazen (2005) and Shelton (2014), respectively.

of an electoral budget cycle among the EU15 countries and the EA countries, respectively. In contrast to the mainstream literature which uses fiscal aggregates (namely, the budget balance or the change in government debt) as the dependent variable, both studies use a more sophisticated measure to capture the discretionary part of fiscal policy[34]. Using a simple *t*-test to compare the averages for electoral and non-electoral country year groups, von Hagen (2003) finds that the average fiscal impulse in pre-election years is statistically significantly higher than in all other country-year cases. Similarly, Buti and van der Noord (2004: 753) find that the fiscal discretionary stance eased in pre-election and election years and conclude that "the electoral budget cycle is alive and well in EMU". However, both studies are constrained by the relatively short period of time covered (1998-2001 and 1999-2003, respectively). Meanwhile, Mink and De Haan (2006) also confirm the presence of an electoral budget cycle in the 12 countries that had adopted the Euro by 2004 over a similarly short timeframe (1999-2004), when early elections are excluded from the sample[35]. But the timing of the cycle differed, with the budget deficit increasing in an election year, but not in the year prior to the election. Taking a somewhat longer timeframe (1990-1999), Hallerberg et al. (2002) also found that budget deficits were larger in election years among the 10 CEECs, but the effect was found to be significant only for those countries with a fixed exchange rate regime.

The presence of an electoral budget cycle in EU countries was confirmed by studies using larger samples. For instance, Tujula and Wolswijk (2004) find a significant electoral cycle in the budget balance for the EU15 countries during 1970-2002, which is stronger than that in their larger sample of OECD countries. Furthermore, the electoral effect seems to have intensified in the latter part of their sample period (1987-2002). Using a dynamic panel data model specification, Efthyvoulou (2012) also finds that fiscal deficits are higher in elections years for the EU27 (the countries that were members of the EU between 2007 and 2012) during 1997-2008, with a larger and stronger

[34] The fiscal policy stance is defined as neutral if expenditure moves in line with potential or trend GDP, whereas tax revenue is measured as function of GDP.
[35] In contrast to pre-determined elections, early elections may involve endogeneity bias from reverse causation or from shocks affecting both the election date and the fiscal balance.

electoral effect in the EA countries. In addition, the electoral budget cycle was found to be negatively related to the relative importance of non-economic issues prior to elections and positively related to electoral competitiveness.

Some studies have adopted a single-country approach to analyse electoral budget cycles in EA countries, thus avoiding difficulties due to differences in cultural, institutional and economic aspects, which may hamper the analysis in cross-country studies. Most of these studies analyse fiscal policy at a sub-national level. These include Veiga and Veiga (2007) for Portuguese mainland municipalities during 1979-2001; Chortareas et al. (2016) for Greek municipalities during 1984-2004; Lago-Peñas and Lago-Peñas (2008) and Bastida et al. (2013) for Spanish municipalities during 1985-1995 and 1992-2005, respectively; and Ashworth et al. (2005) for Flemish municipalities during 1977-2000. The first two studies use the budget balance as the dependent variable, whereas the third study uses deviations from the forecasted budget deficit and the last two studies use municipal debt per capita. Nevertheless, all these studies find evidence of an electoral budget cycle at the municipal level.

Castro and Martins (2014) and Efthyvoulou (2011) also carry out single-country studies but at a national level, employing time-series analysis to test for the presence of an electoral budget cycle in Portugal and Cyprus, respectively. Using monthly data to allow more accurate control of electoral timings, Castro and Martins (2014) find that, in Portugal, during 1991-2013, the government budget balance worsened before elections. On the other hand, using annual data, Efthyvoulou (2011) does not find evidence of an electoral cycle in the yearly change in the government public debt as a share of GDP in Cyprus during 1978-2006 and attributes this to the effect of globalisation and the run-up to participation in EMU.

Summing up, the empirical studies reviewed in this Section differ in the time period covered, the range of control variables included in the models, the specification of the electoral variable as well as in the estimation methods applied, whilst some studies also distinguish between elections whose timing is pre-determined and early elections. Nevertheless, the evidence from cross-country studies covering EU or EA countries shows that despite the constraints imposed on national fiscal policy by the SGP, European governments still manage to manipulate the budget during electoral periods, although the strength of the electoral budget cycle as well as its timing differs across the studies. These results were also confirmed by some single-country studies. However, there is scope for further similar studies at the national level covering other member states using long time-series analysis.

2.2.2 Voters as 'fiscal conservatives' and budget transparency

The concept of an electoral budget cycle is based on the premise that a fiscal expansion during the electoral period influences voters' preferences in favour of the incumbent. However, this has been challenged by various empirical studies. For example, in a study covering 19 OECD countries during 1960-1995, Alesina et al. (1998) find that changes in the budget deficit neither have a significant influence on cabinet changes nor on the popularity of the incumbent, as measured by opinion polls. Covering a more recent timeframe (1975-2008) for the same sample of countries, Alesina et al. (2012) similarly find that fiscal adjustments (measured by a change in the cyclically adjusted balance over potential GDP ratio) do not have a statistically significant impact on terminations of government resulting from elections. Furthermore, for a broader sample of 74 developed and developing countries during 1960-2003, Brender and Drazen (2008) even find a positive relationship between the probability that the incumbent is re-elected and an improvement in the budget balance during the election year relative to the previous year. The corollary of this result is that incumbents who pursue an expansionary fiscal policy around election time are actually 'punished' by voters[36].

Whilst this empirical evidence questions the motivation for an electoral budget cycle, these conflicting views have been bridged by allowing for budget transparency: if budget transparency is lacking, voters will not be able to act

[36] On the other hand, evidence consistent with the implicit view in the traditional literature on economic budget cycles, through a relationship between the win-margin of the incumbent and expansionary fiscal policies during electoral periods, was found in Mourão and Veiga (2010) for a large sample covering 68 countries from 1960 to 2006 and by Aidt et al. (2011) for a sample of 278 Portuguese municipalities from 1979 to 2005.

as 'fiscal conservatives'[37] because they cannot observe the true level of the budget balance before an election. This reflects the competency signalling models described earlier, where a lack of budget transparency increases the information asymmetry between the incumbent and the electorate (Benito and Bastida 2009). Indeed, in their seminal article, Alt and Lassen (2006a) find that during 1988-1998, among their sample of 19 OECD countries, elections had a statistically significant effect on the fiscal balance in the group of countries with low fiscal transparency but not in the countries with more transparent budgets[38]. This relationship was confirmed by Vicente et al. (2013), who find that financial and economic transparency (measured through the index by Transparency International Spain) dampens the electoral cycle in total spending in a sample of 97 Spanish municipalities during 1999-2009, and by Shelton (2014) for a large sample of 90 countries during 1980-2007 when using the International Budget Partnership's Open Budget Index.

Summing up, the electoral budget cycle model has been adapted over the years to incorporate theoretical developments and to be compatible with the view that voters are 'fiscal conservatives' through budget transparency. This model can explain temporary deviations from optimal fiscal policy around electoral periods. The next Section examines an alternative political economy approach based on different interests within government, rather than between government and voters. This approach can provide explanations for the persistence of excessive budget deficits and for why such deficits exist in only some countries but not in others[39].

2.3 Models based on different fiscal preferences within government

Conflicts within society or between regions can result in different fiscal preferences within cabinet or within parliament (Wierts 2008). These result in

[37] This term was first used by Peltzman (1992) in a study on elections in the United States during 1950-1988, who found a negative relationship between growth in federal spending before elections and the incumbent's party vote share in elections.

[38] They measure fiscal transparency by constructing an index comprising eleven characteristics of budgetary procedures, compiled from the responses to the 1999 OECD survey on budget procedures.

[39] See Section 6.1 in Chapter 6 for an overview of fiscal performance in the EA during 1999-2017.

distributional conflicts over the budget among the stakeholders and the effect on the budget is exacerbated if decision-making is fragmented with groups with different interests having some influence on the budgetary process. This branch of the literature finds its origin in Weingast et al.'s model (1981), which was further developed by Baron and Ferejohn (1989). This involves legislative representatives elected from different geographical districts and public projects financed from general taxation. Legislators consider the full benefits of public projects accruing in their district, but do not internalise the effect of the implied spending on the tax burden for the country as a whole. Rather, they consider only their district's share of the cost, which results in an increase in public spending beyond the efficient point.

This model has subsequently been applied not only in systems with geographically distinct constituencies, but more generally to other institutional settings characterised by political fragmentation within government. In particular, von Hagen and Harden (1995) apply the model to a context where spending ministers have strong decision-making powers in the budgetary process, with each minister fully internalising the benefits of government spending falling within its remit but not fully its cost, thus resulting in higher public spending. This has been described as "the "common pool" property of public budgeting" (von Hagen 2002: 264). The implication of this model is that, with fixed tax revenue, the budget deficit is larger with fragmented rather than centralised budgetary decision-making and it is increasing with the number of decision-makers. Fragmentation in budgetary decision-making can manifest in the number of political parties forming part of a coalition government, the number of districts for geographically based legislative representatives as well as in the number of spending ministers in cabinet[40]. This model has been extensively applied to coalition governments, where bargaining within cabinet members is more difficult since spending ministers come from different political

[40] The concept of government fragmentation has also been applied to situations of divided government in presidential systems, where the legislature and the executive are controlled by different political parties - see, for example, Alt and Lowry (1994) and Poterba (1994) for US states. Furthermore, Alesina et al. (2006) apply this characteristic to explain delayed fiscal adjustment in a large sample of countries during 1960-2003. In addition, in their literature review, Alesina and Passalacqua (2015) highlight the relevance of the common pool problem in the context of fiscal federalism, where spending is decided by local governments but financed from national taxation.

parties. The common pool problem is exacerbated if there are strong ideological differences among the members of cabinet: for instance, von Hagen (2002) argues that when there are ethnic, linguistic or religious conflicts within society, the tax burden borne by other groups is more likely to be ignored.

Velasco (2000) makes an important contribution to this branch of the literature by putting the common pool problem model in a dynamic context, with the common pool involving government net assets, i.e. the present value of future income streams less outstanding debt. As explained by Persson and Tabellini (2002), in this context, all actors with decision-making powers in the budgetary process have incentives to not only spend more, but also to spend now rather than later, so as to appropriate more resources. Similarly, Battaglini and Coate (2008) also present a dynamic application of the common pool problem, where the cost of raising taxes to finance higher public spending is not fully internalised also across periods. Whereas earlier models explain the tendency for higher expenditure, these further developments in the common pool resources model explain also the bias towards deficit financing and debt accumulation.

The common pool model has been applied, not only to explain different fiscal outcomes across countries and in the same country over time, but also why it takes time to address budget deficits once they arise and it has been recognised that fiscal adjustment is necessary. In this respect, Alesina and Drazen (1991) develop a 'war of attrition' model where conflict over the distribution of the burden of fiscal adjustment between different socio-economic groups results in delayed fiscal stabilisation[41]. Although delayed fiscal adjustment is costly[42], stabilisation does not take place immediately as groups perceive the possibility of shifting the burden of adjustment on other

[41] Tornell and Lane (1998) develop a variant of this model, where in response to a positive shock resulting in a windfall increase in fiscal revenue, fiscal groups competing over fiscal resources appropriate a more than proportional increase from the common pool fiscal resources. Due to this 'voracity effect', the budget balance actually worsens in good economic times. Whilst the standard 'war of attrition' model involves a lack of policy action, in this model, there is 'over-reaction' by the relevant actors, which results in a procyclical fiscal policy during booms.

[42] In terms of higher inflation, if the deficits are financed by printing money, or in terms of the accumulation of the interest burden on debt, if financed by borrowing.

groups and decide to wait them out. Time is required to reveal which is the weakest group. Eventually, stabilisation takes place when it becomes too costly for this group to wait and it concedes, bearing more than an equal share of the cost of adjustment[43]. In support of their 'war of attrition' model, Alesina and Drazen (1991) present historical examples of delayed fiscal stabilisation from some European countries after World War I as well as from OECD and emerging economies during the 1980s.

The 'war of attrition' model is related to the concept of veto players, defined as:

> "an individual or collective actor whose agreement is required for a policy decision" (Tsebelis 1995: 293).

Thus, fiscal stabilisation is expected to be postponed more in fragmented political systems, such as countries with coalition governments, since there are more veto players involved in budgetary decision-making. Moreover, distributional conflicts are aggravated in highly polarised political systems, further delaying the necessary fiscal adjustment. On the other hand, stabilisation tends to occur when there is a political consolidation (for example after an election), when the dominant group which emerges is able to impose a larger burden of fiscal adjustment on the other (politically weaker) group/s. It is pertinent to note that whilst the 'war of attrition' model explains why fiscal adjustment is postponed, it does not explain why a budget deficit occurs in the first place.

2.3.1 Government fragmentation and fiscal deficits: empirical evidence

There are difficulties to operationalise empirically the concept of fragmentation in the budget process, since this can take many forms, as highlighted above. Furthermore, the distinction between the effects of the common pool problem and the war of attrition model may not be clear in practice. Nonetheless, a large body of empirical studies has developed, analysing the impact of government fragmentation on fiscal outcomes. This ection provides a review

[43] At that point, the estimated additional tax payments related to further delaying the required fiscal adjustment exceed the benefits to the group from waiting for another group to concede. If the fiscal crisis is severe, adjustment is likely to happen earlier, because the cost of waiting rises.

of key contributions testing these models empirically, which have a geographical coverage similar to this study and where the dependent variables are the budget balance or government debt ratio. Three main categories of studies can be identified. The most prevalent category tests the relationship between government fragmentation and budget deficits through coalition governments, either by the number of political parties forming the coalition or more generally by the type of government (coalition or single party majority). The second category applies the concept of government fragmentation within the executive, measuring it with the number of spending ministers, whilst the third category uses a more general government characteristic – that of government 'weakness'.

2.3.1.1 Coalition governments

Some of the studies testing for the influence of coalition governments on budget deficits and/or government debt use a crude measure to indicate the type of government rather than a more specific measure of the degree of fragmentation within government. One of these early studies was that by Roubini and Sachs (1989), covering 15 OECD countries during 1960-1985, where a simple dummy variable was used to distinguish between different types of government. When interacted with another dummy variable to capture periods of rapid or adverse economic growth (1960-1974 and 1975-1985, respectively), fragmented governments (coalition or minority governments or presidential governments with different parties in control of the executive and legislative branch) were found to have a significant effect on the fiscal balance (measured through the change in the government debt to GDP ratio), albeit only in the latter period. The authors consider these findings as evidence supporting the war of attrition model. However, their political variable has been the subject of notable criticism and their findings were subsequently disputed. In particular, Edin and Ohlsson (1991) criticise the functional form chosen for the political dummy variable as this implies a very restrictive form on its effects[44]. Using the same data as in Roubini and Sachs (1989) but using

[44] For example, the specification of the dummy variable by Roubini and Sachs (1989) implies that the effect of minority government on the budget balance is three times that of a two-party coalition government.

different dummy variables for each type of government, they find that only minority governments have significantly larger budget deficits. They thus argue that the estimated coalition effect claimed by Roubini and Sachs (1989) is entirely due to minority governments having larger budget deficits and that this reflects difficult negotiations in parliament rather than within government. The implication of this conclusion is that the key institutional characteristic influencing the fiscal balance is not government fragmentation, as implied by the common pool problem and war of attrition models, but rather government 'strength' in the legislature.

The specification of the political variable by Roubini and Sachs (1989) and the effect of the type of government on fiscal outcomes has been further challenged by De Haan and Sturm (1994, 1997) and De Haan et al. (1999). In their 1994 study, De Haan and Sturm apply a similar model, including the specification of the political index, as in Roubini and Sachs, to a different sample, involving EEC member countries during a much shorter period (1981-1989) and find that the coefficient of the political index is not statistically significant from zero. Furthermore, when using a different dummy variable for different types of government, they also do not find any evidence of the effect of minority governments as claimed by Edin and Ohlsson (1991). Moreover, the authors also claim that the original Roubini and Sachs index contains coding errors. Similarly, De Haan and Sturm (1997) and De Haan et al. (1999) do not find evidence supporting the relationship between the type of government in power and government debt growth, also when using a sample with a geographical coverage which is quite comparable to that of Roubini and Sachs (1989) but over different timeframes (1982-1992 and 1979-1995, respectively). Using a larger and more diverse sample of 57 countries during 1970-1990 and the long-term average public sector balance as the dependent variable, Woo (2003) also does not find a significant effect neither when using the Roubini-Sachs index nor when testing specifically for the minority government effect claimed by Edin and Ohlsson (1991). Thus, the evidence linking the type of government to fiscal outcomes is overall, very weak.

On the other hand, some evidence supporting the government fragmentation hypothesis has been found when using the number of parties in government or similar measures, as the explanatory variable. For instance, De Haan et al. (1999) find that the number of parties in government has a significant impact on government debt growth. This was confirmed by Franzese (2002) for a similar sample of OECD countries but over a longer timespan (1956-1990), although the effect is found to be significant only at moderate and high levels of debt[45]. In their single-country study on around 300 Flemish municipalities during 1977-2000, Ashworth et al. (2005) also find some support for the relationship between the number of coalition partners and municipal debt, but the evidence is significant only when the coalition comprised two parties, but not for bigger coalitions. In contrast, using a panel discrete choice model for 20 OECD countries during 1973-2003, Mierau et al. (2007) find that the occurrence of a fiscal adjustment, involving a notable improvement in the cyclically adjusted budget balance, is not significantly influenced by the effective number of political parties in government. This result, which challenges the 'war of attrition' model, was found to apply both in the case of rapid as well as gradual adjustments.

Studies using more complex measures than the crude number of coalition partners to operationalise government fragmentation present mixed results. For example, using data for only eight EU countries during 1970-1990, Balassone and Giordano (2001) do not find a significant effect on the budget deficit when measuring the degree of concentration of power within government with the share of votes accruing to the party with the relative majority within the coalition. There is a similar lack of evidence also in their country by country analysis, except in the case of Italy. Padovano and Venturi (2001) confirm the significant relationship for Italy in their single-country study, using a measure of the relative parliamentary size of the members in the governing coalition. On the other hand, Huber et al. (2003) use a voting power approach to measure government strength and power dispersion within government in 21 OECD countries during 1970-1999 and find a significant effect on the change in the debt ratio but only in a smaller sample of their

[45] On the other hand, at low levels of debt (below 30% of GDP), Franzese (2002) finds that a larger number of parties in a coalition government actually results in lower debt growth and argues that this is due to disagreement within government on the introduction of new debt-financed spending programmes.

study. Furthermore, in line with Ashworth et al. (2005), they find that the effect is conditional on the composition of the coalition, with the deficit being higher when the coalition is made up of equally strong partners than in those where there is one dominating party.

Some studies have also tested the effect of political polarisation within the coalition on fiscal outcomes. Using measures of the relative number of ministers from a political party and the ideological differences (on a left to right wing scale) between parties in the coalition, Volkerink and De Haan (2001) find a significant impact on the budget balance for 22 OECD countries during 1971–1996. But similar evidence for ideological differences within the governing coalition was not found by neither Franzese (2002) nor Ashworth et al. (2005), whilst likewise, Mierau et al. (2007) find that the likelihood of fiscal adjustment is not significantly affected by political fragmentation. On the other hand, supporting evidence was found by Elgie and McMenamin (2008) for their sample of OECD countries for 1975-2004, when using an alternative measure of ideological differences within government based on rural, regional and religious dimensions. Thus, overall, the empirical evidence linking the type of government to fiscal outcomes remains rather weak, also when allowing for the ideological complexion of the coalition.

2.3.1.2 Cabinet size

As highlighted earlier, an alternative interpretation of government fragmentation involves the size of cabinet: a large cabinet creates a fiscal commons problem as individual spending ministers demand a larger budget, to please their constituencies, and possibly also for the prestige of commanding a larger amount of resources, without taking into account the full burden of taxation financing these outlays.

A first contribution testing for the effect of cabinet size on fiscal outcomes was by Kontopoulos and Perotti (1999): measuring coalition size by the number of parties in the coalition and cabinet size by the number of ministers in cabinet, the budget deficit was found to be significantly affected by the cabinet size, but not by the coalition size in their sample of 20 OECD countries during 1960-1995. Subsequently, Volkerink and De Haan (2001) and Perotti and

Kontopoulos (2002) both largely confirm these findings for a broadly similar sample of countries over a somewhat shorter timeframe, starting from around 1970. Volkerink and De Haan (2001) use a more refined measure of cabinet size which excludes the finance and/or budget ministers and the prime minister, since they are not generally concerned with spending administrations but rather take responsibility for the overall budget[46], and they also account for the share of ministers coming from each political party. Ricciuti (2004) uses a similar measure for cabinet size in a study capturing a comparable sample of OECD countries during 1975-1995. A significant impact on the budget balance was found for the number of spending ministers but not for fractionalization within the government (defined as the probability that picking at random two members, they belong to different political parties). Meanwhile, studies by Woo (2003) and Elgie and McMenamin (2008), covering a larger number of and more diverse countries, have confirmed the effect of cabinet size on the budget balance, in particular for developed or OECD countries. The former uses the total number of ministers as a measure of cabinet size whereas the latter apply the more refined measure by Volkerink and De Haan (2001). Finally, confirming evidence for the influence of the number of spending ministers on the budget deficit was also found by Wehner (2010a) when using a relatively large sample comprising 58 countries during 1975-1998 and adopting a careful operationalisation of the cabinet size variable[47].

On the other hand, Mulas-Granados (2003) presents weaker evidence for the EU15 countries during 1970-2001: cabinet size - measured as in Perotti and Kontopoulos (2002) - only had a significant effect on the change in the cyclically adjusted budget balance during the earlier part of the sample period (1970-1995). Moreover, Mierau et al. (2007) do not find any evidence linking the number of spending ministers on the likelihood of fiscal adjustment.

[46] Wehner (2010a: 633) also criticises the count of ministerial portfolios in Perotti and Kontopoulos (2002), arguing that it is highly selective and excludes a number of important ministries.

[47] Wehner (2010a) also links the two concepts of government fragmentation – coalition governments and cabinet size - and finds that the fiscal impact of a large cabinet size is increasing with partisan fragmentation of cabinet (measured by the portfolio shares of the political parties represented in cabinet). On this basis, it is suggested that single party cabinets may be able to mitigate the fiscal impact of a large number of spending ministers, but the supporting evidence is not very robust.

Overall, thus the evidence points to a stronger link between an executive interpretation of government fragmentation, based on cabinet size, and fiscal outcomes than for government partisan fragmentation. However, the measure of cabinet size is not precise in some of the studies (Wehner 2010a). In addition, as highlighted by Eslava (2011), the issue of causality needs to be further explored in this branch of the literature, since a society's fiscal preferences may also be reflected in the size of cabinet, whilst previous fiscal outcomes and budget consolidation efforts may also affect the number of spending ministers.

2.3.1.3 Government 'weakness'

Different types of government differ not only in the degree of fragmentation but also in other characteristics, such as durability. In particular, coalition and minority governments tend to have short terms of office which, by reducing incentives for members of government to cooperate in budgetary decision-making, can also affect fiscal outcomes (Roubini and Sachs 1989). When the type of government is used as an explanatory variable, it is difficult to distinguish empirically between the effects of these two different characteristics. A branch of the literature has specifically assessed the effect of the length of tenure of office to the budget deficit bias, based on a 'weak' government hypothesis. This rather ambiguous concept has also been examined in terms of government's majority size in parliament as well as whether it faces a solid opposition in parliament. Importantly, this set of studies is not derived theoretically from the common pool problem or 'war of attrition' models, since the government characteristics of interest are fundamentally different from the notion of government fragmentation. Nevertheless, there is a notable set of works which test this 'weak government' hypothesis.

One of the first of these studies, by Grilli et al. (1991), found that average government duration had a significant effect on the net debt ratio in their sample of 18 OECD countries during 1970-1989. De Haan and Sturm (1994) show similar results for EEC countries during the 1980s, when using frequency of government changes as the political explanatory variable. However, De Haan et al. (1999) find that such evidence is not robust across different measures of the debt ratio. Furthermore, more recently, Ricciuti (2004) presents contrasting results, with government duration (measured through a simple dummy variable to capture changes in government) not having a significant effect on the government balance.

Other studies have operationalised government 'weakness' through the size of government's majority in parliament. A large parliamentary majority weakens the influence of any partner in the coalition and the threat of not continuing to support government is less effective, which facilitates control over spending demands by coalition partners. However, the findings are not that robust. Whilst both Volkerink and De Haan (2001) and Elgie and McMenamin (2008) find that the size of government's majority (proxied by the number of seats in excess of those needed for a simple majority) is negatively related to the budget deficit, the results are sensitive to changes in the sample. Moreover, Ricciuti (2004) and Mierau et al. (2007) do not find any supporting evidence for the influence of the majority size on the budget balance and on fiscal adjustments, respectively.

Government's position in parliament is also affected by the composition of the opposition: a solid opposition can present a united front against government and resist redistribution of the fiscal burden from the government's constituencies to its own, thus making delayed fiscal stabilisation more likely; the government may also be more susceptible to concede to spending requests from the opposition side, as the threat to its majority in parliament is more credible. However, empirical evidence supporting this hypothesis is weak. Whilst Padovano and Venturi (2001) find a significant effect on budget deficits in Italy, when using a Herfindhal index to capture the number of political parties in opposition, Volkerink and De Haan (2001) and Woo (2003) do not find supporting evidence in their broader samples[48].

[48] Both use measures of the fragmentation of parliament, rather than specifically for the opposition, as explanatory variables. Volkerink and De Haan (2001) use a measure which captures the share of parliamentary seats as well as the ideological complexion of the political parties represented in parliament, whilst Woo (2003) uses a measure based on the probability that two randomly chosen legislators belong to different parties.

Summing up, there are difficulties to operationalise the 'weak' government hypothesis and the empirical evidence is not very strong, both when proxied by its durability as well as by government's strength in parliament.

2.4 Deficit bias in a monetary union

In the previous Sections, different sources of the deficit bias characterising governments at the national level have been discussed. But participation in a monetary union may further aggravate this tendency, as the costs of borrowing by national governments are not completely contained within that country. Krogstrup and Wyplosz (2010) extend the model in Velasco (2000) to include the partial international transfer of a country's debt burden in a monetary union, so that the deficit bias results not only from a domestic common pool problem but also from an international debt externality.

De Grauwe (2009) explains what these negative international externalities entail. Firstly, the increasing recourse to the capital markets by one (large) country, can drive the monetary union's interest rate upwards, thus increasing the debt servicing costs in other parts of the EA as well[49]. Since fiscal expansions can lead to inflationary pressures, this may lead to a tightening of monetary policy by the ECB, which in turn would have a contractionary effect on all the members of the EA. The higher interest rate may possibly deter investment, thus affecting also long-term economic growth. Increased borrowing by a large EA member state may also attract substantial capital inflows, leading to an appreciation of the Euro, thus harming the EA's competitiveness and growth (Baldwin and Wyplosz 2012).

Another spillover effect involves interference with the conduct of monetary policy in the EA: facing increased borrowing costs, a financially hard-pressed government may put pressure on the ECB to relax its monetary policy stance,

[49] If capital markets work efficiently, each country in the EA would face a different interest rate, reflecting the specific risk premium on its government debt, but financial integration in the EA implies that spillovers to the financial system of other countries are likely. Heavy government borrowing by one country and the possibility of default may also have more general contagion effects on other countries within EMU.

thus jeopardising its independence[50] (De Grauwe 2009). Whilst the country concerned would benefit from an erosion of the real value of its outstanding debt, the inflationary consequences, for instance on competitiveness, would be felt throughout the EA.

Finally, if the country concerned faces the threat of default, the other members may decide to step in and bailout it out, rather than face a systemic collapse of the banking system, which would result following a run on that country's debt (Beetsma 2001). This constitutes the most obvious channel in which excessive borrowing by one country can lead to adverse spillovers on the rest of the monetary union, as the costs of the debt bailout are shared among all the member states. In view of this risk, the Maastricht Treaty introduced a 'no bailout' clause (Article 125, TFEU), prohibiting the Eurosystem and all other public institutions, including national governments, from providing direct support to other EA governments. However, this provision was not credible as evidenced clearly during the EA sovereign debt crises[51]. Such an implicit bailout guarantee implies that financial markets do not work efficiently and the risk premium of the country with excessive borrowing would be lower, as part of the risk of default is transferred to the other EA members which are expected to bail it out in case of financial difficulties. It also leads to moral hazard as individual countries would have less incentive to be fiscally disciplined, knowing that if facing default, they will be rescued by a bailout (Beetsma 2001).

These different types of externalities all imply that part of the costs of excessive borrowing by a EA country are borne by the other member states, but each country considers only the costs which it incurs. Consequently, these externalities aggravate the tendency towards deficit-financing which arises from domestic political factors.

[50] The direct monetisation of government debt by the ECB, or any central bank of EA countries, is specifically prohibited by Article 123 of the Treaty on the Functioning of the European Union (TFEU) 2012.
[51] For a discussion on how the no-bail out clause was circumvented during the EA sovereign debt crises, see for example Baldwin and Wyplosz (2012).

2.5 Summary

In this Chapter, the literature on the political economy of budget deficits has been reviewed, focusing on two alternative theoretical approaches: that where the motivation behind government borrowing results from the incumbent trying to improve its chances of remaining in office; and that involving government fragmentation and a fixed common pool of resources. Both approaches are characterised by conflicts of interests: between the interests of the incumbent and that of voters; and within government, reflecting conflict between groups within the same society, respectively. Furthermore, besides the deficit bias arising from these domestic political conflicts, the tendency for deficit financing in the EA is intensified due to international debt externalities, which imply that part of the cost of a country's debt burden is borne by the other member states.

At the national level, the incumbent's incentive to manipulate the budget to increase the likelihood of re-election results in an electoral budget cycle. Whilst the concept of fiscally-illuded voters in the early models was overly simplistic, the model was subsequently adapted to combine rational voters with imperfect information. In these models, the electoral budget cycle results from competency signalling by the incumbent and is more likely to occur when budget transparency is weak. This allows electoral fluctuations in the budget to occur even when voters are 'fiscal conservatives', sanctioning incumbents in elections for running budget deficits.

The presence of an electoral budget cycle in European countries has been confirmed by various studies, capturing different time periods, using different specifications for the electoral variable, adopting different econometric techniques and allowing for a varied range of economic and political factors. Supporting evidence has also been found in single-country studies focusing on a few EA member states. Thus, the constraints imposed by the SGP do not seem to have prevented national governments from using fiscal expansions to increase the likelihood that they remain in office.

The other theoretical approach for the tendency of deficit-financing reviewed in this Chapter involves distributive conflicts within government over a common pool of resources (including future taxation necessary to finance current public spending). The effect on borrowing is intensified the more fragmented is the government. This approach can also explain why some countries take longer to implement fiscal stabilisation than others.

Empirical testing of the common pool model faces difficulties to operationalise the concept of government fragmentation, which can take different forms. A set of studies uses crude dummy variables to indicate different types of governments, but the link to fiscal outcomes is weak and these studies have been subject to considerable criticism. Furthermore, such proxies may be capturing other government characteristics, besides fragmentation. For example, coalition governments are characterised by partisan fragmentation, but they also tend to suffer from short tenures and in the case of minority governments, they have a 'weak' position in parliament as well. On the other hand, some evidence has been found, also for European countries, when government partisan fragmentation has been measured using the number of coalition partners or other more complex measures of the power of different members of the coalition. There is also some evidence supporting the influence of government fragmentation on fiscal outcomes when an executive interpretation, through cabinet size, is applied. But in these studies, the measure of cabinet size adopted is not always defined precisely and there may also be endogeneity issues.

Other empirical studies have tested for the effect of government 'weakness' on the budget balance and government borrowing. This 'weak' government hypothesis is fundamentally different from the notion of government fragmentation and involves characteristics such as government durability (measured by the length of tenure of office), the size of its majority in parliament and the composition of the opposition. However, evidence supporting this hypothesis is rather limited.

In conclusion, this literature review has identified different motivations explaining why governments resort to deficit-financing and excessive borrowing and the contexts where such incentives are more likely to occur. Whilst there is strong evidence for the influence of the timing of elections on the budget balance in European countries, the findings relating to the effect of political factors are less robust, also reflecting problems to accurately operationalise particular government characteristics. In the next Chapter, a simple model of the budgetary process in EA countries is presented which incorporates the incentives facing the relevant stakeholders and the resulting manifestation of the deficit bias is explained. Subsequently, budget institutions are introduced in the model to explain how the distortions implied by this tendency for government borrowing can be mitigated.

Chapter 3:

Theoretical Framework – A Simple Model of the Budgetary Process in EA Countries and Implications of Budget Institutions

3.1 Introduction

This Chapter proposes a simple model characterising the budget process in EA countries, focusing on two main actors – the executive and the legislature. The model draws heavily on von Hagen (1992), Hallerberg and von Hagen (1999) and Wehner (2010b), with the graphical diagrams used to illustrate the model reflecting considerably the latter's work. In the first Section of the Chapter, the interaction between the executive and the legislature during the different stages of the budgetary process are described. Subsequently, the incentives faced by the actors during the different phases of the budgetary process are discussed. These reflect the two different theoretical approaches, discussed in the previous Chapter, namely, different fiscal preferences between the incumbent and voters; and heterogenous fiscal preferences within government itself. For each phase of the budgetary process, the model is extended to analyse in more detail legislative budgeting, specifically its power relative to the executive and implications for fiscal discipline. This part of the model, which is centred more on the role of the legislature, draws heavily on Wehner (2010b) but focuses on how legislative budgeting can affect the fiscal balance, rather than the size of the overall budget (level of public spending). Finally, budget institutions are introduced in the model and a discussion follows on their effect on the decisions taken by the actors during the different phases of the budgetary process, focusing on implications on the deficit bias.

This model is used as a basis to develop the composite indices capturing the quality of budget institutions and legislative budgetary power, which are presented in the following two Chapters. Furthermore, from the model, hypotheses are derived regarding the relationship between the quality of budget institutions and legislative budgetary power and fiscal discipline. These are tested empirically in Chapter 6, whilst further investigation of this relationship is carried out through the case study analysis presented in Chapter 7 of this thesis.

3.2 A simple model of the budgetary process in EA countries

In the simple model presented in this Chapter, the executive and the legislature take the main budgetary decisions. Other stakeholders, such as trade unions, employers' representatives and other lobby groups, who can also affect the budgetary process are not included in the model. Rather, their fiscal preferences are assumed to be incorporated in those of the two main actors in the model. In order not to miss out on important conflicts within the executive, in contrast to Wehner (2010b), the executive is not modelled as a unitary actor throughout the budgetary process. Rather, the executive is composed of spending ministers and the finance minister (or treasury/budget minister) who presides over financial resources. For simplicity, the role of the head of government in the budgetary process is assumed to be taken over by the finance minister, since as explained further on, they face the same incentives.

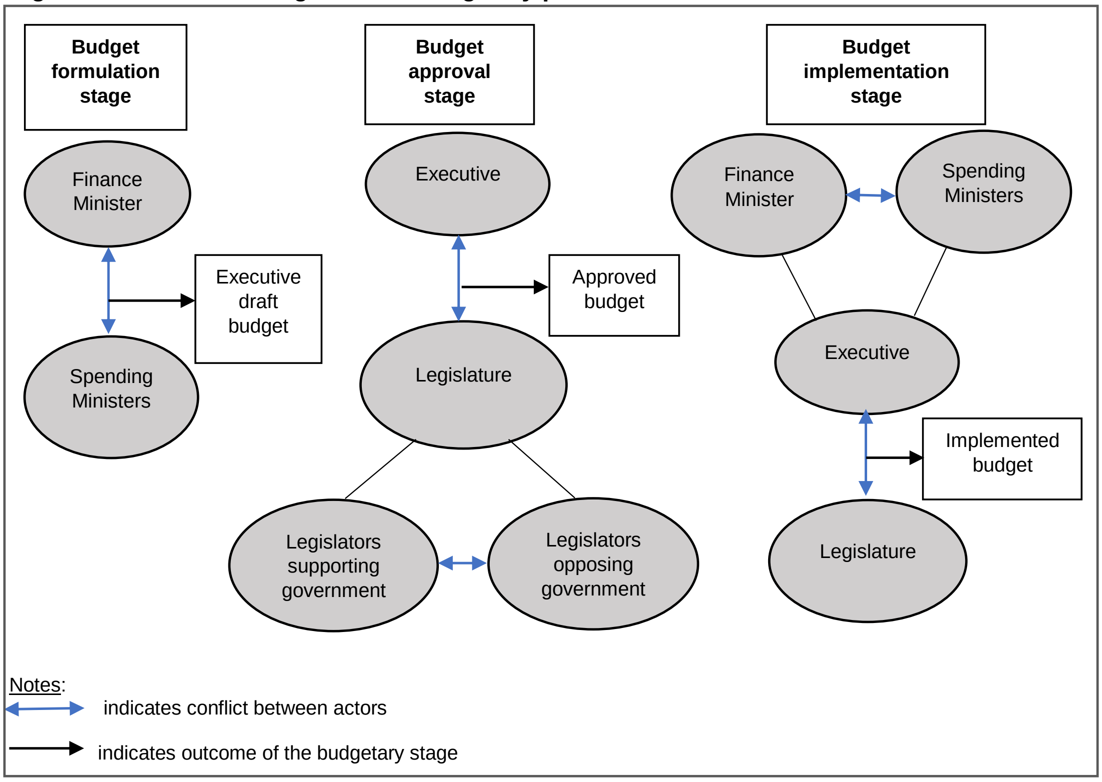
On the other hand, the legislature is first considered as a unitary actor which negotiates with the executive on the draft budget. Subsequently, when the focus of the discussion shifts to legislative budgetary power, a simple distinction is made between two groupings within the legislature: those members of parliament that support the government and those that oppose it, since they face different political incentives. Including additional political groupings would imply more complex modelling but would not add more diverse incentives within the legislature for the purpose of this model[52]. As in Wehner (2010b), interaction between the executive and particular legislators and dynamics between different chambers in the legislature are not considered in the model. This simplification facilitates the analysis and makes it easier to focus on the relative power of the executive and the legislature in the budgetary process, without affecting the main results.

[52] The model is based on a parliamentary system, since this is the prevalent system in EA countries (Inter-American Development Bank 2015). However, it can be applied to presidential systems. Since in the latter, independence between the executive and legislative branches of government is more distinct, all legislators would be considered as having the same incentives as the opposition group in parliamentary systems.

For EA countries, the CION and Ecofin are other important stakeholders in the national budgetary process. However, for simplicity, these are not included as separate actors in the model. Rather, their influence on the national budgetary process is modelled through the constraints imposed on the national budget which emanate from the supra-national SGP rules.

In the model, the budgetary process comprises the formulation, approval and implementation stages, as shown in Figure 3.1. In the first stage, the executive prepares a draft budget. During this stage, spending ministers bargain with the finance minister over the size and composition of the budget. The legislature does not have a key role during the budget preparation: as in Wehner (2010b), the task of drafting the budget is delegated to the executive. This is a realistic assumption since few legislatures in developed countries have the relevant formal powers or the required technical competence to formulate their own comprehensive budget proposal (Schick 2002).

Figure 3.1: The three stages of the budgetary process



Source: Modified from Dabla-Norris et al. (2010: 5)

In the second stage, the executive presents its budget proposal to the legislature. This draft budget constitutes the executive's common position as conflicts within the executive would have been resolved during the first stage of the budgetary process. Rather, the second stage involves negotiation between the executive and the legislature, with the latter having a critical role during this phase of the budgetary process. The legislature can approve the executive's draft budget without amendments, propose amendments and approve an amended budget or reject the budget proposal. When examining the role of the legislature in more detail, a distinction is made between the group of legislators supporting the government and those opposing it, since, as discussed further on, these face different political incentives which affect their stance on the draft budget proposed by the executive.

In the third stage of the budgetary process, the executive implements the budget which has been approved by the legislature. Further modifications of the budget law by the executive during budget implementation may be possible, so that in effect, the implemented budget can differ from that approved by the legislature. Thus, strong legislative budgetary power during the approval stage can be undermined if the budget law is not binding and the executive has the power to modify the budget from that approved and align it more closely to its original draft (Alesina et al. 1999). During the budget execution phase, the incentives of spending ministers and the finance minister differ once again - hence they are modelled separately. On the other hand, both legislators supporting the executive and those opposing it face the same incentives, that of ensuring that the implemented budget reflects that approved: thus, the legislature is modelled as a unitary actor during this stage of the budgetary process.

Reflecting the focus of this study – on the implications of budget institutions on fiscal discipline - in the model, the budgetary process simply involves decisions over the size of the budget balance (as a ratio to the GDP)[53], rather than choices on the composition of spending or on the sources of government

[53] In the model, the outcome of the budgetary process is the budget balance as a ratio to GDP. Implications on other indicators of fiscal discipline are not considered. Thus, the budget balance is assumed to be directly reflected in the level of government indebtedness, with a budget deficit increasing the level of debt by a corresponding amount, and vice-versa for a budget surplus. However, in practice, the annual change in government debt may not be exactly equal to the budget deficit/surplus, due to stock-flow adjustments. In the empirical analysis, presented in Chapter 6, alternative fiscal indicators are considered, including the annual change in the government debt ratio to GDP.

revenue. The budget balance is derived from the difference between total public spending and total revenue. For simplicity, in the model, spending consists of public goods and services, which improve public welfare, and transfers to the public. The public benefits from higher public spending immediately (or in a relatively short time) and as the executive seeks political support from the public, higher public spending also improves the executive's utility. Similarly, legislators favour higher public spending because this increases the public's utility and hence also their chances of re-election. All public spending is paid out of a general revenue fund, which, for simplicity, is assumed to consist solely of tax revenue. As in the model proposed by Hallerberg and von Hagen (1999), a higher tax burden lowers public welfare since the tax system creates a deadweight loss, which increases with the level of taxation. This excess burden of taxation is mostly felt in the medium to long term as taxpayers adjust their behaviour to changes in tax incentives or net asset returns. Government can also finance its spending by borrowing from capital markets. Taxpayers are assumed to be partly non-Ricardian, so that deficit financing allows the shifting of part of the tax burden to finance higher spending on future taxpayers. Since the actors participating in the budget process (spending ministers, finance minister and the legislators) all face electoral uncertainty, they discount the future at a rate which is larger than the real interest rate. However, the government faces an inter-temporal budget constraint, where the present value of all public spending must equal the sum of current and future (tax) revenue including deadweight losses and thus the public debt does not grow without bound.

3.2.1 Incentives faced by actors in the budgetary process

The incentives of spending ministers and the legislature in the model reflect electoral considerations as well as the fiscal commons problem[54]. In particular, the latter affects the behaviour of spending ministers during both the budget formulation stage and the implementation stage, whilst legislators are similarly

[54] The model presented in this Chapter explains how conflict within government results in a budget deficit bias. It can similarly be applied to explain situations of delayed fiscal stabilisations (as in the 'war of attrition' model, described in Section 2.3 of the previous Chapter).

affected during the budget approval stage. However, legislators also face different political incentives during the approval stage, depending on whether they come from political parties forming part of government or from parties in opposition. Finally, all actors in the legislature and in the executive, including also the finance minister, have incentives to spend more and finance this expenditure through borrowing during electoral periods, in order to increase the likelihood of re-election.

Thus, in the model, the utility of spending ministers increases with a higher budget allocation because they enjoy the full benefits, in terms of constituency support and political success, of higher public spending, but they do not take full account of the burden of taxation to finance the increased outlays, since the cost falls on the general public[55]. Moreover, higher spending which is deficit-financed, rather than through current taxes, is a preferable option since the cost of debt falls on future generations, thus allowing the appropriation of more resources. However, this is limited by the government solvency condition (Velasco 2000), so that in the model, higher current spending is partly financed by increased current taxation and partly through borrowing.

On the other hand, the finance minister is not generally concerned with spending administrations but rather takes responsibility for the overall budget and the overall economic welfare. Thus, compared to line ministers, the finance minister is more likely to take into account the full tax burden of current spending decisions and also to discount less the future cost of deficit financing. Consequently, the finance minister generally prefers a lower level of spending compared to line ministers, so as restrain the level of present and future taxation. This applies also to the prime minister (or head of government), who is similarly held accountable by voters for the general economic, financial and budgetary situation in the country. To keep the model simple, the preferred position of the finance minister is assumed to be of a balanced budget.

[55] As discussed in the previous Chapter, the common pool resource problem is accentuated when spending ministers come from different political parties, as in the case of coalition governments.

Changing this assumption, to a small budget surplus or a small budget deficit, would not significantly alter the results.

Like spending ministers, legislators also face a fiscal commons problem since they can favour their constituency and increase their chances of re-election through higher spending, whose costs fall on the general public or future generations, depending on how it is financed. As discussed in the previous Chapter, the common pool problem intensifies as the number of decision makers increases. Since the number of members in a legislature is higher than the number of spending ministers in cabinet and legislatures also contain more parties than the executive, the common pool problem is accentuated in the legislature (von Hagen 2002)[56]. Thus, in the model, the legislature prefers higher spending, than the executive and during the approval stage, it proposes amendments to the draft budget to this effect, which imply a larger budget deficit.

However, within the legislature, members also face political consequences from proposing amendments to, or rejecting, the draft budget. This is particularly the case in parliamentary systems, where rejecting the executive's budget proposal may be considered as a vote of no confidence in the government, leading to its demise[57]. Members of the legislature coming from political parties supporting the government would be reluctant to propose amendments to the draft budget if this can lead to the fall of government, because this would imply the risk of losing their role in government and possibly also their parliamentary seat, if fresh elections are held. On the other hand, legislators coming from opposition parties are more willing to propose amendments to the executive's draft budget, since this can weaken the government, increasing their chances of forming part of a new government.

[56] The model in this Chapter presents a simplification of the heterogenous fiscal preferences of different political parties, represented in parliament and/or in cabinet. For instance, members of parliament may be elected on a low public spending/fiscal discipline mandate and they could also form part of government. However, the general tendency is that elected officials prefer higher outlays, which results in a deficit bias.

[57] This does not apply to presidential systems, as legislators and the executive are elected separately. Thus, legislators are more likely to press for amendments to the executive's budget proposal, whilst, on its part, the executive tends to accommodate more such proposed amendments in order to secure the safe passage of the budget in the legislature.

Finally, in the model, the incentives faced by the actors in the budgetary process are not constant over time, but vary over the electoral cycle, reflecting the theoretical approach involving conflict between the incumbent and voters, discussed in the previous Chapter. As elections approach, the benefit of higher spending which accrues to spending ministers and legislators increases as favouring constituencies can have an immediate effect on their re-election chances. Consequently, they tend to discount more the future costs of financing such outlays. Before elections, even finance ministers may become more concerned with their electoral chances and discount more the future tax burden of financing higher current spending.

3.2.2 Budget formulation

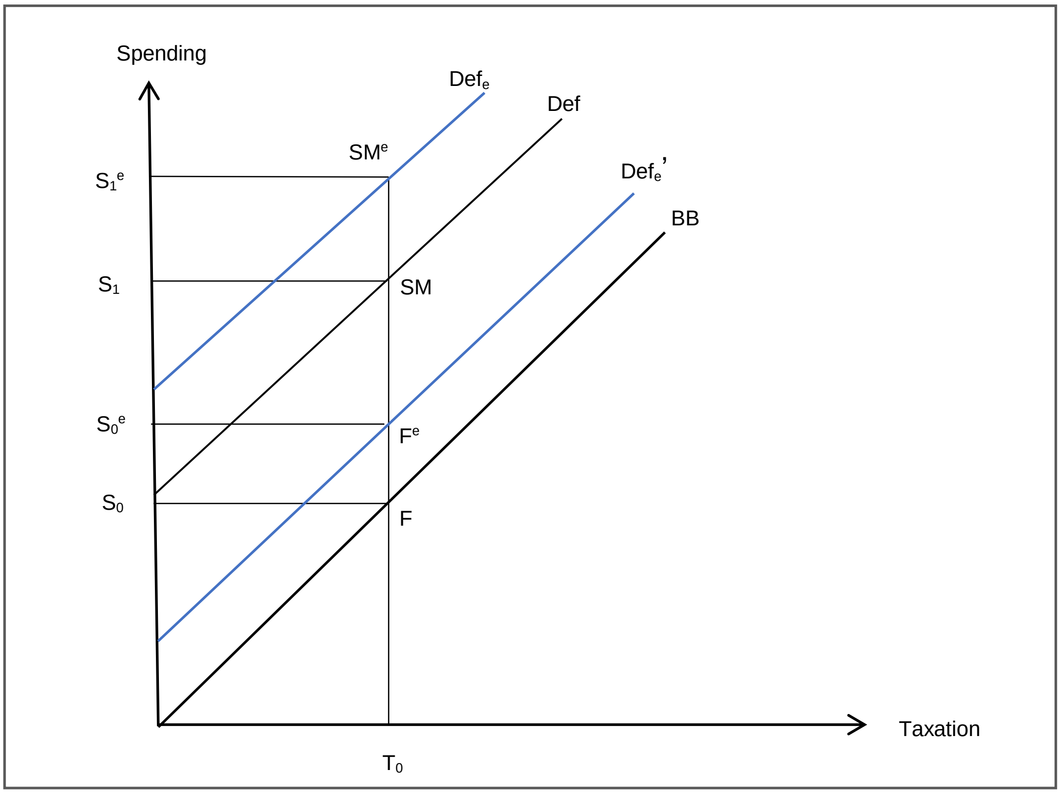
In the model, the budget formulation phase is characterised by conflict and negotiations between the finance minister and spending ministers. Figure 3.2 depicts hypothetical preferred budget balance positions for spending ministers and the finance minister. The preferred positions of the finance minister are given by the 45° line (BB), where total spending (S) = total taxation (T) and the budget is balanced. Suppose that the ideal point for the finance minister is F, where the level of tax revenue is T_0 and total spending is S_0 ((T_0 - S_0) = 0). On the other hand, line ministers prefer a higher level of spending and with taxation at T_0, their preferred position would involve a budget deficit, say point SM on line Def (where (T_0 - S_1) < 0). The greater the extent of the fiscal commons problem and the more that ministers discount the future, the greater would be the distance between their preferred position (line Def) and the 45° (balanced budget) line[58]. As shown by von Hagen (1992) and subsequently also Hallerberg and von Hagen (1999), the equilibrium outcome of unrestricted negotiations to resolve these conflicts during the budget formulation stage would be higher than optimal total spending. In the figure, this is depicted as

[58] The preference lines of actors involved in the budgetary process are depicted as parallel lines in order to portray a neat graphical representation. However, the same conclusions would be derived if the preference lines had different slopes (implying that the preferred budget balance varies with the level of taxation): any preference line above the 45° line implies a budget deficit (taxation < spending) whilst any preference line below it represents a budget surplus (taxation > spending).

point SM, involving a budget deficit, rather than the preferred balanced budget by the finance minister at point F.

During the electoral period, ministers have greater incentives to spend more and to finance this expenditure through borrowing. In Figure 3.2, this is shown as a shift in the preferred position of spending ministers from SM to SM^e (on line Def_e), implying that unrestricted negotiations during the budget formulation stage would result in a larger budget deficit (since $S_1^e > S_1$, and taxation is assumed to remain unchanged at T_0). This tendency for larger budget deficits during electoral times is exacerbated since even the finance minister may be tempted to spend more during electoral periods: his/her preferred position shifts from F to F^e (on line Def_e') which involves a budget deficit (since $S_0^e > T_0$). After elections, when the benefits of favouring constituencies through higher spending are not so immediate, the preferred positions of spending ministers and finance ministers shift back to SM and F, respectively.

Figure 3.2: Budget formulation - preferred budget positions of spending ministers and the finance minister

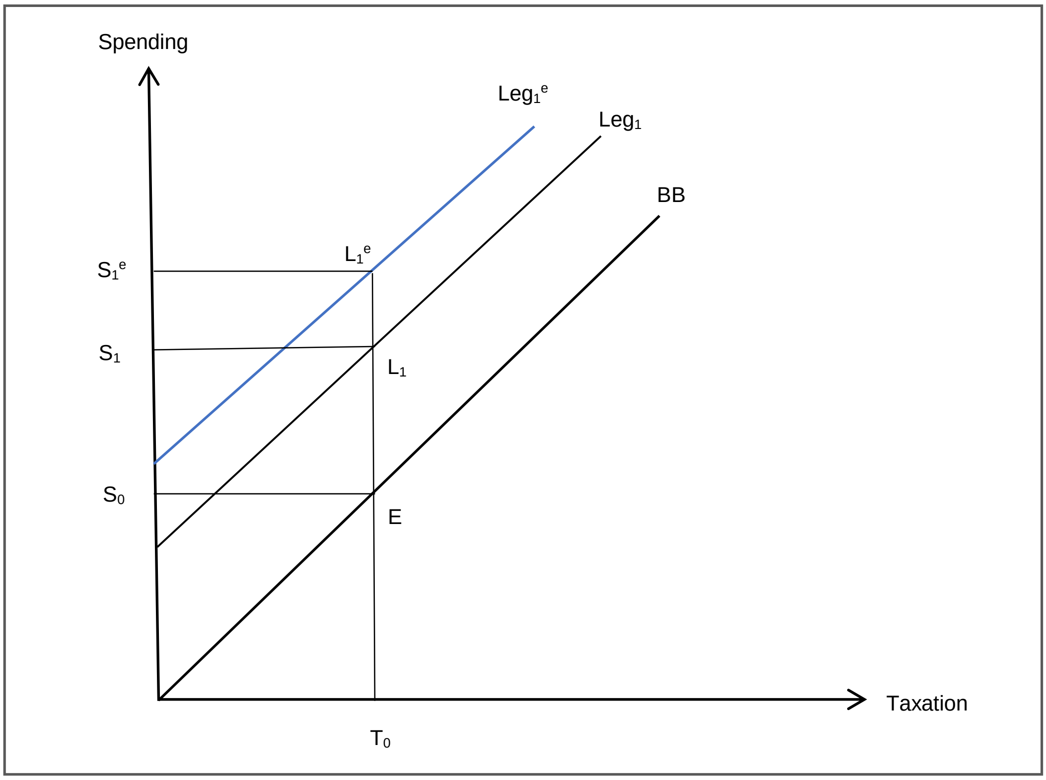


Source: Figure drawn by author

3.2.3 Budget approval

The outcome of the budget formulation stage is the executive's draft budget, which is then presented to the legislature for approval. This stage of the budgetary process is thus characterised by conflict between the executive and the legislature. In Figure 3.3, suppose that the executive proposes a draft balanced budget (point E on line BB), with taxation at T_0 and equal to spending, S_0. However, the legislature prefers a higher level of spending (S_1) and for the same level of taxation, its preferred position would be L_1 on line Leg_1, implying a budget deficit $((T_0 - S_1) < 0)$. If the legislature has unrestricted amendment powers (ignoring other *de facto* constraints), it will seek to amend the executive's budget proposal, so that the approved budget is a budget deficit at point L_1, rather than the balanced budget at point E. During electoral periods, the preferred position of legislators shifts upwards temporarily to L_1^e, implying that unrestricted legislative amendment powers would result in even higher spending ($S_1^e > S_1$) and thus a larger budget deficit.

Figure 3.3: Budget approval - preferred budget positions of the executive and the legislature



Source: Adapted from Wehner (2010b: 23)

This analysis is now extended to provide a more detailed analysis of the legislature's role during the budget approval stage. Firstly, the consequences of rejecting the budget, namely the political implications and reversionary budgets are examined. In addition, the assumption of the legislature as a unitary actor is removed and a distinction is made between the legislators coming from political parties supporting government and those coming from opposition parties.

3.2.3.1 Political implications of rejecting the budget

Although the legislature may have formal powers to amend the budget, its members (or at least some of them) may opt not to avail themselves of these powers, since failure to approve the budget has political implications, which can be severe if this is considered as a vote of no confidence in the government. von Hagen (1992) identifies two opposing effects of the possibility of rejecting the budget. On the one hand, if rejecting the budget can lead to the fall in government, the executive is more likely to pre-empt the legislature's amendment requests in order to ensure that the budget is approved. On the other hand, members of the legislature coming from political parties supporting the government would be more reluctant to propose amendments to the draft budget if this can lead to the demise of government. These two different effects have contrasting implications for legislative budgetary power, with the former increasing the legislature's influence in the budgetary process, whilst the latter reduces it. They also have differing consequences for fiscal discipline: since the legislature is assumed to be more affected by the fiscal commons problem than the executive, the fiscal balance is expected to be worse if the executive gives in to expected amendments to its budget. According to von Hagen (1992), although the combined effect of these two different implications is ambiguous, the latter effect is assumed to prevail. However, in the model presented in this Chapter, it is postulated that the effect depends on the type of government.

In the case of a single-party majority government, members of parliament supporting the government would be reluctant to propose amendments to the executive's draft budget and since they have a majority in parliament, this would be approved without any amendments. On the other hand, with a minority government, the government requires the support of opposition parties to obtain legislative approval for its budget. Thus, to ensure safe passage of the budget law, the executive pre-empts amendments by the legislature: in Figure 3.3, this is shown as the executive foregoing its ideal budget E and proposing a budget close to L_1, implying a higher level of public spending and a budget deficit. In contrast, in the case of a coalition government, members of parliament coming from political parties forming part of the coalition would be more likely to support the executive's draft if their party risks being left out of the coalition government following the demise of the government in office. On the other hand, if a political party forming part of the coalition perceives that its role in government could be stronger if the current coalition breaks up (for instance, because it expects greater political support if new elections are held), its legislators are more likely to press for budget amendments and the executive may try to pre-empt their preferences by accommodating them in its budget proposal. Thus, it is not possible to derive a direct general correlation between the political implications of rejecting the budget in coalition governments and legislative budget amendments in the case of a coalition government.

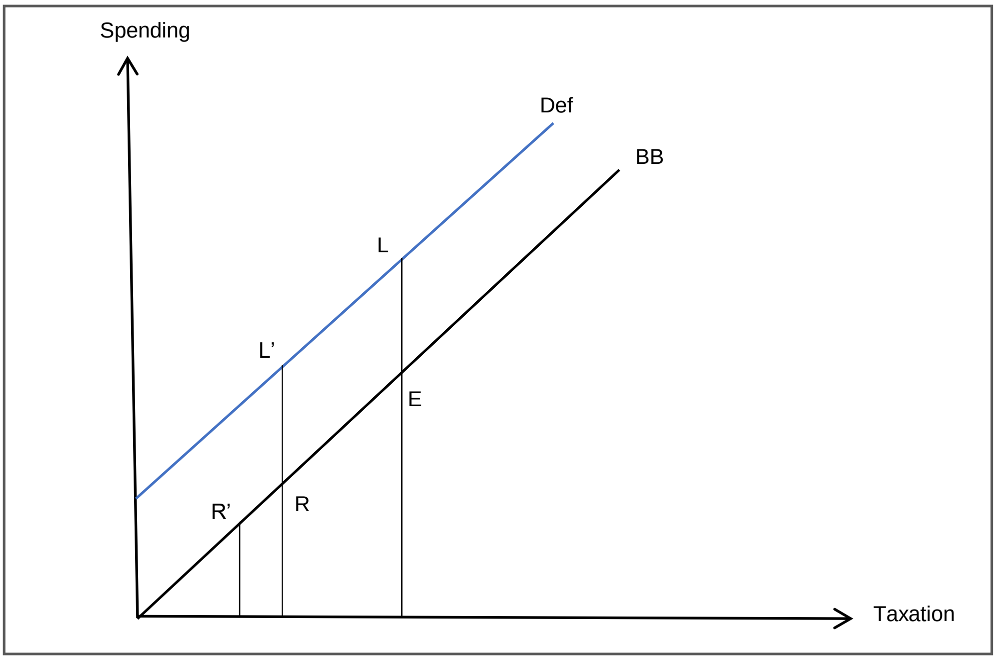
3.2.3.2 Reversionary budgets[59]

The reversionary budget is the outcome that takes effect when a previous budget has expired but a new one - either the executive proposed budget or the legislature's ideal budget or some compromise between the two positions - has not yet been approved. It thus affects the bargaining positions of the legislature and the executive during the budget approval stage. In most countries, there are formal rules governing such circumstances, generally specified in the constitution or the organic budget law, and generally three broad reversionary scenarios are possible: zero spending, last year's approved budget or the executive's draft budget (Wehner 2010b). The consequences of non-approval of the budget are most severe under the scenario of zero spending since this involves government shutdown. The

[59] This part of the model draws heavily on Wehner (2010b).

second scenario of last year's approved budget involves less disrupting consequences but still results in inconveniences as new policy measures or investment projects cannot be initiated. Finally, reverting to the executive's budget proposal eliminates the adverse impacts of non-approval of the budget, but in the process, strengthens substantially the relative position of the executive vis-à-vis the legislature. Combined with the case where the legislature does not have any amendment powers but can only approve or reject the draft budget, this effectively implies that the outcome will always be the executive's proposal (E in Figure 3.4).

Figure 3.4: Reversionary budgets



Source: Adapted from Wehner (2010b: 30)

On the other hand, with the other reversionary scenarios, the executive may be willing to depart from its ideal budget E and concede to the legislature's proposed amendments, as long as the legislature's preferred budget (L) is preferable to the reversionary outcome (R). This would be the case if the consequences of not approving the budget are very severe, as in the case of a government shutdown. Thus, legislative budgetary power would be strengthened in this case. But in other reversionary scenarios, the outcome cannot be determined so clearly, because it depends on whether the legislature's threat of non-approval of the budget is credible, which in turn depends on whether the reversionary outcome is closer to the legislature's ideal budget than the executive's proposal (Wehner 2010b).

Supposing that the reversionary budget is R[60], the executive would prefer the legislature's amended budget at point L than the reversionary outcome ((E – L) < (E – R)). However, the executive would still not concede to the legislature's amendments in this case because the legislature's threat of not approving the budget is not credible: the legislature prefers the executive's proposal rather than the reversionary outcome ((L – E) < (L – R)). On the other hand, consider the case where the legislature's preferred budget is L', i.e. the legislature prefers a smaller budget (lower level of taxation) than the executive, and the reversionary outcome involves severe consequences (R'). In this case, the executive would also prefer the amended budget rather than the reversionary outcome ((E – L') < (E – R')). But in this case, the legislature's threat of not approving the budget is credible ((L' – E) > (L' – R')). Thus, the executive would accommodate the proposed amendments and the approved budget would be L'. If as expected the reversionary outcome involves a smaller budget than the executive's proposal (i.e. R is located to the south or southwest of E), the reversionary budget implies stronger legislative budgetary power only if the preferred position of the legislature involves a smaller budget (lower level of taxation) than the executive (i.e. L is located to the northeast of E). But as discussed earlier, this is not the legislature's ideal position in the model presented in this Chapter.

3.2.4 Budget implementation

During the implementation stage of the budget, further changes to the approved budget may take place. A certain degree of flexibility enables the executive to respond to unforeseen developments. For instance, if the economic scenario deteriorates and tax revenue is lower than projected, the possibility for the executive to cut spending during budget implementation can ensure that the fiscal balance position is not impacted adversely. Similarly, the possibility to re-allocate expenditures within the overall budget envelope, after

[60] This implies a smaller budget than the executive's proposal, which is generally the case, for example if the reversionary budget is based on the previous year's allocations.

the budget has been approved by the legislature, can be beneficial from a fiscal discipline perspective, because funds can be shifted to new spending requirements, whilst ensuring that the overall expenditure level is not exceeded. In contrast, executive flexibility to increase spending during budget execution can undermine fiscal discipline, since, being affected by the fiscal commons problem, spending ministers are prone to make demands for larger outlays and to overrun their budget appropriations (von Hagen 1992). In Figure 3.2, if the approved budget is at point F, with an aggregate spending level of S_0, during budget implementation, line ministers would try to exceed their budgetary allocations to their preferred level, S_1, implying a budget deficit at point SM.

On the other hand, any type of executive flexibility during the budget implementation stage can weaken legislative budgetary power, since this implies that the budget approved by the legislature is not binding. In particular, if the approved budget (point L_1 in Figure 3.3) differs substantially from the executive's draft budget (point E), during implementation, the executive may try to realign the budget more closely to its original proposal, by cutting, cancelling or postponing expenditure approved by the budget law. Legislative budgetary power would still be weakened if the executive only has authority to shift funds from one budget item to another: in this case, the actual implemented budget would not reflect the spending priorities decided upon in the approved budget.

3.3 Implications of budget institutions

Different forms and characteristics of budget institutions affect the roles of the executive and the legislature during the budgetary process and can also impose constraints on their decision-making, with implications on the size of the budget balance. In particular, budget institutions which involve more centralisation in decision-making induce actors to take a more comprehensive view of the budget, thus addressing the common pool resource problem and resulting in more fiscal discipline. This typically involves assigning strong decision-making powers to the finance minister and restricting the legislature's budgetary amendment powers. Alesina and Perotti (1999) refer to this approach as 'hierarchical' budget institutions and note that, whilst contributing to more fiscal restraint, this approach restricts the representation of different interests during the budgetary process. An alternative form of fiscal governance is the 'contracts' approach, where fiscal discipline is achieved through strong commitment by actors, with similar decision-making powers, to fiscal rules or medium-term budgetary targets (von Hagen and Harden 1995; Hallerberg and von Hagen 1999)[61]. This type of commitment, especially if it is enshrined in law, can also restrict the possibility for the incumbent to manipulate fiscal policy in order to improve re-election chances, thus addressing electoral budget cycles.

Different characteristics which influence the quality of budget institutions, including legislative budgeting, are hereby introduced in the model to explore how they affect the choices made by the different actors during the three stages of the budgetary process. Four main categories of budget institutions are considered: numerical fiscal constraints; procedural rules which govern the budgetary process; budget transparency and independent fiscal councils. A description of these categories follows, together with a discussion of how these institutional characteristics can address the electoral budget cycle and the common pool resource problem. In the following Sections, where relevant, the discussion also captures aspects of legislative budgeting.

3.3.1 Numerical fiscal constraints

Numerical fiscal constraints involve a rule-based approach to instil fiscal discipline, involving fiscal rules and/or MTBFs. Fiscal rules (such as balanced budget rules) set formal, often legal, limits on the budget. The most widespread definition of fiscal rules is that by Kopits and Symansky (1998: 2):

> "a permanent constraint on fiscal policy, typically defined in terms of an indicator of overall fiscal performance"[62].

EA countries are subject to supra-national fiscal rules under the SGP, with the 'corrective' arm of the Pact requiring that the budget deficit and the

[61] These two different forms of fiscal governance are discussed in more detail in Section 4.2.1 of the next Chapter.
[62] This definition is also used by the CION (2017b) for its fiscal rules strength index.

government debt (as a ratio of GDP) should not exceed 3% and 60%, respectively, whilst the 'preventive' arm requires the achievement of the MTO which generally constitutes a close to balanced budget position in cyclically-adjusted terms. As discussed in Chapter 1, following the reforms implemented after the Great Crisis, EA countries are also required to have national fiscal rules in place, which reflect the SGP provisions[63]. In their model for a monetary union setting, Krogstrup and Wyplosz (2010) rationalise supra-national fiscal rules, such as the SGP, since they can mitigate both the domestic deficit bias and the international negative externalities[64]. EA countries are also required to have a MTBF in place and to annually present their medium-term budgetary plans in their SPs[65]. Whilst there is not a broadly used definition, the CION (2017c) uses the following definition for its MTBF index:

> "those fiscal arrangements that allow government to extend the horizon for fiscal policy making beyond the annual budgetary calendar".

Fiscal rules and medium-term budgetary targets aim to achieve fiscal discipline by limiting the budgetary choices faced by the executive and the legislature during the different phases of the budgetary process. However, fiscal rules have been criticised as limiting short-run discretion to respond to unexpected economic shocks at the cost of attaining long-term fiscal discipline (Wyplosz 2005). Alesina and Passalacqua (2015) argue that instilling flexibility in the rules is problematic[66] and thus, a balanced budget rule may be a second-best solution when large political distortions would result in a budget which is very distant from optimal fiscal policy. Another set of issues surrounding numerical budget constraints is the difficulty to enforce them, with the result that governments either circumvent the rules through creative

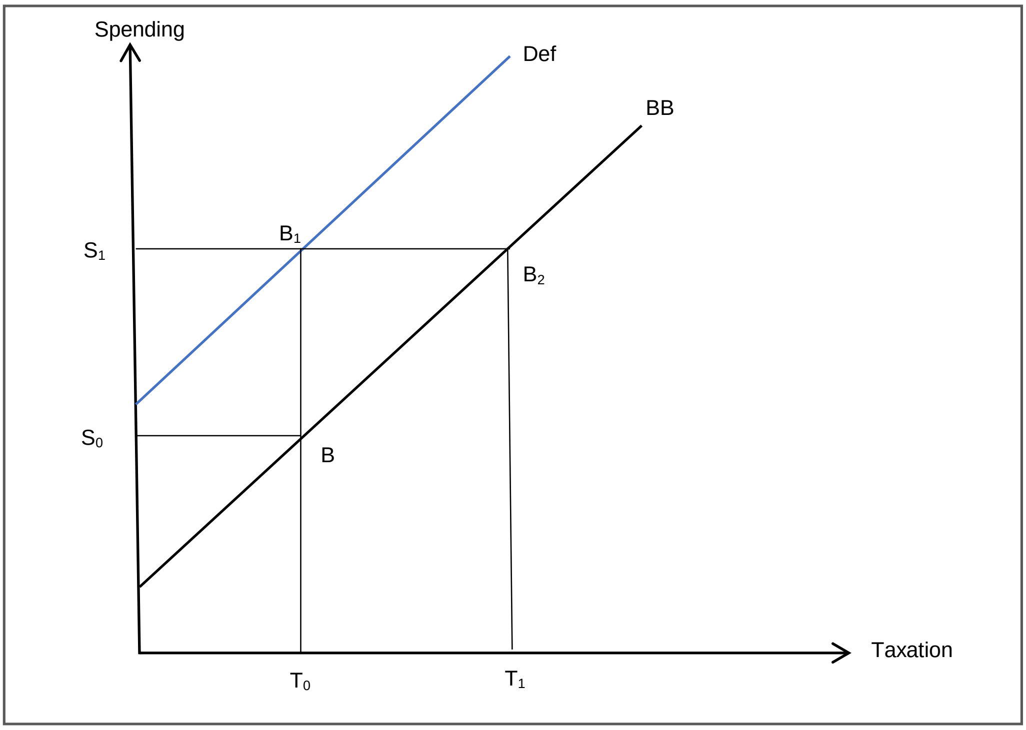
[63] As provided in Articles 5-8 of Council Directive 2011/85/EU. This obligation was reinforced through Article 3 of the Fiscal Compact, contained within the TSCG, which requires that the annual structural budget (defined as the cyclically-adjusted balance net of one-off and temporary measures) of EA countries must be in balance or surplus, with a lower limit of a deficit of 0.5% of GDP.
[64] See Section 2.4 of Chapter 2.
[65] As provided in Articles 9-11 of Council Directive 2011/85/EU.
[66] For instance, the rigidity of the fiscal rules can be reduced by including escape clauses, but their definition can affect both the stringency and the enforceability of the rule. Another approach is to define the rules in cyclically adjusted terms – but the measurement of the cyclical adjustment is subject to different interpretations and different methods of calculation (Alt et al. 2014).

accounting practices (Eslava 2011) or simply *de facto* ignore them. Indeed, referring to the recurrent breaches of the SGP by various EA countries, Calmfors and Wren-Lewis (2011) highlight that fiscal rules are insufficient to bring about fiscal discipline.

Commitment is thus critical for the effectiveness of numerical fiscal constraints to achieve fiscal discipline. Budgetary decision-makers are more likely to abide by the constraints implied by fiscal rules and MTBFs if these have been self-imposed (Wyplosz 2012). This is particularly relevant for EA countries since the SGP is a supra-national fiscal rule and the requirement to introduce national fiscal rules was also centrally-mandated. The involvement of the legislature in numerical budgetary constraints can contribute to more 'ownership' of these rules and thus enhance their credibility. Thus, for instance, according to Lienert's (2010) technical notes and manual on the role of the legislature in the budget process, it is a good practice for the legislature to either endorse the executive's MTBF or adopt its own. This can also broaden the base of political support for the budgetary strategy, which is particularly important during periods of fiscal retrenchments. Similarly, the legislature could be entrusted with the responsibility to monitor fiscal rules (for instance, by being the responsible entity to decide on escape clauses, if applicable). Likewise, the involvement of the legislature in SGP procedures is likely to increase their 'national ownership'. Such involvement of the legislature in fiscal rules, MTBFs or SGP procedures, is thus modelled as more binding fiscal constraints.

During the budget formulation stage, numerical budgetary constraints involve a 'top-down' approach, with the starting point being the limitation, imposed by the fiscal rule, MTBF or SGP provisions, and this determines the feasible ministerial spending allocations. This contrasts with the 'bottom-up' approach of unconstrained negotiations within the executive, where the resulting balance in the draft budget reflects the aggregation of the total spending requests from all ministries. In Figure 3.5, assuming exogenous taxation at T_0, the latter is depicted as a budget deficit at point B_1, with aggregate spending at S_1 ($(T_0 - S_1) < 0$). On the other hand, suppose that the numerical fiscal constraint targets a balanced budget. This would constrain spending to S_0, resulting in a balanced budget at point B ((T_0 - S_0) = 0).

Figure 3.5: Budget formulation with binding budgetary targets and budgetary forecasts



Source: Figure drawn by author

The existence of fiscal rules and MTBFs (including SGP provisions) can also limit the scope of legislative amendments during the budget approval stage. Thus, suppose that in Figure 3.3, the executive presents a draft budget which targets a balanced budget (at point E) which satisfies the requirements of the numerical budget constraints in place. Although the legislature's preferred position is at point L_1 (or L_1^e during electoral periods), it may be reluctant to propose amendments involving higher spending and a budget deficit because these would breach the requirements of these constraints. Similarly, during budget implementation, numerical fiscal constraints can curtail the possibility of spending overruns by line ministries, thus limiting deviations between the actual budget executed and that approved by the legislature. Of course, the effectiveness of the numerical budget constraints to instil fiscal discipline in the different stages of the budgetary process depends on their enforceability and credibility, which as discussed earlier can be strengthened, for instance, through legislative involvement in the relevant procedures.

3.3.2 Procedural rules which govern the budgetary process

As highlighted earlier, procedural rules which centralise decision-making powers in the budgetary process also contribute to address the common pool resource problem. During the formulation stage of the budgetary process, a strong finance minister can restrain the demands of spending ministers. Characteristics of the delegation approach during the budget preparation stage include bilateral negotiations between the finance minister and the line ministers (rather than negotiations taking place in full cabinet), the imposition of budget ceilings on the initial spending requests of line ministers and the final and ultimate decision-making power by the finance minister to resolve or settle disputes. With these characteristics in place, in Figure 3.5, the preferred fiscal position of the powerful finance minister, at point B, implying a balanced budget, becomes binding and spending requests by line ministers would be limited to S_0[67].

During the budget approval stage, an important institutional characteristic concerns the extent of the legislature's formal power to amend the executive's budget proposal. The fiscal commons problem faced by legislators can be limited by restricting the power of the legislature to amend the draft budget proposed by the executive. Legislative budgetary amendment powers are generally enshrined in a country's legislation, or even in its constitution, and can range from no power at all (the legislature can only approve or reject the executive's proposal) to unfettered amendment powers (the legislature can increase or cut the budget or move funds around without any legal constraints). But in many countries, amendment powers are restricted, for instance through budget balance or total spending constraints[68] (Wehner 2010b).

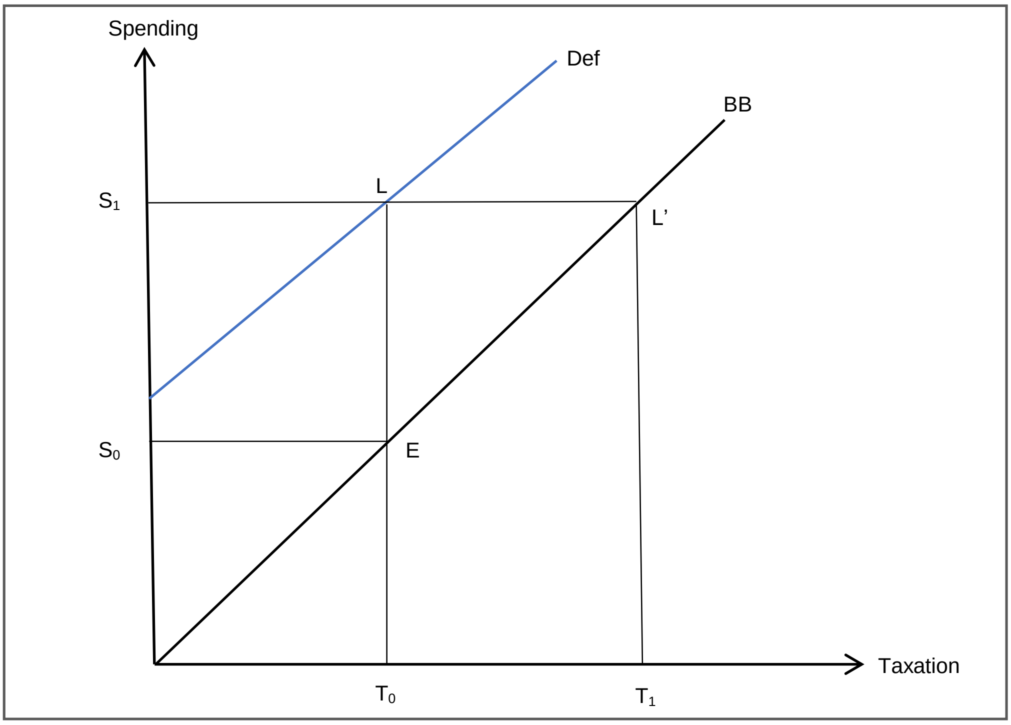
[67] As explained earlier, during electoral periods, the finance minister's preferred budget balance shifts upwards to a deficit position (on line Def_e' in Figure 3.2), so that in the model, there is an electoral budget cycle with the delegation approach, but not with binding numerical fiscal constraints.

[68] In practice, rigidity of some budget components, such as the public wage bill, pensions and other social benefits and debt servicing costs further limit the scope of legislative budgetary amendments (Wehner 2010b). The conclusions of the following analysis concern only the non-predetermined part of the budget.

Assuming that in Figure 3.6, the executive draft budget proposal is a balanced budget at point E ((T_0 - S_0) = 0) and that the legislature's ideal budget is point L, thus implying a budget deficit ((T_0 - S_1) < 0). With unrestricted amendment powers (ignoring other *de facto constraints*), the approved budget would be L. But if amendment powers are constrained, say the legislature can only propose amendments which keep the budget balance unchanged (deficit constraint), its ideal budget L is not a feasible option. If the legislature prefers to keep revenue unchanged at T_0, it will have to accept the executive's proposal, with lower spending than its preferred position (S_0 < S_1). In order to increase spending to its preferred level (S_1), this has to be compensated with higher revenue (T_1) at point L', where the budget is also balanced ((T_1 - S_1) = 0). Other feasible options for the legislature are any points on line BB. However, such restrictions on legislative amendment powers may not involve a hard budget constraint, if the legislature can cover spending increases with unrealistic revenue, for instance through more optimistic economic forecasts (Wehner 2010b). In Figure 3.6, the legislature proposes L', but the increase in revenue from T_0 to T_1 does not materialise, so that the actual budget balance is a deficit at point L ((T_0 - S_1) < 0).

On the other hand, if the restriction requires that the total spending level in the draft budget is not exceeded, the legislature can propose amendments to the executive budget which shift spending among different categories but it cannot increase the total amount of spending beyond S_0. Thus, in effect, the legislature would approve the proposed budget at point E, but perhaps with a different expenditure composition than that proposed by the executive. Similarly, if amendment powers are limited to spending cuts only, the legislature would approve the draft budget (point E), since this is closest to its ideal point L. Thus, restrictions involving total spending involve harder budget constraints than those targeting the budget balance.

Figure 3.6: Legislative budget amendment powers



Source: Adapted from Wehner (2010b: 23)

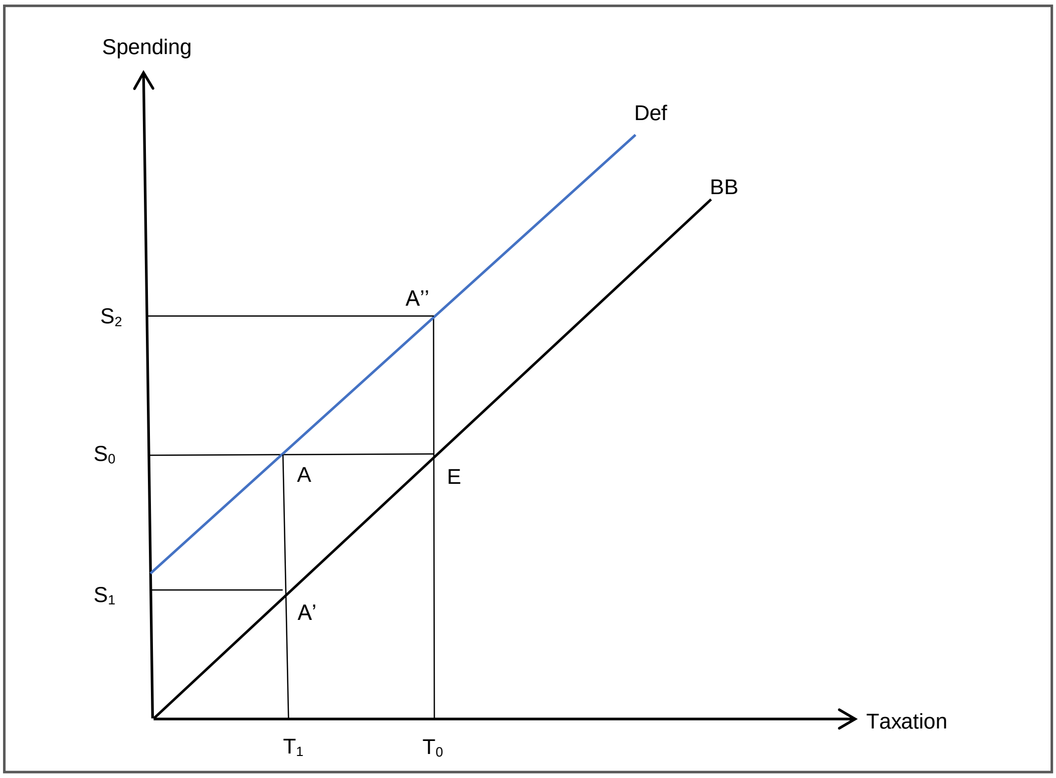
Other relevant institutional characteristics in the budget approval stage concern the degree of centralisation in the voting procedure and in the structure of parliamentary committees dealing with the budget. The sequence of voting can affect the extent to which the fiscal commons problem prevails in the legislature. More fiscal restraint is likely if the legislature first debates and votes on the overall budget size and then, within this constraint, discusses and votes on the individual budget items; rather than if it debates and votes on the budget on an item by item basis, possibly followed by a general vote on the budget as a whole. Similarly, a centralised parliamentary committee structure dealing with the budget can have a role akin to that of the finance minister within cabinet. The costs of financing larger budgetary outlays are more likely to be taken into account when there is a single budget committee which considers and decides on proposals by sectoral committees, compared to a scenario where such a budget committee either does not exist or has limited powers to restrain spending requests by sectoral committees. These institutional characteristics thus reduce the common pool resource problem in the legislature. In Figure 3.6, this is represented by a downward shift in the preferred budget of the legislature (from line Def to closer to line BB).

Finally, an important characteristic of budgetary procedures during the budget implementation stage concerns the degree of executive flexibility to change the budget from that approved by the legislature. This can involve executive power to cut or increase spending and to transfer funds among different budget line items. Such flexibility can also be implemented through supplementary or corrective budgets at the end of the fiscal year, by putting spending items off-budget or by financing them through contingent liabilities. Whilst executive power to change the budget during the implementation phase weakens legislative budgetary power, the effect on fiscal discipline depends on the type of flexibility, as discussed below.

In Figure 3.7, suppose that the balanced budget E has been approved by the legislature and that due to unexpected adverse economic developments, actual revenue falls short of the projected T_0 but rather is at T_1. If spending is unchanged at its approved level of S_0, the actual budget (A) would imply a deficit ((T_1 - S_0) < 0). But if the executive can cut spending from S_0 to S_I, it would be able to restore a balanced budget (at point A', where ((T_1 - S_1) = 0). Alternatively, suppose that due to unexpected developments, more spending is required on a specific budget item than that approved by the legislature. If the executive has power to transfer funds from one budget item to another, it can increase spending on this sector, whilst decreasing the allocation on other items, thus ensuring that the total spending remains unchanged at S_0 and the budget remains balanced at point E. Without this flexibility, the executive would either have to forego higher spending on this priority item or else incur higher total spending (say, S_2), implying an actual budget deficit at point A'' ((T_0 - S_2) < 0).

On the other hand, executive authority to increase spending during budget implementation, over and above the appropriated amount which had been authorised by the legislature, can result in worse fiscal outcomes. Suppose again that the approved budget was a balanced budget at point E, implying total spending of S_0, but that the sum of all the original spending requests by line ministers (during the budget formulation stage) was at S_2. During the execution of the budget, spending ministers will try to increase their budget allocations beyond the approved appropriations, to their original preferred spending level S_2, and with taxation unchanged at T_0, this implies a budget deficit $((T_0 – S_2) < 0)$ at point A''. As in the budget negotiation phase, such powers can be restricted through a delegation approach, where a powerful finance minister curtails the possibility for spending ministers to exceed the budget allocations approved by the legislature spending overruns, so that spending is limited to the approved amount S_0. Provisions which make the budget law more binding – for instance by limiting the use of supplementary budgets, as suggested by Lienert (2010) - can also have similar effects.

Figure 3.7: Restrictions on executive flexibility during budget implementation



Source: Adapted from Wehner (2010b: 35)

Executive flexibility to increase spending during budget implementation can also be curtailed through legislative provisions which either prohibit this possibility or impose limitations, for instance by applying thresholds. Legislative authorisation for off-budget expenditures and contingent liabilities, whilst strengthening legislative budgetary power, through more control over the budgetary process, also contributes to fiscal discipline since it implies a more comprehensive budgetary system. On the other hand, whilst requiring legislative approval for any appropriations over and above the approved amounts increases legislative budgetary power, particularly if approval is required *ex-ante* rather than *ex-post*, the effect on fiscal discipline is not straightforward as it depends on how close the actual budget is to the legislature's ideal point. For instance, in Figure 3.7, suppose that the legislature's ideal budget is at point A'' but the executive's draft budget E had been approved. In this case, the legislature would be willing to approve overruns resulting in a higher expenditure level (between S_0 and S_2) since the revised budget would be closer to its preferred budget (A''). Thus, requiring legislative authorisation for increases in expenditure beyond that in the approved budget strengthens legislative budgetary power but may not be effective to discourage spending overruns. Furthermore, the political context is also relevant, as with a minority government, legislative debate on divergences from the approved budget tend to be more intensive, compared to a majority parliament context, where the process can merely involve a 'rubber stamping' exercise (Gaspard et al. 2016).

3.3.3 Budget transparency

The budget process and the budget documentation itself are very complex and thus budget transparency is an important aspect of budget institutions. Alt and Lassen (2006a: 532) define budget transparency as:

> "the amount, relevance, accessibility, and comprehensibility of timely information that becomes available to voters",

whilst the OECD (2002: 7) provides an alternative, but broadly similar definition:

> "the full disclosure of all relevant fiscal information in a timely and systematic manner".

As discussed in the previous Chapter, the information asymmetry between the incumbent and voters increases the likelihood of electoral budget cycles. Conversely, budget transparency makes it easier for voters to assess the full costs of financing higher spending and reduces their confusion regarding the current and future tax burden necessary to finance higher spending (Alesina and Perotti 1996). Furthermore, budget transparency can also contribute to address the common pool resource problem, for instance, by making the costs of financing the different spending requests by line ministries clearly visible to all actors during the budget formulation stage. Similarly, during the approval stage, the aggregate implications of budget amendment proposals by legislators would be discerned easily. In addition, a high degree of transparency during budget execution can contribute to the earlier detection of slippages from budgetary targets. Finally, budget transparency can also contribute to enforce fiscal rules, as it limits the possibility of circumventing such numerical budgetary constraints (Alesina and Perotti 1996)[69]. Alesina and Passalacqua (2015) provide different examples of practices which governments can use to obfuscate the budget, including over-optimistic budgetary projections and keeping items off-budget. They also identify different means of how budget transparency can be improved, namely through rules and regulations of how the budget should be prepared, organised and implemented or through IFIs, as discussed in the next Section.

In the model, a high degree of budget transparency implies that the costs of financing higher spending become more visible and this is reflected in a downward shift of the preference line of spending ministers and the legislature (from line Def closer to line BB, in Figures 3.5 and 3.6). Similarly, more transparency during the budget implementation phase can contribute to contain requests for additional spending by line ministers, whilst potential slippages from the fiscal targets can be addressed earlier: thus, the actual budget is more likely to be closer to the target (point E in Figure 3.7, rather than point A'').

[69] This has been confirmed theoretically by Milesi-Ferretti (2004) in an analysis of the effect of fiscal rules with weak budget transparency when governments can misreport fiscal data. Furthermore, von Hagen and Wolff (2006) and Alt et al. (2014) examine this empirically, using stock-flow adjustments (a statistical residual term which reconciles the increase in government debt with the budget deficit) or specific components of the stock-flow adjustment, respectively, as a proxy for creative accounting. Von Hagen and Wolff (2006) find persistent and large adjustments in the EU15 during 1980-2003, in particular after the SGP became effective in 1997; whilst Alt et al. (2014) similarly find that fiscal gimmickry increases with weak budget transparency in a similar sample of countries during 1990-2007.

A high degree of budget transparency can also address the information asymmetry between the executive and the legislature, thus contributing to strengthen legislative budgetary power. For instance, comprehensive and clear budgetary documentation and better access to budgetary information improve the legislature's capacity to engage with and influence the budget.

3.3.4 Independent fiscal institutions

Key characteristics of IFIs are their non-partisan and independent nature and their mandate to publicly assess government's fiscal policy and fiscal performance. Thus, the IMF (2013) defines fiscal councils as:

> "a permanent agency with a statutory or executive mandate to assess publicly and independently from partisan influence government's fiscal policies, plans and performance against macroeconomic objectives related to the long-term sustainability of public finances, short-medium term macroeconomic stability, and other official objectives".

The OECD adopts a similar but more concise definition:

> "independent public institutions with a mandate to critically assess, and in some cases provide non-partisan advice on fiscal policy and performance" (von Trapp and Nicol 2017: 1),

whilst the CION (2017d) additionally specifies their functions in its definition, as follows:

> "monitoring compliance with fiscal rules, production or endorsement of macroeconomic forecasts for the budget, and/or advising the government on fiscal policy matters".

IFIs address the deficit bias at source, by taking part of the budgetary decision-making process out of the political arena and delegating it to an independent institution (Wierts 2008). An advantage of IFIs, when compared to numerical budgetary constraints, is that they can combine short-run discretion, when there are unexpected developments, with a long-term commitment to fiscal sustainability (Wyplosz 2002). IFIs can contribute to strengthen other aspects of budget institutions, for instance by increasing the reputational costs of breaching fiscal rules and medium-term budgetary targets. Importantly, fiscal councils can also improve budget transparency, for instance by producing or endorsing the macroeconomic forecasts that underpin the budgetary projections (Ayuso-i-Casals et al. 2009). Another contribution that fiscal councils can make to the budgetary process is through independent analysis and assessments of the government's fiscal stance, whereby voters' awareness about the consequences of certain fiscal policy paths is improved, thus addressing information asymmetries between politicians and voters (Debrun et al. 2012)[70]. However, as highlighted by Alesina and Passalacqua (2015), the effectiveness of fiscal councils depends heavily on their independence.

Since IFIs contribute to improve budget transparency, in the model, their influence on the budgetary process is similarly depicted as a shift in the fiscal preferences of spending ministers and the legislature, from a budget deficit position closer to a balanced budget. Furthermore, in the EA, fiscal councils have an important role to produce or endorse the macroeconomic forecasts underpinning the budget[71]. Suppose that in Figure 3.5, realistic macroeconomic and revenue forecasts imply taxation equal to T_0, but the budget shows tax revenue at T_1. This can be reconciled with a higher level of spending (S_1), whilst still showing a balanced budget target, at point B_2 ($(T_1 – S_1) = 0$). However, if the additional revenue does not materialise (actual revenue is T_0 rather than T_1), the actual budget would be in deficit, at point B_1 ($(T_0 - S_1) < 0$). The risk of over-optimistic forecasts can be mitigated by entrusting IFIs to endorse or even produce the macroeconomic forecasts underpinning the budget, and even more if their role extends also to the budgetary projections.

70 These tasks involve an advisory role for the fiscal council. Whilst there is an appealing analogy with how independent central banks have addressed the inflation bias, the transfer to budgetary power to a fiscal council is more challenging given the fundamental democratic principle that the budget is a prerogative of governments under the control of parliament (Wierts 2008). For further discussion on the merits of fiscal councils and challenges in delegating fiscal policy authority, see Wyplosz (2008).

71 Article 4(4), of Regulation (EU) No 473/2013 requires that national medium-term fiscal plans and draft budgets shall be based on macroeconomic forecasts which are either produced or endorsed by an independent body.

Fiscal councils can also contribute to strengthen legislative budgetary power, either indirectly through more budget transparency, which can bridge the information asymmetry with the executive, or more directly by providing support through its technical expertise, especially if it is institutionally attached to the legislature.

3.4 Summary and hypotheses

This Chapter has presented a simple model of the budgetary process in EA countries, capturing the formulation, approval and implementation stages. Using graphical analysis, the interaction within the executive and between the executive and the legislature during the different stages of the budgetary process have been explained. Within the legislature, a distinction has also been made between the political groupings supporting the government and those opposing it. The incentives behind the behaviour of these different actors reflect political economy theories which explain the tendency of governments to run budget deficits, namely the common pool resource problem and the electoral budget cycle, as discussed in the previous Chapter. Political incentives also motivate the behaviour of the two different groups of legislators during the budget approval process.

Using this model, it has been shown that unrestricted negotiations between spending ministers and the finance minister during budget preparation leads to budget deficits, which will be larger during election time. Similar consequences result if the legislature has unrestricted powers to amend the budget during the approval stage and also if, during implementation, line ministries can increase spending beyond the appropriations approved in the budget law.

Introducing budget institutions in the model, it has been shown that numerical budget constraints can contribute to address the deficit bias through a commitment approach. This applies both to fiscal rules and MTBFs introduced at the national level, as well as supra-national rules, such as the requirements of the SGP which apply to the EA countries. However, their effectiveness to instil fiscal discipline in the budgetary process depends on the enforceability of such constraints. Legislative involvement in these rules and frameworks, including the SGP provisions, can increase the ‘ownership’ and credibility of these constraints.

As regards the procedural rules which govern the budgetary process, a strong finance minister can address the common pool resource problem during both the budget preparation and implementation stages. Restrictions on the power of the legislature to amend the budget proposed by the executive are also expected to contribute to more fiscal discipline, with the effect being stronger if there is a spending constraint rather than a budget balance constraint. Procedures whereby the legislature first votes on fiscal aggregates and then on specific appropriations, as well as a centralised parliamentary budget committee structure can also contribute to have more fiscal restraint during the budget approval stage. During budget implementation, measures which make the budget law more binding can contribute towards more fiscal discipline if they restrain increases in spending beyond the approved appropriations. In contrast, greater flexibility for the authority to decrease or cancel spending or shift funds from one budget item to another can lead to smaller budget deficits, as it enables the executive to respond to unexpected developments without breaching the fiscal targets.

Budget transparency can also result in more fiscal discipline by narrowing the information asymmetry between voters and the incumbent, thus reducing the possibility that the latter manipulates the budget to increase its re-election chances. It can also contribute towards a more comprehensive view of the budget to all the actors involved in the budgetary process, thus diminishing the fiscal commons problem. Budget transparency can also strengthen other aspects of budget institutions, for instance by reducing the possibility of circumventing numerical budgetary constraints. Similar results can also be obtained through the establishment of independent fiscal councils. The latter can also have an important role to ensure that the budgetary projections are not overly optimistic.

Thus, in conclusion, numerical fiscal constraints, a strong finance minister, restrictions on legislative budget amendment powers and other procedures which result in more centralised decision-making during the budgetary process, as well as budget transparency and fiscal councils are all expected to result in more fiscal discipline. Based on these institutional characteristics, the concept of the quality of budget institutions is operationalised in the next Chapter by constructing a relevant composite index. Furthermore, the following hypothesis can be derived from the model, which is tested in the empirical analysis presented in Chapter 6, and further investigated through a case study analysis in Chapter 7:

<u>Null Hypothesis I0</u>*: The overall quality of budget institutions does not have any influence on the budget balance.*

<u>Hypothesis I</u>*: An improvement (a worsening) in the overall quality of budget institutions results in smaller budget deficits or larger budget surpluses (larger budget deficits or smaller budget surpluses).*

As regards legislative budgetary power, the legislature has a key influence on the budget during the approval stage. Unrestricted amendment powers obviously imply a stronger role for the legislature. However, political motivations could undermine such power if the vote on the budget is considered as a vote of confidence in the government, particularly for single party majority governments. On the other hand, this would strengthen the legislature's influence in the case of minority governments, whilst for coalition governments, the effect depends on the electoral prospects of individual political parties. Legislative budgetary power is also affected by the reversionary budget, i.e. the outcome if the budget is not approved before the start of the fiscal year. The position of the legislature is obviously weakened if the reversionary budget involves a reversal to the executive's proposal, whilst it is strengthened if the reversionary budget has very severe consequences, as in the case of a government shutdown. Other less extreme cases of reversionary budgets generally do not increase the legislature's influence because its threat of not approving the budget would not be credible.

In the model, the legislature does not have a significant role in the budget formulation stage, but this can be strengthened through involvement in numerical budgetary constraints. Meanwhile, during the budget implementation phase, all types of executive flexibility which make the approved budget law less binding weaken legislative budgetary power. Furthermore, a higher degree of budget transparency and the establishment of a fiscal council can reduce the information asymmetry between the legislature and the executive and thus also facilitate its involvement in the budgetary process. These different characteristics form the basis of the composite index for legislative budgetary power, which is presented in Chapter 5.

Finally, the impact of legislative budgetary power on fiscal discipline is quite complex. A stronger budgetary role for the legislature emanating from unrestricted amendment powers, severe consequences of the reversionary budget as well as from requiring legislative authorisation for the executive to cut or re-allocate spending during the implementation phase, is associated with larger budget deficits. On the other hand, improved fiscal outcomes are expected if legislative budgetary power reflects involvement in numerical fiscal constraints, including SGP provisions, a more binding budget law (by discouraging the use of supplementary budgets) and a more comprehensive budgetary process (by requiring legislative authorisation for off-budget expenditures and contingent liabilities). The influence of legislative budgetary power on fiscal discipline is thus uncertain and depends on the specific characteristics of legislative budgeting. It is tested empirically in Chapter 6 on the basis of the following hypothesis, which reflects the prevailing view in the literature, but which is being contested in this study:

<u>*Null Hypothesis II0*</u>*: Overall, legislative budgetary power does not have any influence on the budget balance.*

<u>*Hypothesis II*</u>*: Stronger (weaker) legislative budgetary power results in larger budget deficits or smaller budget surpluses (smaller budget deficits or larger budget surpluses).*

Chapter 4:

The Quality of Budget Institutions in the Euro Area

4.1 Introduction

As discussed in Chapter 1, as a response to the sovereign debt crises in the EA, various reforms to the SGP were implemented between 2010 and 2013, namely through two legislative packages (the 'Six-Pack' and the 'Two-Pack') and the Fiscal Compact. These reforms not only resulted in a stricter supra-national fiscal governance framework for EA countries, but also introduced common requirements for budget institutions at the national level.

Thus, a directive comprised within the 'Six-Pack' involved common requirements, for instance, concerning the forecasts underpinning the budget, MTBFs and budget transparency[72]. An important development was through the Fiscal Compact, which required signatory countries to introduce in their national legislation fiscal rules restricting the budget deficit and introducing debt brakes, which reflect the SGP provisions, as well as corrective mechanisms in case of deviations from these rules[73]. Furthermore, the 'Two-Pack' included, amongst others, requirements for the setting up of independent fiscal councils at the national level, with the responsibility to generate or endorse the macroeconomic forecasts underpinning the budget and to monitor compliance with the national fiscal rules introduced by the Fiscal Compact[74].

Motivated by the subsequent wave of reforms to budget institutions in various EA countries, this Chapter assesses the quality of budget institutions in EMU. It also identifies main differences across the EA member states and compares the quality of budget institutions in the EA before and after the Great Crisis. The specific research questions which this Chapter aims to address are the following:

- What is the overall quality of budget institutions in the EA and what are the main differences across the member states?
- How has the quality of budget institutions changed in the EA following the Great Crisis?

[72] Council Directive 2011/85/EU.
[73] Articles 3 and 4, TSCG 2012.
[74] Articles 4 and 5, Regulation (EU) No 473/2013.

The analysis is carried out by constructing a composite numerical index. This index contributes to the literature by providing a recent and comprehensive measure of the quality of budget institutions for all the 19 EA member states. In particular, the index captures reforms implemented since the Great Crisis and it has a broad scope which also includes the characteristics of fiscal councils, since these now constitute part of the required institutional set-up in EA countries. In addition, to address the second research question, an index is also produced to measure the quality of budget institutions before the Crisis.

The rest of this Chapter is structured as follows: the next Section provides a review of the literature which measures the quality of budget institutions, whilst also discussing different forms of fiscal governance; subsequently, the methodology applied in this study is described, including the selected variables, the data sources and the approaches applied to construct the index and carry out the comparative analysis; finally the results are presented and discussed and a summary of the results and conclusion closes off the Chapter.

4.2 Literature review: measuring the quality of budget institutions

Since the early nineties, various studies have produced composite numerical indices to measure the quality of budget institutions. These indices capture and synthesize a wide range of qualitative information about various aspects of the institutional arrangements in the different stages of the budget process[75].

Focusing on quality of budget institutions indices for European countries[76], the first comprehensive index was produced by von Hagen (1992) for the twelve countries which were members of the EEC at the time. Subsequently, Hallerberg et al. (2007, 2009) have constructed comparable indices for the 15

[75] Most of these studies have also assessed the impact of the quality of budget institutions, as measured through these indices, on fiscal outcomes. A review of these empirical analyses is presented in Section 6.2.1 in Chapter 6.

[76] Examples of quality of budget institutions indices with a different geographical coverage include those by Alesina et al. (1999) and Filc and Scartascini (2004) for Latin American countries; Dabla-Norris et al. (2010) for low- and middle-income countries; and Bleaney (2010) and Gollwitzer (2011) for African countries. In addition, Schaechter et al. (2012) construct a fiscal rules index for a large sample of diverse countries.

countries that were members of the EU before 2004 (EU15) for different time periods (1990-91, 2000-1 and 2004). The coverage of indices of budget institutions was extended to the 10 CEECs which became EU members in 2004 and 2007 by Gleich (2003), Yläoutinen (2004), Fabrizio and Mody (2006) and Hallerberg et al. (2009). More recently, the indices in Olden et al. (2012) cover ten south eastern European countries, including Bulgaria, Romania and Croatia, which acceded to the EU in 2007 and 2013, respectively. Some studies compile indices which focus on specific aspects of budget institutions, rather than a measure of their overall quality. In particular, the CION (2017e) produces indices covering only MTBFs, fiscal rules and the scope of the tasks discharged by fiscal councils for the 28 countries that were members of the EU in 2018 (EU28). Debrun and Kumar (2007a) and Maltritz and Wüste (2015) use CION data to compile fiscal council indices, for the EU15 and for the 27 countries that were members of the EU before 1 July 2013 (EU27) countries, respectively. More recently, Horvath (2018) also produces fiscal council indices, measuring their potential for effective scrutiny, for a sample of 20 EU countries. Table 4.1 presents a list of the main indices capturing the quality of budget institutions in European countries developed in the literature.

These indices generally capture the quality of budget institutions through procedures governing the budgetary process (namely the role of the finance minister and legislative amendment powers), numerical fiscal constraints and budget transparency[77]. The budget institutions index in von Hagen's (1992)'s seminal paper includes all these characteristics and provided the basis for several indices developed in subsequent studies. However, there is some variation in the scope of the indices. For instance, the index developed by Gleich (2003), and subsequently followed by Fabrizio and Mody (2006), does not include the budget transparency dimension, whilst the index in Olden et al. (2012) does not capture the strength of the finance minister in the budget process. Meanwhile, Yläoutinen (2004) develops separate indices which cover in a detailed manner different aspects of budget institutions (including connectedness between the EU's fiscal surveillance mechanisms and annual

[77] Alt and Lassen (2006b) and subsequently Benito and Bastida (2009) provide indices focusing exclusively on budget transparency.

budgets), but does not construct a measure for the overall quality of budget institutions. It is notable that the only quality of budget institutions index which includes fiscal councils is that by Darvas and Kostyleva (2011).

Table 4.1: Quality of budget institutions indices for European countries

Author	Date	Sample		Scope of index	Data sources
von Hagen	1992	12 EEC countries	1991	- structure of budget negotiations; - long-term budgetary constraints; - parliamentary process to approve the budget; - executive flexibility during budget implementation; - fiscal transparency.	information on national budgetary procedures provided by the CION (generated from questionnaires to national authorities)
Gleich	2003	10 CEECs	1998-2000	- structure of budget negotiations; - long-term budgetary constraints; - parliamentary process to approve the budget; - executive flexibility during budget implementation.	questionnaires to national experts: ministries of finance, central banks, parliaments
Yläoutinen	2004	10 CEECs	2003	separate indices capturing the following dimensions: - structure of budget negotiations; - multi-annual fiscal frameworks (similarity between pre-accession fiscal document and annual budget); - parliamentary process to approve the budget; - role of finance minister during budget implementation; - attributes of parliamentary committees. Detailed qualitative information on other aspects of budget institutions.	questionnaires to national experts: finance ministries, central banks and parliaments
Fabrizio and Mody	2006	10 CEECs	1997, 2003	- structure of budget negotiations; - long-term budgetary constraints; - parliamentary process to approve the budget; - executive flexibility during budget implementation.	various secondary sources, including the IMF, Gleich (2003) and Yläoutinen (2004)
Debrun and Kumar	2007	EU15	2005	fiscal councils index capturing their mandate and tasks, their independence and potential influence on the budgetary process, including through public debate.	CION fiscal governance database

Table 4.1: Quality of budget institutions indices for European countries (cont.)

Author	Date	Sample		Scope of index	Data sources
Hallerberg et al.	2007	EU15	1990-91, 2000-1, 2004	- structure of budget negotiations; - long-term budgetary constraints; - parliamentary process to approve the budget; - executive flexibility during budget implementation.	questionnaires to national experts: finance ministries, central banks and parliaments
Hallerberg et al.	2009	EU15	1990-91, 2000-1, 2004	- structure of budget negotiations; - long-term budgetary constraints; - parliamentary process to approve the budget; - executive flexibility during budget implementation - budget transparency; - relationship between national and subnational governments.	questionnaires to national experts: finance ministries, central banks and parliaments
Hallerberg et al.	2009	10 CEECs	1998-2000, 2003	- structure of budget negotiations; - long-term budgetary constraints; - parliamentary process to approve the budget; - executive flexibility during budget implementation.	various secondary sources, namely Gleich (2003), Yläoutinen (2004) and Fabrizio and Mody (2006)
Darvas and Kostyleva	2011	20 central, eastern and south eastern European countries; 25 OECD countries	2007-2008	- fiscal rules; - medium-term expenditure framework; - multi-annual expenditure estimates; - parliament budget amendment powers; - independent fiscal council; - carryover of unused funds to next fiscal year; - quality of external audit.	OECD budget reviews and the OECD International Database of Budget Practices and Procedures (2007/2008)
Olden et al.	2012	10 south eastern European countries	2009-2011	- understanding the scale and scope of fiscal challenge; - developing a credible fiscal consolidation strategy; - implementing the consolidation strategy.	various secondary sources, including information from IMF
Maltritz and Wüste	2015	EU27	2011	index captures tasks and mandate of fiscal councils	CION fiscal governance database
European Commission	2017	EU28	1990-2016[1]	three separate indices capturing the following dimensions: - fiscal rules index; - MTBF index - scope index of IFIs	questionnaire to national finance ministries
Horvath	2018	20 EU countries	2015	two fiscal councils indices capturing their mandate, resources, access to information, influence and relationship with stakeholders	questionnaires by author and by CION to national fiscal councils

Note:
[1] fiscal rules index 1990-2016; MTBF index 2006, 2008-2016; scope of IFIs index 2015-16 (all indices are updated annually)

The index which provides the most recent and broad measure of the overall quality of budget institutions with the largest coverage of EA countries is that by Darvas and Kostyleva (2011). The results of this study show overall, budget institutions in the EA were of a medium quality, with limited variation among the member states[78]. Austria, Netherlands and Ireland had the highest scores in the index, whilst Italy, Greece and Belgium were the weakest performers.

Finally, it is relevant to point out that most of the data for these indices was generated from questionnaires to national experts, or from databases (for example, the OECD's International Budget Practices and Procedures Database and the CION's fiscal governance databases) which in turn were constructed from data generated from surveys to national authorities. Whilst having the advantage of capturing both budgetary procedures specified in law as well as other 'de facto' procedures, participants may portray budgetary procedures in their country to be better than they are in reality. In order to address this potential bias, in various studies, the authors corroborated such data with information from national legislation and other secondary sources. Furthermore, the construction of composite indices involves various assumptions, such as regarding the weight of the different individual characteristics and whether they are substitutes to each other, which are not based on any theoretical foundation. However, the ranking of the budgetary institutions indices was found to be quite robust to variations in the weighting of institutional scores or to alternative aggregation methods (for instance in Gleich 2003 and Hallerberg et al. 2007).

4.2.1 Forms of fiscal governance

As explained in the previous Chapter, two main forms of budget institutions can be distinguished, both of which can be effective to internalise the common pool externality. In the delegation approach, budgetary decision making is delegated to a powerful finance minister and legislative amendment power is limited. On the other hand, in the contracts approach, a group of agents with similar decision-making rights (generally being political parties in a coalition

[78] The median index score value was 2.7 (out of a maximum of 4) and the scores for the EA countries ranged from 1.9 to 3.

government) negotiate and commit themselves to numerical targets for budgetary aggregates for a multi-year period (von Hagen and Harden 1995; Hallerberg and von Hagen 1999).

Hallerberg and von Hagen (1999) linked the form of fiscal governance to the type of government. They argued that partners in a coalition government would be reluctant to delegate budgetary decision making to a finance minister, who may use the budget appropriations to favour the constituency of its political party at the expense of others. Thus, they postulated that the delegation approach is more appropriate for countries with single-party majority governments, whilst the contracts approach is more suitable for countries with a coalition government. Hallerberg et al*.* (2007, 2009) further elaborated that the contracts approach may be particularly suitable when there is considerable ideological dispersion among the political parties forming the coalition.

Hallerberg and von Hagen (1999) tested their hypothesis for the EU15 during 1981-1994, by developing separate indices for the delegation and contracts approaches, using the different dimensions in von Hagen's (1992) quality of budget institutions index and classifying the countries under the two different forms of fiscal governance. The delegation index comprises dimensions such as the dominance of the finance minister in the drafting and implementation stages of the budget, limitations on parliamentary amendments and the costs of a failure by the legislature to approve the budget. On the other hand, the contracts index captures characteristics such as the stringency, comprehensiveness, time horizon and degree of political commitment to the fiscal targets. Hallerberg et al. (2007, 2009) provide an updated classification of these two distinct indices for the same sample of countries for 1985-2004, whilst Yläoutinen (2004) and Hallerberg and Yläoutinen (2010) similarly classify the ten CEECs which joined the EU in 2004 and 2007. The findings of these studies show that most countries had the expected form of fiscal governance, largely based on the type of government which prevailed during the period under consideration. Furthermore, the contracts approach was more prevalent among both the EU15 and the CEECs, reflecting the fact that most of these countries have coalition governments. However, these results are based on small samples which mostly comprise countries with coalition governments.

A controversial corollary of the link between the form of fiscal governance adopted by a country and its type of government is that the SGP, with its reliance on numerical fiscal constraints, is more appropriate for countries that adopt a similar rules-based approach in their domestic budget process (i.e. countries that have coalition governments) than in those countries that rely on a delegation form of fiscal governance (i.e. countries with single-party majority governments or coalitions consisting of closely aligned political parties)[79]. This has become more relevant for EA countries in view of the rules-based approach of the common requirements for national budget institutions that were introduced following the Crisis, as described in Section 4.1.

4.2.2 Contribution to the literature

Although various indices of the quality of budget institutions have been developed for EU countries, most of these studies cover either the EU15 or the ten CEECs, rather than all the present 19 EA member states[80]. On the other hand, other indices with a broader coverage of EU countries (Maltritz and Wüste 2015; European Commission 2017e; Horvath 2018) focus on specific institutional characteristics and thus do not provide a single overall measure of the quality of budget institutions. This Chapter thus contributes to the literature by producing a comparable index of the overall quality of budget institutions for all the EA member states. It is relevant to focus on the budget institutions in EA countries since they are governed by a common supra-national fiscal framework and thus, it is pertinent to analyse any differences in their budget institutions.

Furthermore, the constructed index presented in this Chapter constitutes a recent measure of the quality of budget institutions in the EA, which captures

[79] See, for example, von Hagen (2002), Hallerberg (2004), Annett (2006), Hallerberg et al. (2007, 2009) and Hodson (2009).

[80] Only Darvas and Kostyleva (2011) include all the 19 EA countries in their study. However, their sample has a broader geographical coverage and the EA member states are categorised in two different groups: non-OECD central, eastern and south eastern European countries and OECD (including non-European countries). The focus of their research is to compare the performance of the first group using the OECD group as a benchmark.

reforms to budget institutions implemented since the Great Crisis. In contrast, the most recent measures of the overall quality of budget institutions for EA countries refer to 2004 data (Hallerberg et al 2009) and 2007-08 (Darvas and Kostyleva 2011). In this context, this Chapter also assesses how the budget institutions in EA countries have changed since the Great Crisis, by constructing and comparing indices for the quality of budget institutions for the pre- and post-crisis period.

Finally, the constructed index presented in this Chapter also contributes to the literature by providing a more comprehensive coverage of the overall quality of budget institutions in EA countries. Most notably, it includes a sub-index for the formal powers and organisational capacity of fiscal councils[81], which, as noted earlier, have become a more prominent aspect of budget institutions in the EA, with their establishment and functions being regulated by the 'Two-Pack' legislation. In addition, in the constructed index, the connectedness between the supra-national SGP rules and the national MTBF and annual budget is also captured; the structure of parliamentary committees dealing with the budget is taken into account in the budget approval stage; and budget implementation and budget transparency are also measured more broadly than in most previous studies.

4.3 Methodology: constructing a composite index to measure the quality of budget institutions in the EA

Following the prevalent approach in this branch of the literature, this Chapter measures the quality of budget institutions in the EA by constructing a composite numerical index. The research presented in this Chapter is descriptive: it assesses the quality of budget institutions in the EA, compares it across the 19 member states and also analyses how national budget institutions have changed since the Great Crisis. This Section starts by discussing the pros and cons of using composite indices as well as the philosophy underpinning this research design. Subsequently, the process of

[81] Darvas and Kostyleva (2011) also capture fiscal councils in their index, but they only measure whether an independent fiscal council is in place or not.

constructing the composite index is described, whilst a discussion on the relevant ethical issues concludes this Section.

4.3.1 Research design: a composite index to measure the quality of budget institutions in the EA

An advantage of composite indices is that by combining indicators on different themes into a single measure, they can "summarise complex or multi-dimensional issues" (Saisana et al. 2005: 307). In this manner, composite indices reduce the complexity of multi-dimensional phenomena since it is easier to interpret one single figure rather than trying to identify a common trend from many different indicators (Nardo et al. 2005). As discussed in Section 4.2, there is vast and established literature using composite indices to measure the overall quality of budget institutions[82]. In this regard, composite indices provide a practical and efficient way of summarising qualitative information on institutional characteristics and of measuring the complex nature of budgetary procedures. The use of a composite index also facilitates the comparative analysis of budget institutions across EA countries. Furthermore, the index can be easily used as an explanatory variable in empirical analysis examining the relationship between the quality of budget institutions and fiscal discipline[83].

However, a composite indicator's advantage of combining a large amount of data on different dimensions into a single number can lead to "simplistic policy conclusions" (Saisana et al. 2005: 308). Thus, as recommended in the OECD and Joint Research Centre, European Commission's (2008) handbook on constructing composite indicators, the analysis of the results based on the overall scores of the constructed index is complemented with a more detailed analysis based on the different sub-indices, so as to decompose the aggregate results and identify the contribution of different institutional characteristics.

[82] Composite indices are also widely used to monitor and benchmark country performance in a broad range of other policy areas, for example, the Global Competitiveness Index (World Economic Forum), the Corruption Perceptions Index (Transparency International) and the Human Development Index (United Nations Development Programme), amongst many others.

[83] Indeed, the quality of budget institutions index presented in this Chapter and the legislative budgetary power index developed in the next Chapter constitute the institutional explanatory variables in the empirical model estimated in Chapter 6.

4.3.1.1 Philosophy of research

The research presented in this Chapter is carried out from a post-positivist paradigm, reflecting its quantitative approach. The ontological position which is adopted is a realist one, where it is assumed that the external world has an existence which is independent of the human mind and where knowledge is fallible, with research aiming to improve interpretations of reality, which are approximations of the real world (Blaikie 2007). This is because we can only know reality through our perceptions and conceptions. Thus, in this research, our understanding of the 'true' quality and characteristics of budget institutions is tentative and this study constitutes a progressive step in the building of knowledge on the characteristics of budget institutions in EA countries.

Associated with this realist ontology, the epistemological position adopted in this part of the study is empiricism, where knowledge construction is based on evidence. This is reflected in the emphasis on quantification in the construction of a numerical composite index to capture the qualitative characteristics of budgetary institutions. A post-positivist view of empiricism is adopted, whereby the generation of knowledge involves a cautious process of trial and error which is constrained by the possibilities of observation and experimentation (Greetham 2006). Thus, it is recognised that the constructed index involves a certain degree of abstraction and only constitutes an 'approximate' numerical measure of the complex reality of budget institutions. In addition, there may be problems with the quality of the data and other measurement problems. Recognising these difficulties, efforts are made to establish reliability and validity in the methods used and the conclusions that are derived, particularly by testing the robustness of the composite indicator to alternative approaches in its construction.

4.3.2 Research methods: constructing the composite index

This Section first outlines the variables selected to capture the main characteristics of budgetary institutions which are included in the constructed index. This is followed by a discussion on the data sources used. This Section then proceeds to explain how the composite index is constructed. A discussion on the approaches used to check its robustness and to analyse the results closes off this Section.

4.3.2.1 The selected variables

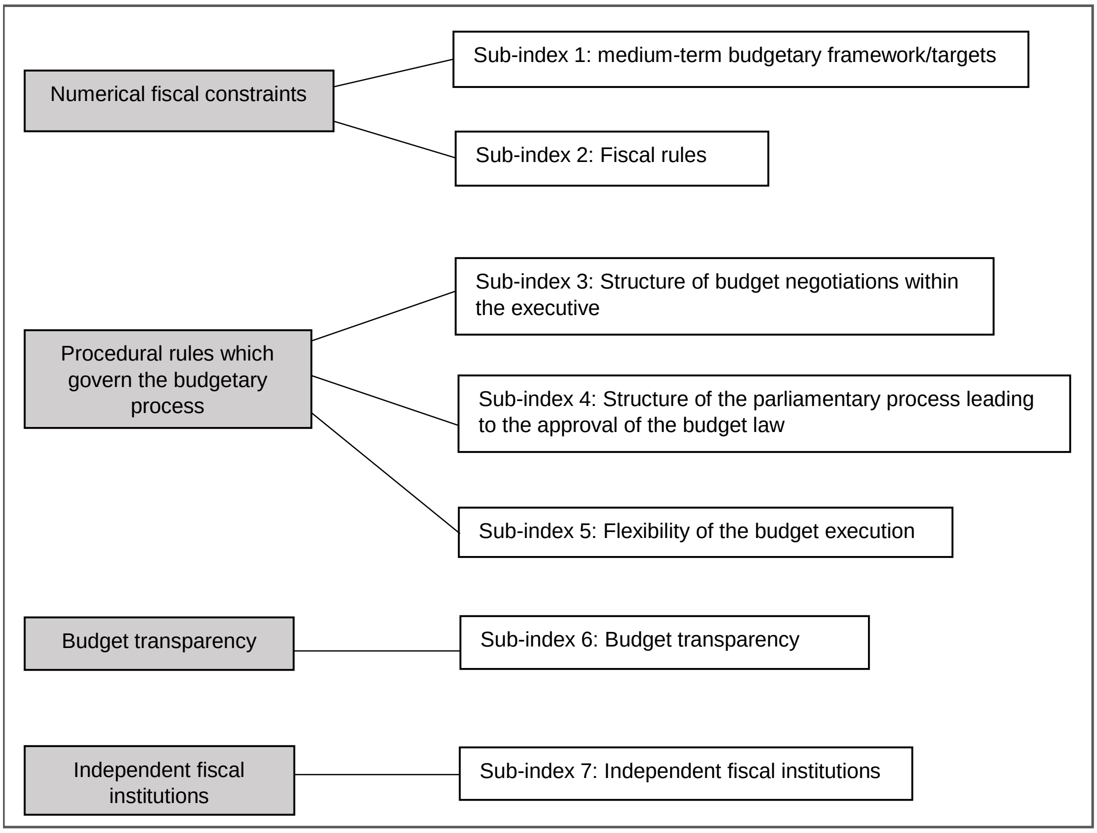
The constructed composite index does not aim to capture every potential relevant characteristic of budget institutions, as this would make the analysis unmanageable. Rather, key dimensions of budget institutions in EA countries are identified, being guided by the literature and the model of the budgetary process presented in the previous Chapter. The constructed index draws on existing indices of budget institutions, namely Yläoutinen (2004) and Hallerberg et al. (2009), being among the more comprehensive and recent indices for EU countries found in the literature, as well as the European Commission's (2016a, 2016b) MTBF and fiscal rules strength indices. It comprises seven sub-indices, covering the formulation, approval and implementation stages of the budgetary process and, as shown in Figure 4.1, it captures the four main categories of budget institutions identified in Chapter 3 - numerical fiscal constraints, procedural rules governing the budgetary process, budget transparency and independent fiscal councils. The specific indicators captured by the different sub-indices of the constructed index are described below, thus extending the discussion presented in Section 3.3 of the previous Chapter, and are presented in detail in Table AI of Appendix I. Furthermore, the main elements of similarity as well as main differences between the constructed index and the indices by Yläoutinen (2004) and Hallerberg et al. (2009) and the European Commission's (2016a, 2016b) indices are also highlighted.

The first sub-index concerns the MTBF and captures the characteristics of national MTBFs, which all EA countries are obliged to have in place[84]. Furthermore, similarly to Yläoutinen (2004), it also measures the connectedness between the national budgetary process and the EU surveillance framework. The national MTBF component is largely based on the European Commission's (2016a) MTBF index and considers the framework to be more binding, the more it is connected to the annual budget

[84] Article 9, Council Directive 2011/85/EU.

targets, if it is discussed or presented in the national parliament and the stronger is the monitoring and enforcement of its targets. However, differently from the CION’s index, it also considers the years since the framework has been in place, since it may take some time for actors in the budgetary process to adjust their behaviour to such constraints. The scoring scale applied is also different. The supra-national component of this sub-index captures the links between the SP and the national MTBF and annual budget documents as well as the relationship between their respective fiscal targets.

Figure 4.1: Budget institutions categories and sub-indices



Source: Figure drawn by author

Differently from Yläoutinen (2004) and Hallerberg et al. (2009), the constructed index includes a fiscal rules sub-index. This sub-index also draws heavily on the European Commission’s (2016b) fiscal rules strength index. However, rather than measuring the characteristics of all fiscal rules in place, this sub-index adopts a simpler approach by focusing on the fiscal rule with the largest coverage of the general government sector[85]. The scope of the rule is considered, since it is more difficult to circumvent fiscal rules that cover more fiscal operations; as well as its binding nature, including the statutory or legal base, flexibility to set or revise objectives, monitoring and enforcement provisions and media visibility. In addition, the effectiveness of the fiscal rule is also expected to increase over time. At the same time, a second component of the fiscal rules sub-index simply captures whether other different types of rules exist (balanced budget rules, debt rules and revenue or expenditure rules) and their coverage of the general government sector.

The third, fourth and fifth sub-indices of the quality of budget institutions index concern procedural rules which govern the different stages of the budgetary process, with the first two drawing considerably on Yläoutinen (2004) and Hallerberg et al. (2009). The third sub-index captures the 'strength' of the finance minister vis-à-vis line ministries during the budget formulation stage and considers characteristics which are typical of the delegation approach, namely the imposition of ceilings on spending ministers' initial requests; the nature of negotiations over budget allocations and the ultimate decision-making power to settle disputes.

The fourth sub-index concerns the budget approval stage and captures the legislature's formal powers to amend the draft budget and whether these amendment powers are restricted or not[86]. As explained in Section 3.3.2 of the previous Chapter, restricted powers are considered to contribute to more fiscal discipline, with spending constraints involving more binding restrictions than budget balance constraints. This sub-index also captures other characteristics relating to the degree of centralisation in the budget approval process, namely whether the legislature first votes on the total budgetary aggregates before voting on specific appropriations and the parliamentary committee structure dealing with the budget.

[85] The implicit assumption is that there is decreasing marginal benefit of adopting multiple fiscal rules. This assumption is also reflected in the European Commission's (2016b) fiscal rules strength index, through the weights attached to additional rules.

[86] This component is less comprehensive than the respective sub-indices in Ylãoutinen (2004) and Hallerberg et al. (2009); a broader measure of legislative amendment powers is included in the legislative budgetary power index, presented in the next Chapter.

The fifth sub-index relates to the budget implementation stage. Whereas the indices by Yläoutinen (2004) and Hallerberg et al. (2009) focus specifically on the role of the finance minister during budget execution, the constructed index provides a more comprehensive assessment of the executive authority to cut, transfer or increase spending during budget implementation, as well as some information on the use of supplementary budgets. Specifically, the degree of flexibility is measured by whether the relevant power applies to all types of spending or only to certain categories; the application of thresholds and the required approval. Reflecting the discussion in Section 3.3.2 of the previous Chapter, executive discretion to cut, cancel or re-allocate spending is considered as contributing positively to the quality of budget institutions, whilst executive power to increase spending may lead to less fiscal discipline.

The sixth sub-index constitutes a broad measure of budget transparency, including the comprehensiveness of budget documentation; the public availability of budgetary information, including on the budgetary forecasts; and the comprehensiveness of the budget approval process, specifically whether legislative authorisation is required for off-budget expenditures and contingent liabilities[87]. On the other hand, budget transparency is not included in Yläoutinen (2004), whereas Hallerberg et al. (2009) focus more on the budget document itself and include a subjective assessment of the overall transparency of the budget process.

The seventh and last sub-index involves a distinct feature of the constructed index since it captures both the formal powers as well as the organisational capacity of fiscal councils. As in Horvath (2018), the selected characteristics were largely inspired by the OECD's (2014) recommended principles for IFIs, including, amongst others, independence and non-partisanship, mandate, resources, access to information and communication. Furthermore, since building up a reputation by fiscal councils takes time (Calmfors and Wren-Lewis 2011), as in the case of numerical budgetary constraints, established

[87] The frequency of publication of budgetary data is another relevant indicator of budget transparency. However, it is not included in this sub-index because EA countries are subject to very specific common requirements in this respect (Article 3, Council Directive 2011/85/EU).

IFIs are considered to have a stronger influence on the budgetary process than younger institutions.

4.3.2.2 Data sources

The main sources of data used to construct the quality of budget institutions index are the OECD budgeting practices and procedures database, the CION's fiscal governance databases as well as the IMF's fiscal councils dataset. The first two datasets are generated through questionnaires to budget directors and officials in national capitals. On the other hand, the IMF's dataset is mainly produced from secondary sources (Debrun et al. 2013). The use of this vast secondary data provides cost and time savings, whilst its reliability is enhanced by the availability of detailed information on the methodology used to generate the data in the respective websites of the three institutions. Furthermore, the use of the OECD and CION data enable a comparison of the characteristics of budget institutions in EA countries over time, since OECD surveys on budget procedures and practices are available for 2007 and 2012[88], whilst CION data is available annually for recent years (see Table 4.1).

As shown in Table AI in Appendix I, the OECD database is the main source of data for the sub-indices capturing the formulation, approval and implementation stages of the budgetary process as well as for budget transparency. On the other hand, the CION's databases for MTBFs and fiscal rules (CION 2016a, 2016b) provide more detailed information on these institutional characteristics, whilst the IMF Fiscal Councils dataset 2015 constituted a more updated source of information on fiscal councils. This secondary data is all available online[89]. Additionally, other data from the CION's fiscal governance databases was obtained in May 2016 following requests via email to the relevant officials in the Directorate-General for

[88] OECD data is also available for 2003, but it is not included in this study since this predates the date of EU membership of some EA countries (Cyprus, Estonia, Latvia, Lithuania, Malta, Slovenia, Slovakia).

[89] The IMF Fiscal Councils dataset 2015 is no longer available online as it was replaced with a more updated vintage in April 2017, which is available at: http://www.imf.org/external/np/fad/council/. The CION data has also been updated but the data used to compile the index is still available (European Commission 2017b, 2017c), being marked as 'old methodology'.

Economic and Financial Affairs (DG Ecfin)[90]. This constitutes unique, detailed information on the budgetary process in the EA countries, which is being used for the first time in the compilation of budget institutions indices.

Since the geographical coverage of the OECD's database does not include the four non-OECD EA countries (Cyprus, Latvia, Lithuania and Malta), matching data for these member states was generated by requesting officials in national authorities (namely budget directors or officials from fiscal councils, parliamentary budget offices or parliamentary budget committees) to respond to the relevant questions of the OECD survey. Information on the structure of budget negotiations in all EA countries was also obtained from questionnaires, as this was not otherwise available[91].

Secondary sources - namely finance ministries, parliamentary and fiscal councils websites, legal texts and official documents - were used to address some gaps in the IMF fiscal councils dataset and also to corroborate the data[92]. A detailed list of the various secondary sources used for each country is presented in Table AII in Appendix I. The data to generate the quality of budget institutions index was compiled during May-December 2016, with the cut-off date being 31st December 2016[93]. Given the various data sources used, different components in the constructed index refer to 2012 for data obtained from the OECD database, to 2014 for data from the CION's fiscal governance databases and the IMF fiscal councils dataset and to the second half of 2016

[90] This concerned the connectedness of the SP with the national budgetary process for the quality of budget institutions index, as well as other data which was used to compile the legislative budgetary power index (see Section 5.3.1 of the next Chapter).

[91] The questionnaire also comprised questions on legislative budgeting. Since it constitutes a more important data source for the legislative budgetary power index, it is discussed in Section 5.3.1 of the next Chapter.

[92] Information generated from interviews was also used to corroborate data for Malta. This interview data constitutes an important input in the case study on budget institutions in Malta, presented in Chapter 7.

[93] This study does not include the updated data published subsequently by the CION and the IMF in the first half of 2017 (available at: https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/fiscal-governance-eu-member-states_en; and https://www.imf.org/external/np/fad/council/, respectively). This updated data by the CION (2017b, 2017c, 2017d) includes new MTBF and fiscal rules indices, as well as a new index covering the scope of IFIs. The rankings for EA countries for fiscal rules and MTBFs are quite similar when comparing the 'old' indices, used to compile the quality of budget institutions index, and these 'new' indices - Spearman rank correlation coefficient of 1 for the fiscal rules index for 2005-15 and of 0.8 for the MTBF index for 2006 and 2008-15, although recent years exhibit more variation.

for the primary data generated through questionnaires. The resulting index aims to capture the new fiscal governance framework in the EA following the Great Crisis, which started to be introduced as from 2011[94] and is labelled as the 'post-crisis' index[95]. Whilst the OECD data pertains to 2012, this largely concerns aspects of budget institutions which were not directly affected by the common EA requirements. On the other hand, reforms concerning MTBFs, fiscal rules and fiscal councils entered into force in 2013 and these characteristics are captured in the index by the more recent CION and IMF data sources.

In order to assess the developments in budget institutions in EA countries since the Great Crisis, a quality of budget institutions index was also produced for the 'pre-crisis' period, mostly referring to 2007. This index was compiled using only the OECD, CION and IMF secondary data sources[96]. Thus, it has a more limited geographical coverage as data for Cyprus, Estonia, Latvia, Lithuania and Malta is not available in the OECD 2007 dataset[97]. Furthermore, some differences between the 2007 and 2012 OECD questionnaires and in the annual CION questionnaire also limit the comparability of the two indices. In addition, due to lack of available information and also reflecting the fact that most fiscal councils in EA countries were set up after the Great Crisis, the pre-crisis IFI sub-index constitutes a much simpler measure, capturing only whether a fiscal council was in place in 2007 and for how long it had been established. However, despite these differences, a comparison of the two indices still permits the identification of major institutional budgetary reforms implemented during the period under review.

4.3.2.3 Constructing the index

Given the "inescapable subjectivity" (Cherchye et al. 2007: 111) involved in the construction of composite indices, this Section follows Freudenberg

[94] With Council Directive 2011/85/EU, whereas the and the 'Two-Pack' Regulations entered into force in 2013.
[95] It is recognised that the sovereign debt crisis in the EA was still ongoing with bail-outs to Spain and Cyprus in 2012 and 2013, respectively and the third bailout to Greece in 2015.
[96] Some of the required data from the CION databases is not available for 2007 and in these cases, the earliest available data pertaining to 2009 and 2010 is used.
[97] These countries were not members of the OECD at the time - Estonia joined in 2010.

(2003)'s recommendations for transparency and provides a detailed account of the methodology applied and the choices made to construct the quality of budget institutions index. At a general level, the building of this index followed technical guidelines in the handbook on composite indicators published by the OECD and Joint Research Centre, European Commission (2008).

The scoring scheme applied to the different characteristics of budget institutions has a range between zero and ten, as in Alesina et al. (1999); with zero indicating the least favourable and ten indicating the most favourable, from the perspective of their contribution to fiscal discipline. The maximum score of ten was equally distributed over the range of possible responses for each variable. Details on the scoring system for the different indicators included in each sub-index are provided in Table AI in Appendix I.

To construct the index, equal weights were assigned to the seven sub-indices, as shown in Table 4.2. This approach, which follows previous studies, has the advantage of simplicity and reflects the fact that there is no theoretical or empirical basis for assigning more importance to particular institutional characteristics.

Table 4.2: Quality of budget institutions index – weighting structure

Sub-index		**Weight**	
1. Medium-term budgetary frameworks/targets		0.14	
	National MTBF		0.50
	Connectedness of Stability Programme with national MTBF and annual budget		0.50
2. Fiscal rules		0.14	
	Fiscal rule with the largest coverage of the general government sector		0.67[1]
	Other fiscal rules in place		0.33
3. Structure of budget negotiations within the executive		0.14	
4. Structure of the parliamentary process leading to the approval of the budget law		0.14	
5. Flexibility of budget execution		0.14	
6. Budget transparency		0.14	
7. Independent fiscal institutions		0.14	
	Formal powers of the fiscal council		0.50
	Organisational and technical capacity of the fiscal council		0.50

Note:
[1] When measuring the scope of the rule, the coverage of general government finances is assigned a weight of 0.50, whilst the accounting system and exclusions from the rule; and the years since it has been in place each have a weight of 0.25.

Source: Produced by author

A similar approach of assigning equal weights was generally adopted within the sub-indices[98], except for the fiscal rules sub-index. In this case, similarly to the European Commission's (2016b) fiscal rules strength index, diminishing marginal benefit is assumed for additional rules and a larger weight was assigned to the fiscal rule with the largest coverage of the general government sector. Establishing an appropriate weighting method is subject to considerable debate in the literature on the construction of composite indicators (Saisana et al. 2005). Thus, the sensitivity of the country rankings for the index scores to alternative weighting schemes is assessed. This is carried out by using Spearman rank correlations, as in Alesina et al. (1999).

Another important methodological choice in the construction of a composite index involves decisions regarding the aggregation form. Following previous studies, the seven weighted sub-indices were aggregated using a linear additive approach[99]. This assumes full and constant compensability among the different sub-indices (Nardo et al. 2005). For instance, a strong finance minister during budget negotiations can compensate for weak fiscal rules or MTBFs, which is consistent with the concept of different forms of fiscal governance (delegation or contracts approaches), as discussed in Section 4.2.1.

The index of the quality of budget institutions, *I*, was thus constructed as follows: first, for each of the seven sub-indices:

$$D_j = \sum_{i=1}^{N} w_i x_i$$

where D_j is the score for each sub-index j; x_i is the score of the variable *i*[100] and w_i is the weight attached to it, with

$$\sum_{i=1}^{N} w_i = 1$$

[98] But to address the few gaps in the data, the score for the respective sub-index for the countries concerned was computed on the basis of the available information, with the weights being adjusted accordingly.
[99] A multiplicative approach is not suitable since countries can have scores of zero for one or more of the variables considered, whilst a non-compensatory multi-criteria analysis is more appropriate when the composite index comprises highly different dimensions (Nardo et al. 2005).
[100] Variable *i* refers to the components comprised in each sub-index, as described in Table AI in Appendix I, with *N* representing the number of components comprised in each sub-index.

and $0<w_i<1$ and $i=1,2, \ldots N$.

A similar computation is carried out to calculate the composite indicator:

$$I = \sum_{j=1}^{7} D_j w_j$$

where D_j is the score of the sub-index j and $w_j = 0.14$, as shown in Table 4.2.

4.3.2.4 Analysis of the results

The scores for the quality of budget institutions index were analysed using descriptive statistics. Elements of strength as well as weaknesses in the quality of budget institutions were identified on the basis of the mean and median score values and country frequencies, whilst the extent of diversity among the EA countries was measured by the standard deviation and the range of the score values. Country rankings were also used to analyse the results, with countries grouped into three categories: the top score category (top quartile), the medium score category (second and third quartiles) and the low score category (bottom quartile)[101]. This analysis using descriptive statistics is carried out for the seven different sub-indices as well as for the overall quality of budget institutions index. A similar approach is adopted in the comparison of the pre- and post-crisis indices, whilst data constraints which limit the comparability of the two indices are highlighted when presenting the results.

In the analysis of the findings, a distinction is made between EA countries that experienced sovereign debt crises and other members of the monetary union. This classification is based on an objective criterion, namely whether countries have received financial assistance from EU mechanisms. The 'bailed-out' countries thus comprise Cyprus, Greece, Ireland, Latvia, Portugal and Spain[102].

Finally, in view of the rules-based approach which characterises the EA fiscal governance framework, the analysis of the results was extended further by

[101] In the graphical presentation of the results, a 'traffic light' colour scheme is applied with green, amber and red indicating the top, medium and low score categories, respectively.
[102] Latvia received assistance from the EU balance of payments assistance programme in 2008 before it joined the EA. Financial assistance to the other countries was provided between 2010 and 2015. Further details are available at: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance_en.

decomposing the constructed quality of budget institutions into two separate indices to capture the delegation and contracts approaches. As discussed in Section 4.2.1, Hallerberg and von Hagen (1999) and more recently, Yläoutinen (2004), Hallerberg et al. (2007, 2009) and Hallerberg and Yläoutinen (2010) have similarly developed indices to measure these two alternative forms of fiscal governance. To compile these indices, equal weights were assigned to the different components, which were aggregated using a linear additive method.

4.3.3 Ethical Issues

The quality of budget institutions index is mainly based on secondary data which is publicly available and its use does not involve any particular ethical issues. As regards the detailed data which was obtained directly from CION services, no specific restrictions on its use were imposed, except the requirement to acknowledge its source.

Primary data generated through a questionnaire to national authorities was mainly used for the four non-OECD EA countries, as well as for the component relating to the structure of budget negotiations within the executive for all EA countries. The relevant ethical issues concerning this questionnaire are discussed in the next Chapter, since it constitutes the main source of data for the legislative budgetary power index.

4.4 Results: the quality of budget institutions in the EA

This Section first presents the results for the seven sub-indices and then for the overall scores for the quality of budget institutions index. This is followed by a comparison between the bailed-out countries and the other EA member states and an analysis of developments since the Great Crisis. Finally, the findings are applied to determine the prevalent form of fiscal governance (delegation and contracts approach) in the EA countries. Tables AIII and AIV in Appendix I present the detailed results for the post-crisis quality of budget institutions index and for the pre-crisis index, respectively.

4.4.1 The quality of budget institutions index: results at a sub-index level

Table 4.3 shows the main results for the post-crisis quality of budget institutions index and for the different sub-indices. The findings are ranked according to the scores for the overall index, with countries grouped into top, medium and low score categories. Meanwhile, Table 4.4 presents key descriptive statistics for the seven sub-indices and their main components.

Overall, EA countries fare quite strongly in the MTBF sub-index (Figure 4.2), with mean and median values of around 7. Reflecting the obligation to have a national MTBFs in place, overall EA countries perform particularly well in the national MTBFs component[103].

The main elements of strength of national MTBFs in the EA concern the existence of co-ordination mechanisms for all levels of general government prior to setting the medium-term budgetary targets (found in 16 countries) and the involvement of national parliament (through a vote in ten countries and presentation of the MTBF in another eight countries). On the other hand, there is scope to make MTBFs more binding since a fixed framework which connects the MTBF with the annual budget targets exists in only nine countries whilst well-defined actions in case of deviations from plans and regular monitoring of medium-term targets are found in only eight countries.

[103] Being largely based on the CION's MTBF index, the country rankings in this component are also quite similar (Table AV in Appendix I).

Table 4.3: Quality of budget institutions index – results (post-crisis data)

	Top score category						Medium score category							Low score category						
	ES	**FR**	**SI**	**AT**	**IE**	**DE**	**LV**	**NL**	**IT**	**EL**	**LT**	**EE**	**CY**	**SK**	**PT**	**FI**	**LU**	**BE**	**MT**
Overall index	**7.8**	**6.9**	**6.8**	**6.7**	**6.7**	**6.7**	**6.4**	**6.4**	**6.3**	**6.3**	**6.2**	**6.1**	**6.0**	**5.8**	**5.7**	**5.6**	**5.5**	**5.2**	**5.0**
1. MTBF	8.3	7.7	8.3	9.2	5.8	7.1	5.0	7.5	7.9	6.9	5.2	5.0	7.5	6.0	7.1	7.1	4.8	6.7	6.3
2. Fiscal rules	8.6	7.9	3.3	6.1	8.0	6.8	6.8	7.5	8.0	5.4	5.5	4.4	4.2	6.7	5.7	4.6	6.9	5.4	5.7
3. Budget negotiations	10.0	5.8	9.2	7.5	9.2	8.3	8.3	7.5	9.2	10.0	7.5	7.5	8.3	6.7	5.6	7.5	7.5	4.7	8.3
4. Budget approval	8.3	8.3	8.3	2.5	3.3	3.3	5.0	1.7	4.2	6.7	5.0	5.0	4.2	2.5	3.3	2.5	3.3	1.7	0.0
5. Budget execution	6.5	5.8	6.9	7.7	6.6	6.7	5.6	4.1	3.8	5.7	6.9	6.6	7.2	6.6	6.7	3.9	6.1	6.7	6.1
6. Budget transparency	6.6	6.9	6.1	7.7	8.4	9.3	8.8	8.9	6.9	4.9	9.2	9.6	5.7	6.8	4.8	8.3	7.8	4.0	3.7
7. IFIs	6.4	6.1	5.8	6.4	5.5	5.2	5.4	7.5	3.9	4.2	3.9	4.6	4.7	5.6	6.6	5.6	2.2	7.2	5.3

Source: Results are produced by author

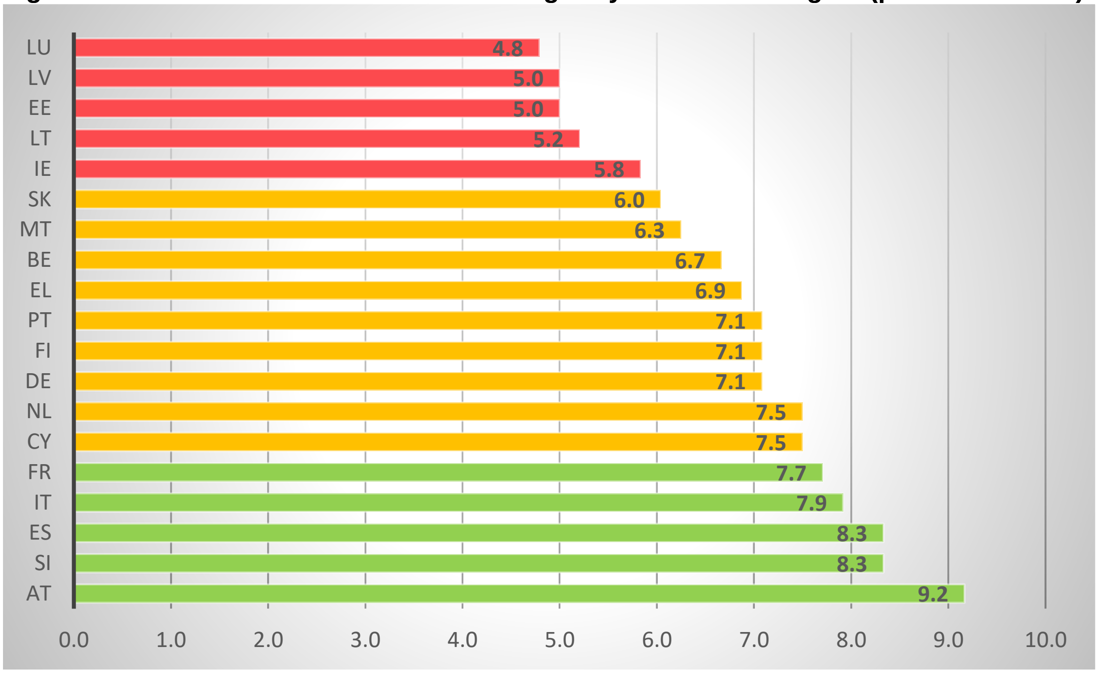
Table 4.4: Quality of budget institutions sub-indices - descriptive statistics (post-crisis data)

	Mean	Median	Standard deviation	Range
1. Medium-term budgetary framework/targets	**6.8**	**7.1**	**1.3**	**4.8 - 9.2**
National MTBF	7.9	8.3	1.4	5.0 – 10.0
Connectedness between Stability Programme and national budgetary process	5.7	5.8	2.2	1.7 – 10.0
2. Fiscal rules	**6.2**	**6.1**	**1.5**	**3.3 – 8.6**
Fiscal rule with the largest coverage of the general government sector	6.9	7.1	1.4	4.4 – 9.6
Other fiscal rules in place	4.4	4.3	3.0	0.0 – 10.0
3. Structure of budget negotiations within the executive	**7.8**	**7.5**	**1.4**	**4.7 – 10.0**
4. Structure of the parliamentary process leading to the approval of the budget law	**4.2**	**3.3**	**2.4**	**0.0 – 8.3**
5. Flexibility of budget execution	**6.1**	**6.6**	**1.1**	**3.8 – 7.7**
Executive authority to cut, cancel or rescind spending once the budget has been approved by the legislature	6.5	7.8	3.4	0.0 – 10.0
Possibility for line ministers to re-allocate funds within their own budget envelope	6.1	7.5	1.3	2.4 – 10.0
Executive authority to increase spending after the budget has been approved by the legislature	5.1	4.4	2.5	2.5 – 10.0
Supplementary budgets	6.8	5.0	2.6	3.3 – 10.0
6. Budget transparency	**7.1**	**6.9**	**1.8**	**3.7 – 9.6**
Legislative authorisation of off-budget expenditures and contingent liabilities	7.1	10.0	3.7	0.0 – 10.0
Comprehensiveness of budget documentation	6.7	6.5	1.5	4.3 – 9.0
Public availability of budgetary information and methodologies	7.4	6.7	2.4	3.3 – 6.7
7. Independent fiscal institutions	**5.3**	**5.5**	**1.3**	**2.2 – 7.5**
Formal powers of independent fiscal institutions	5.1	5.3	1.1	2.5 – 6.6
Organisational/technical capacity of independent fiscal institutions	5.5	5.1	2.2	1.8 – 10.0

Source: Results are produced by author

Meanwhile, EA member states fare less strongly regarding the connectedness of the SP with the national budgetary process, with average score values of around 6. In particular, although in practice the targets in the SP and the national MTBF and annual budget are the same (in 12 and 14 countries, respectively), this is generally not backed by a legal obligation. It is also notable that there is also more variation among the EA countries in this component of the MTBF sub-index.

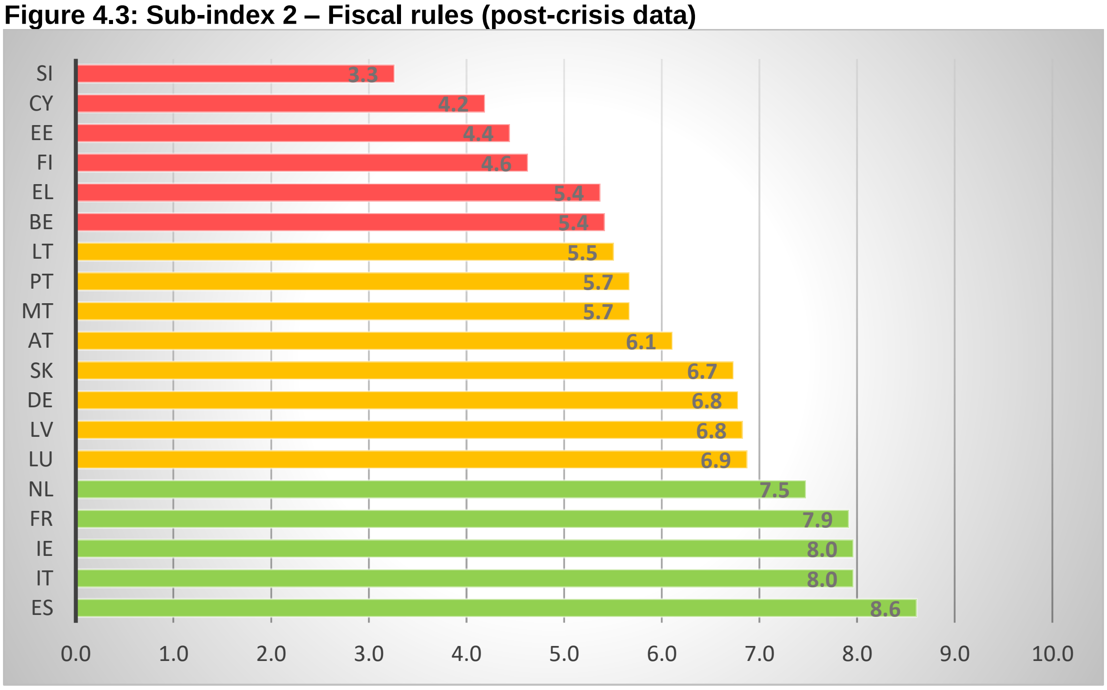
Figure 4.2: Sub-index 1 - Medium-term budgetary framework/targets (post-crisis data)



Source: Results are produced by author

Although fiscal rules constitute a requirement for EA countries, the average score values for the second sub-index are at around 6. The country rankings, which are presented in Figure 4.3, are quite robust to changes in the weights assigned to the two components comprised in this sub-index and are also quite similar to those with the CION's fiscal rules strength index (see Table AVI in Appendix I).

Figure 4.3: Sub-index 2 – Fiscal rules (post-crisis data)

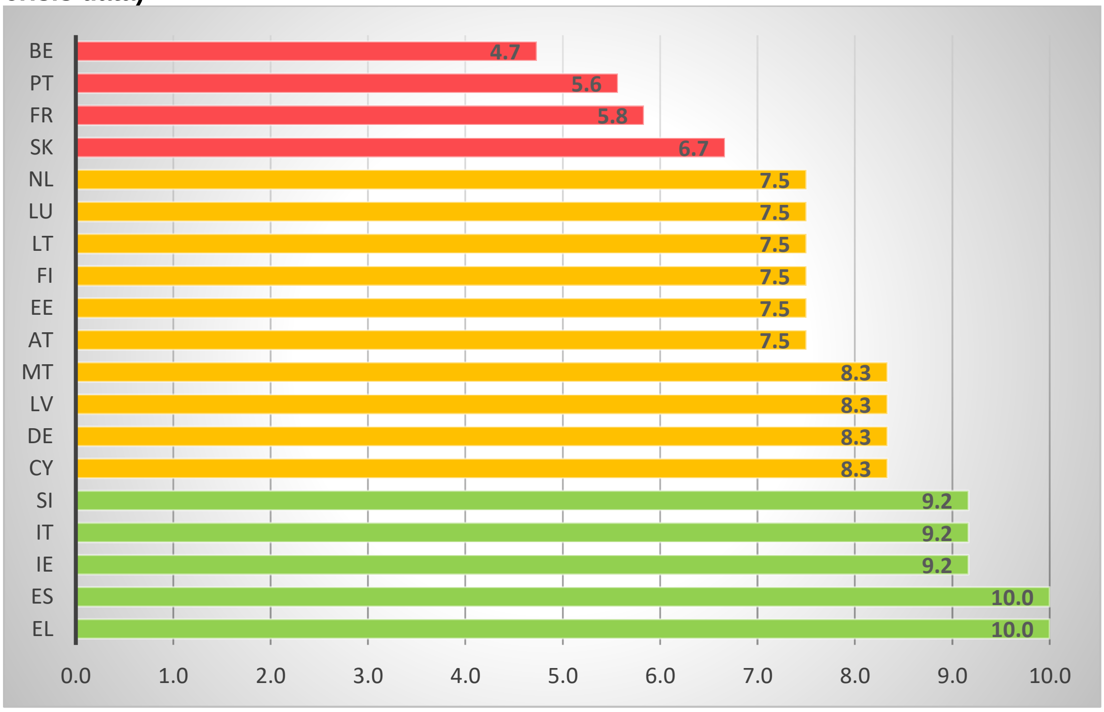


Source: Results are produced by author

The strength of the fiscal rule with the largest coverage is reflected in the fact that it is based on a legal act in 14 EA countries and on a constitutional basis in three other countries, whilst the targets are binding with no margin for adjusting the objectives included in the fiscal rule in 14 countries. On the other hand, there is scope to improve the effectiveness of fiscal rules since enforcement is delegated to an independent body in only nine countries and automatic correction mechanisms in case of non-compliance are found in only four countries. Similarly, only nine member states reported high media visibility for the fiscal rule. It is also noted that fiscal rules with broad coverage of the general government sector (more than 50%) are a relatively recent phenomenon in eleven EA countries, being introduced after 2010. Moreover, whilst 16 EA countries have more than one fiscal rule in place, these additional rules generally have a narrow scope, applying to regional and local government and/or the social security sector.

The quality of the institutional framework governing the budget negotiations phase (Figure 4.4) is overall good, with a median value of 7.5.

Figure 4.4: Sub-index 3 – Structure of budget negotiations within the executive (post-crisis data)

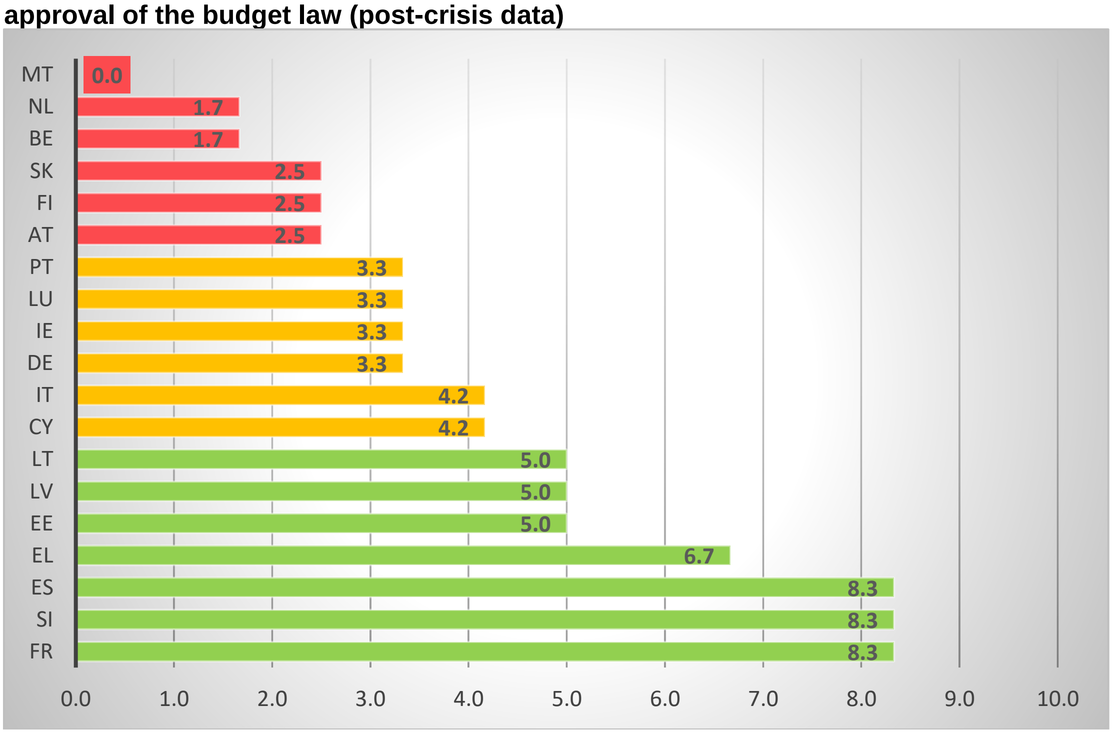


Source: Results are produced by author

Sixteen EA countries impose budget ceilings on the initial total expenditure requests of line ministries. On the other hand, reflecting the fact that most EA countries have coalition governments (Döring and Manow 2016), budget negotiations take place bilaterally between the finance minister and the spending ministers in only six countries and similarly the final decision-making power to resolve or settle disputes is centralised (at the Prime Minister or Minister of Finance level) in only six countries.

In contrast, the quality of budget institutions in the budget approval stage is generally weak in EA countries, with a low median score value of around 3. As shown in Figure 4.5, there is a high degree of disparity among the member states.

Figure 4.5: Sub-index 4 – Structure of the parliamentary process leading to the approval of the budget law (post-crisis data)

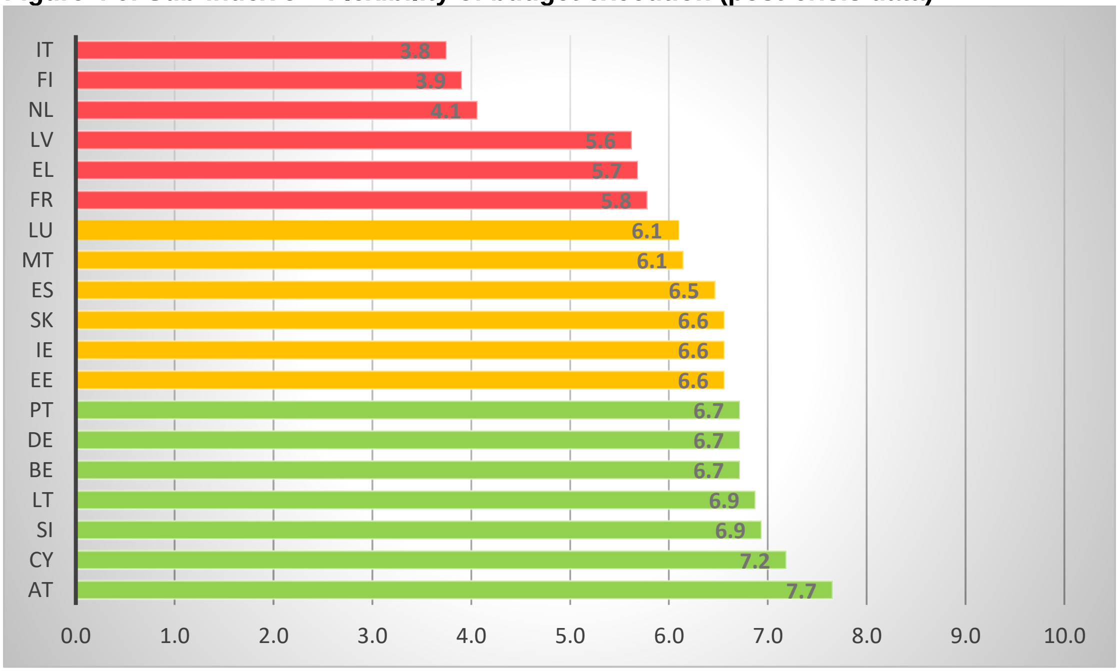


Source: Results are produced by author

In most EA countries, legislatures have the power to amend the draft budget presented by the executive, with nine EA countries having unrestricted powers. Restricted amendment powers apply in eight countries, whilst the legislature can only approve or reject the draft budget, but not amend it, in the remaining two countries. Furthermore, there is a general lack of centralisation with the legislature voting first on the total amount of expenditure before voting on specific appropriations in only four countries. This constitutes an area for possible policy reform in the budget approval phase, without constraining the legislature's budgetary power and hence safeguarding the democratic legitimacy of the budgetary process. On the other hand, a positive institutional feature in the budget approval stage is a centralised parliamentary budget committee structure, which is found in thirteen EA countries. This facilitates a comprehensive view of the budget during the approval stage, similar to the role of the finance minister during the budget preparation stage.

Turning to the budget implementation stage, the average score values for the fifth sub-index is around 6 and the variation within the EA is quite contained, as shown in Figure 4.6. Executive authority to cut or cancel spending and for line ministers to re-allocate funds within their own budget envelope is quite strong, which facilitates adjustment to unforeseen developments during budget implementation. On the other hand, in EA countries, the executive also has some power to increase spending and to use supplementary budgets[104], which make it easier to sanction expenditure slippages. The prevalent restrictions to the executive's authority to implement changes to the approved budget include allowing such changes for some categories of spending only, requiring approval - either from the finance ministry, government or the legislature - and to a lesser extent by applying thresholds.

Figure 4.6: Sub-index 5 – Flexibility of budget execution (post-crisis data)

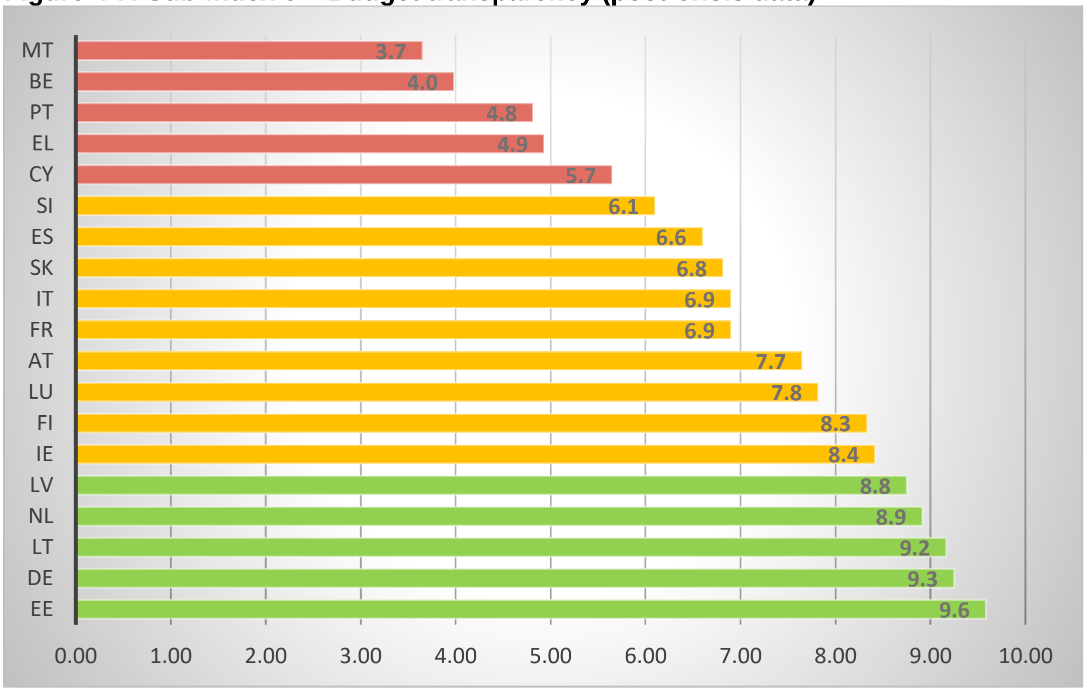


Source: Results are produced by author

[104] A proxy relating to the top reason why supplementary budget/s are necessary was used because comparable data for the amounts of supplementary budgets for all EA countries was not available.

Meanwhile, the level of budget transparency in the EA (Figure 4.7) is good, with average score values of around 7. Twelve EA countries require legislative authorisation for all or most existing off-budget expenditures and contingent liabilities. In addition, overall, budget documentation includes a wide range of information, whilst there is also good public availability of budgetary information and methodologies in most EA countries. Nevertheless, there is scope for more transparency to distinguish new expenditure measures in budget documentation (which is always done in only six countries) and to make publicly available a comprehensive annual financial plan for all levels of government, long-term perspectives on total revenue and expenditure, citizens' budget and citizens' budget guide (explaining the budget process and the actors involved) (which are made publicly available in only nine or less countries).

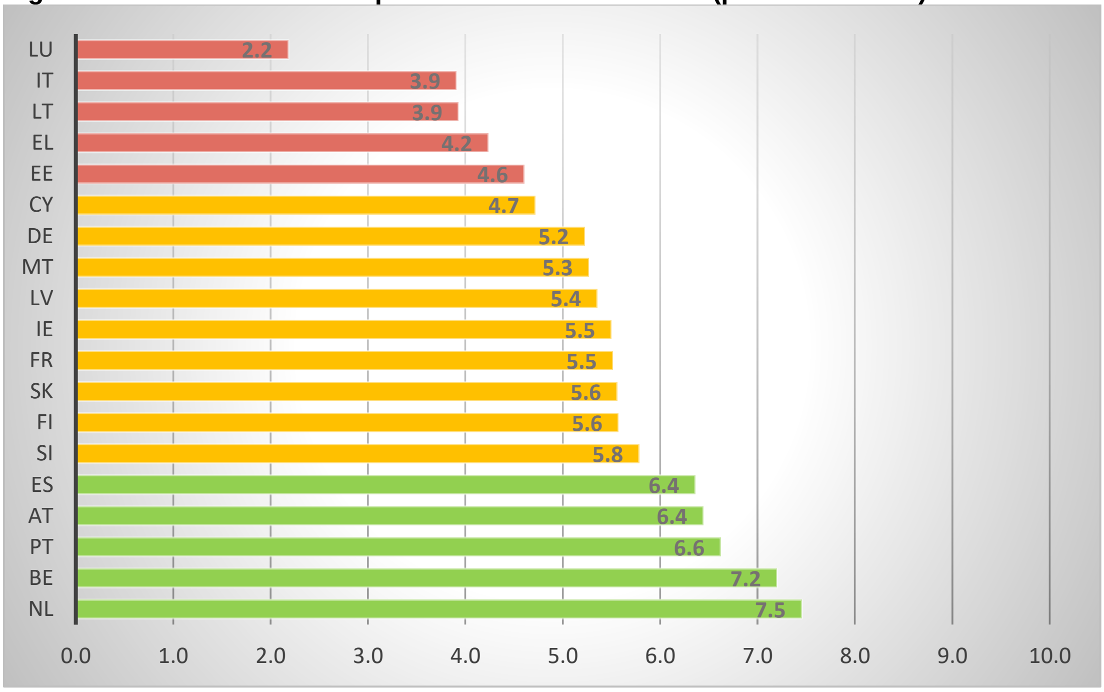
Figure 4.7: Sub-index 6 – Budget transparency (post-crisis data)



Source: Results are produced by author

Finally, independent fiscal councils are not a particularly strong feature of budget institutions in the EA, with average score values for the last sub-index of around 5.5. A similar performance is noted for both formal powers as well as the organisational and technical capacity of IFIs. The country rankings, shown in Figure 4.8, are quite similar to those using Horvath's (2018) fiscal councils indices (being the more recent and comparable index for IFIs) and also to those obtained when applying an alternative (multiplicative) method to aggregate the formal and organisational capacity components of this sub-index[105] (Tables AVII and AVIII in Appendix I).

Figure 4.8: Sub-index 7– Independent fiscal institutions (post-crisis data)



Source: Results are produced by author

In terms of formal powers, the independence of IFIs is generally ensured in legal and operational terms (in 18 out of a total of 22 institutions[106]) and through the right to select, employ and pay staff (in 14 councils). On the other hand, other characteristics contributing to the independence of fiscal councils could be improved, namely safeguards on the budget (in place in only eight institutions) and membership (re-appointment of the governing/high-level members is prohibited in only six institutions; and only nine IFIs have only academics and policy experts as their members). In addition, few fiscal councils involve parliament in the appointment and dismissal of their members. Meanwhile, whilst most fiscal councils have a relatively broad mandate,

[105] A certain degree of both formal powers and organisational/technical capacity is required for fiscal councils to influence the budgetary process, which implies that the full substitutability assumed by the linear additive approach may not be plausible. However, this method was applied to aggregate the two components of the IFI sub-index for simplicity and to be consistent with the methodology applied to aggregate the different sub-indices into the overall index.

[106] Belgium and Germany have two IFIs in place, whilst the second fiscal council in Slovenia was established but not operational by the cut-off date of December 2016. All other EA countries have one IFI.

forecasts are produced in only seven IFIs, whilst a comply and explain requirement exists in only five countries.

As regards organisational and technical capacity, strong characteristics concern access to budgetary information and the number and range of public reports produced. On the other hand, most fiscal councils face constraints due to their relatively small size (having only up to twenty staff in 12 countries). In addition, most are relatively young institutions, with 15 councils being established since 2010[107].

4.4.2 The quality of budget institutions index: results for the composite index

Overall, EA countries have budget institutions of medium quality (Table 4.5 and Figure 4.9), with average score values for the composite index of around 6. There is a low degree of variation among the member states. Similar results for the EA countries are found in Darvas and Kostyleva (2011) and likewise Austria and the Netherlands have high scores in the index whilst Belgium has a low score. However, there are differences in the rankings of other countries[108]. The robustness of the results was also tested by considering alternative weighting structures (Table AIX in Appendix I) and the country rankings were found to remain quite similar (Table AX in Appendix I).

Table 4.5: Quality of budget institutions index – descriptive statistics (post-crisis data)

	Mean	Median	Standard deviation	Range
All EA countries	6.2	6.3	0.7	5.0 – 7.8

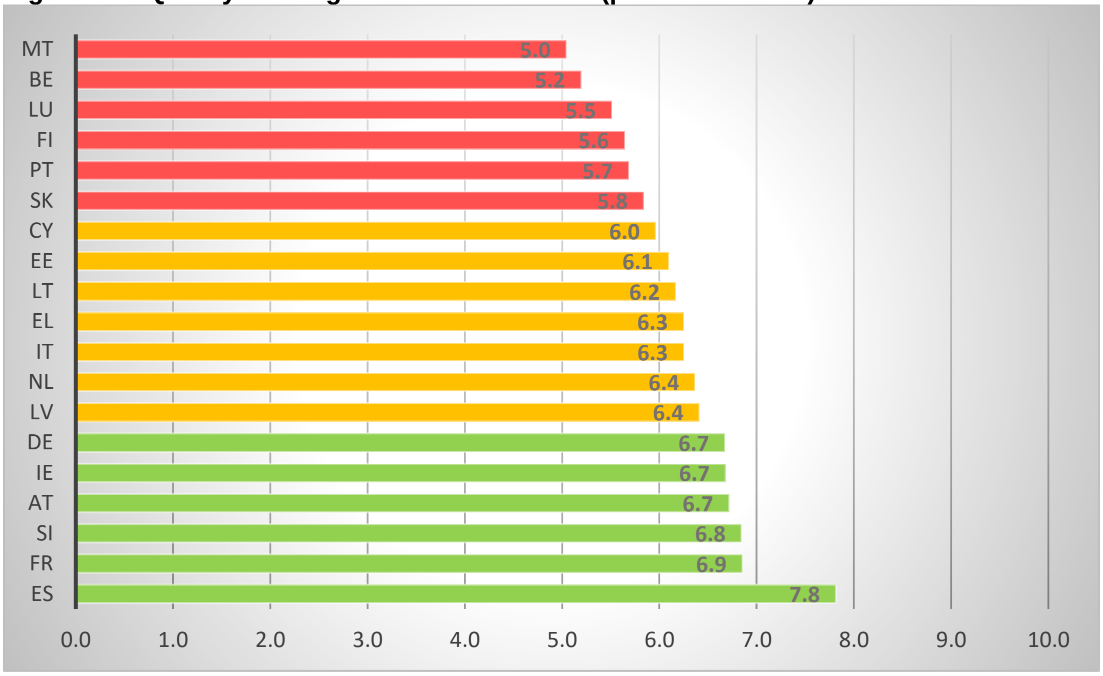
Source: Results are produced by author

The median values for the different sub-indices (Figure 4.10) indicate that, in general, EA countries fare more strongly in terms of MTBFs and the structure of budget negotiations. They also perform quite well in terms of fiscal rules, flexibility of budget execution and budget transparency. On the other hand,

[107] In one country, a second IFI was established, whereas in the other 14 member states, the set-up of an IFI was a new institutional development.
[108] The Spearman rank correlation coefficient for the two indices (for the EA countries) is only 0.3, which can reflect the different time periods covered as well as the broader scope of the constructed index.

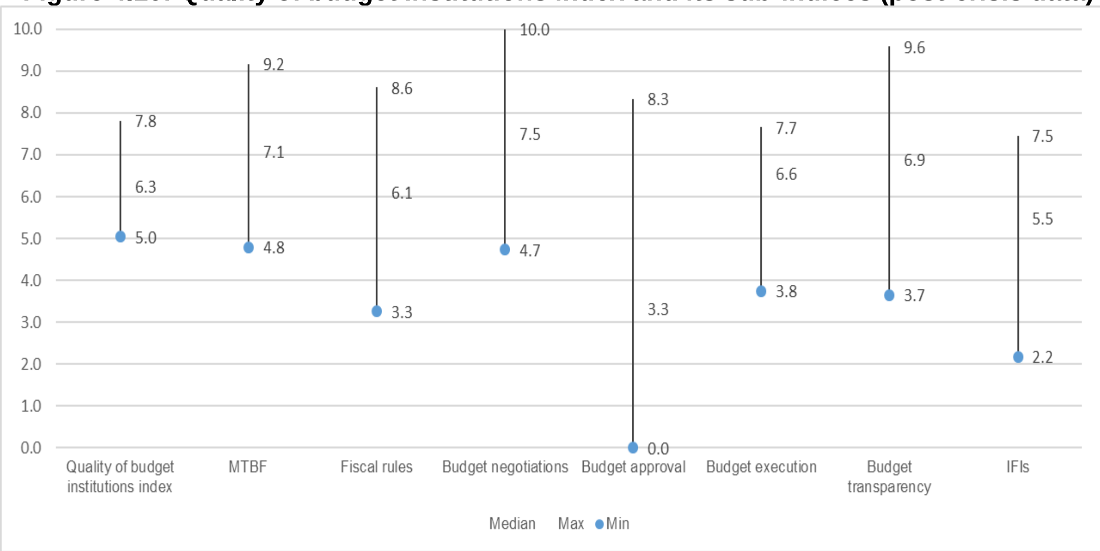
they fare poorly in the budget approval stage, and fiscal councils are also rather weak.

Figure 4.9: Quality of budget institutions index (post-crisis data)



Source: Results are produced by author

Figure 4.10: Quality of budget institutions index and its sub-indices (post-crisis data)



Source: Results are produced by author

The variation among EA countries for the overall index scores is rather contained, but, as shown Figure 4.10, there is more disparity at a sub-index level. There is most variation in the sub-index concerning the budget approval process, which is not covered by the EA fiscal governance framework. In this sub-index, the standard deviation is 2.4. In the other sub-indices, the extent of diversity is broadly similar (standard deviation of around 1.5). This degree of variation is found also for those characteristics which are subject to common requirements at an EA level, namely the MTBF, fiscal rules and IFI sub-indices. This shows that even when common EA requirements apply, national governments do not adopt the same model for the dimension of budget institutions concerned. Rather, there is variation among the EA countries in the quality of different aspects of budget institutions, including in the strength of their numerical budgetary constraints and in their fiscal councils.

Furthermore, it is noted that in various countries, weak scores in some sub-indices are compensated by higher scores in other sub-indices. For example, within the top score category, France has a lack of centralisation in the structure of budget negotiations within the executive, but then has a very centralised structure of the budget approval process, whilst the opposite is the case for Austria, Ireland and Germany. The remaining two countries in the top score category (Spain and Slovenia) fare strongly in both sub-indices. Also within the group of high score countries, Slovenia as well as Austria have relatively weak fiscal rules but strong MTBFs, whereas the opposite is the case for Ireland whilst the other countries perform similarly in both sub-indices. These findings show substitutability between the different dimensions of budget institutions[109], providing further indication that there can be different models for achieving good quality budget institutions and not necessarily a 'one-size-fits-all' form of fiscal governance.

These findings contrast with the general thrust of a more homogenous fiscal governance framework based on common requirements for all EA countries, particularly since the Great Crisis. On the other hand, it is consistent with arguments by Wyplosz (2012) and Hallerberg (2011), who drawing on the experience with fiscal frameworks in a number of countries, emphasise the need for local ownership of fiscal frameworks and for different approaches to fiscal governance, depending on a country's specific institutional characteristics. Furthermore, Kopits (2012: 156), based on a review of the experience with fiscal frameworks in countries such as the Netherlands, Sweden and the United Kingdom, criticises the centrally-mandated rules-

[109] This supports the assumption of substitutability inherent in the linear aggregation method used in the construction of the composite index.

based approach to fiscal governance, which has been increasingly applied in the EA, and argues that effective fiscal frameworks are “home-grown and home-owned” and supported by broad political ownership. The requirements for all EA countries to introduce fiscal rules and MTBFs and to establish fiscal councils ignore the diversity in the political system and institutional set-up of the different countries. Furthermore, being imposed supra-nationally, they may also suffer from a lack of national ownership, which can affect their effectiveness to achieve fiscal restraint.

4.4.3 Quality of budget institutions in bailed-out and other EA countries

In view of the expected influence of the quality of budget institutions on fiscal discipline, it is relevant to compare the scores for the constructed index for the bailed-out countries to those for the other EA member states. As shown in Table 4.6, the results do not show a marked difference in the overall quality of budget institutions between these two groups of countries, with very close average score values. Furthermore, it is notable that the EA country with the maximum score in the quality of budget institutions index is Spain, whilst Ireland is also in the top score category and all the other bailed-out countries, except Portugal, have medium quality budget institutions (Figure 4.9). Meanwhile, within the group of other EA countries, focusing on the member states with a relatively sound public finance position (as reflected in an average budget surplus during 2012-15), Germany has a top score in the quality of budget institutions index, whilst Estonia and Luxembourg are in the medium and low score categories, respectively. These findings constitute a crude indication of a weak relationship between the quality of budget institutions and fiscal performance[110].

At a sub-index level, the bailed-out countries and the other EA member states also fare quite similarly. The average score values are very close for the MTBF, fiscal rules, flexibility of budget execution and fiscal council sub-indices. Budget transparency is the only institutional characteristic where bailed-out countries fare worse than the other members of the EA. On the other hand, they have higher mean and median values for the budget formulation and

[110] This relationship is analysed in more in-depth in Chapter 6.

budget approval sub-indices[111]. Furthermore, the variation among the countries included in these two groups is also quite similar both for the overall index and also for most of the sub-indices.

Table 4.6: Quality of budget institutions in bailed-out[1] and other EA countries – descriptive statistics (post-crisis data)

	Mean		Median		Standard deviation		Range	
	Bailed-out	**Other**	**Bailed-out**	**Other**	**Bailed-out**	**Other**	**Bailed-out**	**Other**
Quality of budget institutions	**6.5**	**6.1**	**6.3**	**6.2**	**0.7**	**0.6**	**5.7 - 7.8**	**5.0 - 6.9**
1. MTBF	6.8	6.8	7.0	7.1	1.2	1.3	5.0 – 8.3	4.8 – 9.2
2. Fiscal rules	6.4	6.1	6.3	6.1	1.7	1.4	4.2 – 8.6	3.3 – 8.0
3. Budget negotiations	8.6	7.5	8.8	7.5	1.7	1.2	5.6 – 10.0	4.7 – 9.2
4. Budget approval	5.1	3.7	4.6	3.3	2.0	2.5	3.3 – 8.3	0.0 – 8.3
5. Budget execution	6.4	6.0	6.5	6.6	0.6	1.3	5.6 – 7.2	3.8 – 7.7
6. Budget transparency	6.5	7.3	6.1	7.7	1.7	1.9	4.8 – 8.8	3.7 – 9.6
7. IFIs	5.5	5.3	5.4	5.5	0.9	1.4	4.2 – 6.6	2.2 – 7.5

Note:
[1] The bailed-out countries comprise Cyprus, Greece, Ireland, Latvia, Portugal and Spain.

Source: Results are produced by author

4.4.4 Quality of budget institutions: comparison of pre- and post-crisis indices

Whilst, as discussed in Section 4.3.2, data constraints limit the direct comparability of the pre- and post-crisis quality of budget institutions indices, the average score values indicate some overall improvement in the EA during the period under review (from around 5 to 6). On the other hand, the degree of variation among EA countries has remained broadly unchanged at a low level (Table 4.7).

As shown in Figure 4.11, the improvement in the quality of budget institutions appears to be across the board, with a higher score in the quality of budget institutions index by almost all countries in the sample (except in Belgium). The most marked increases were recorded in Greece, Ireland and Spain, all bailed-out countries, with their ranking position improving considerably. This

[111] This reflects the prevalence of the delegation form of fiscal governance among the bailed-out countries, as per findings presented in Section 4.4.5 (see Table 4.10).

shows that the overall good quality of budget institutions in the bailed-out group of countries, as discussed in the previous Section, is a relatively recent development, reflecting reforms implemented as part of the conditions to their bail-outs, as specified in their respective economic adjustment programmes[112]. Reforms in these three countries mainly involved fiscal rules, IFIs and the structure of budget negotiations during the formulation stage, as well as MTBFs in the case of Greece. In contrast, Portugal registered a more modest increase in its overall score[113]. Other countries with notably higher scores in the post-crisis index are France and Italy.

Table 4.7: Pre- and post-crisis quality of budget institutions indices – descriptive statistics (post-crisis data)

	Mean		Median		Standard deviation		Range	
	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis
Quality of budget institutions	**5.2**	**6.3**	**5.1**	**6.3**	**0.8**	**0.7**	**3.6 – 6.3**	**5.2 – 7.8**
1. MTBF	5.2	6.8	5.4	7.1	1.9	1.3	0.8 – 8.3	4.8 – 9.2
2. Fiscal rules	3.4	6.2	3.8	6.1	1.6	1.5	0.0 – 5.5	3.3 – 8.6
3. Budget negotiations	6.8	7.8	6.3	7.5	1.7	1.7	5.0 – 10.0	4.7 – 10.0
4. Budget approval	4.6	4.3	3.3	3.3	2.7	2.5	0.0 – 8.3	1.7 – 8.3
5. Budget execution	6.1	6.0	6.0	6.5	1.2	1.2	4.5 – 8.6	3.8 – 7.7
6. Budget transparency	7.0	7.0	7.3	6.9	1.6	1.6	3.1 – 10.0	4.0 – 9.3
7. IFIs	2.1	5.3	0.0	5.5	3.8	1.3	0.0 – 10.0	2.2 - 7.5

Notes:
[1] Sub-indices 1, 2 and 7 refer to all the 19 EA countries. On the other hand, sub-indices 3-6 (and thus also the quality of budget institutions index) refer only to the 14 EA countries (AT, BE, FI, FR, DE, EL, IE, IT, LU, NL, PT, SK, SI and ES) for which pre-crisis data is available. The respective descriptive statistics for the post-crisis period also cover the same 14 EA countries and hence, differ from those presented earlier.
[2] Pre-crisis data refers to 2007 for all indices, except for sub-index 1 which comprises data pertaining to 2009 and 2010. Post-crisis data refers to 2014 for sub-indices 1, 2 and 7; and to 2012 for sub-indices 3-6.
[3] Sub-indices 2 and 4 are fully comparable for the pre- and post-crisis periods, but data constraints limit the comparability of sub-indices 1, 3, 5, 6 and in particular, sub-index 7 (since most IFIs were set up after 2007). As a result, the pre- and post-crisis quality of budget institutions indices are also not directly comparable.

Source: Results are produced by author

Overall, for the EA countries in the sample, almost all the dimensions of the quality of budget institutions contributed to the overall improvement in the composite indicator over the period under review. However, the better quality

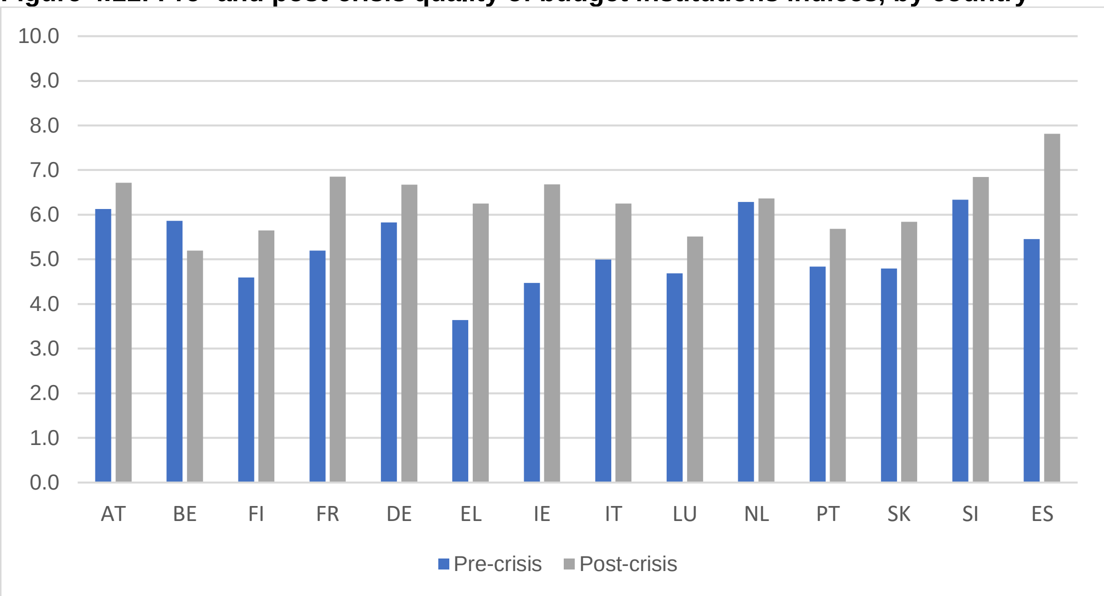
[112] For more information on the economic adjustment programmes for the bailed-out countries, see: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance_en.

[113] Due to data constraints, the pre-crisis quality of budget institutions index cannot be compiled for the other two bailed-out countries – Cyprus and Latvia.

of budget institutions in the EA was largely spurred by the common EA requirements introduced following the Great Crisis. In particular, as shown in Figure 4.12, the largest improvements involved the fiscal councils and fiscal rules sub-indices. Nine countries in the sample set up new IFIs during the period under review[114], whilst the improvement in fiscal rules reflects both the introduction of new fiscal rules as well as reforms extending the scope of existing rules and making them more binding. The common EA requirements also affected MTBFs, but a more modest increase was registered in the median value of the relevant sub-index.

Similarly, some improvement is also noted for the budget formulation and implementation stages. In the budget formulation stage, this mainly reflects reforms by seven countries to introduce budget ceilings or more stringent ceilings on the initial spending requests of line ministers, whilst there is more executive flexibility, both to cut, cancel and shift spending as well as to increase it. On the other hand, the structure of the budget approval process was more resistant to change, whilst the findings suggest a slight deterioration of budget transparency.

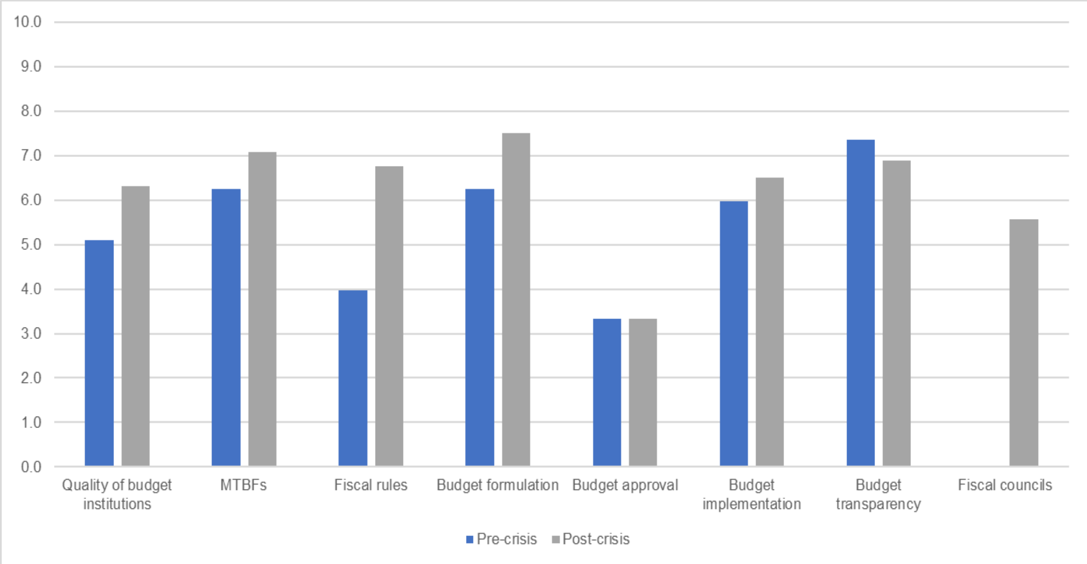
Figure 4.11: Pre- and post-crisis quality of budget institutions indices, by country



Source: Results are produced by author

[114] Five other member states also set up new IFIs during the period but are not included in the pre-crisis sample.

Figure 4.12: Pre- and post-crisis quality of budget institutions indices and sub-indices, median values



Source: Results are produced by author

4.4.5 Forms of fiscal governance in the EA

The common EA requirements for national budget institutions involve a rules-based approach. Hence, it is relevant to assess whether this form of fiscal governance is more prevalent among the EA countries. To carry out this analysis, the constructed index was decomposed into two separate indices capturing the delegation and contracts approaches (described in Section 4.2.1). Similarly to Yläoutinen (2004), the delegation approach index comprises the strength of the finance minister during budget negotations and during budget implementation as well as restrictions on legislative budget amendment powers[115].

[115] The sequence of the voting procedure and the parliamentary budget committee structure, within the approval stage, are not included in the delegation index as they concern more the degree of centralisation of decision-making within parliament rather than the relative strength of the legislature vis-à-vis the executive. Furthermore, in the implementation stage, flexibility for line ministers to reallocate funds within their own budget envelope and restrictions on executive authority to increase spending and on the use of supplementary budgets are not included as they imply less power for the finance minister.

Table 4.8: Delegation and contracts indices – results (post-crisis data)

	AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
Delegation index	5.4	4.5	8.2	7.1	2.5	6.3	5.1	9.3	8.9	6.2	3.6	4.2	5.4	5.5	4.2	4.8	5.6	7.3	8.3
Contracts index	7.1	6.0	5.3	6.5	6.5	7.6	7.2	5.9	6.7	7.0	7.3	6.1	5.9	5.7	8.5	5.9	6.9	5.9	7.9

Source: Results are produced by author

On the other hand, as shown in Table AXI in Appendix I, the contracts index includes national MTBFs[116] and fiscal rules as well as budget transparency and IFIs, since the latter two characteristics can contribute towards stronger numerical budgetary constraints. This contracts index is considerably broader in scope than that in Hallerberg et al. (2009), in particular by including budget transparency and fiscal councils. The results for the constructed delegation and contracts indices are shown in Table 4.8, whilst descriptive statistics are presented in Table 4.9.

Table 4.9: Delegation and contracts indices - descriptive statistics (post-crisis data)

	Mean	Median	Standard deviation	Range
Delegation index	5.9	5.5	1.9	2.5 – 9.3
Contracts index	6.6	6.5	0.8	5.3 – 8.5

Source: Results are produced by author

Overall, in the EA, budget institutions are stronger in terms of characteristics typical of the contracts approach, as reflected in the higher average score values[117]. There is also more variation among EA countries in the scores for the delegation approach. This prevalence of the contracts approach among EA countries is expected since, as discussed further on, most member states have coalition governments.

However, at a country level, the identification of the form of fiscal governance cannot be clearly defined because various countries have quite similar scores for the two indices. Thus, whereas Yläoutinen (2004) and Hallerberg et al. (2009) categorise a country's form of fiscal governance on the basis of its score for the respective delegation and contracts indices[118], in this study, the

[116] The connectedness between the SP and the national budgetary process is not included in the contracts index, since all EA countries are required to prepare a SP and hence this characteristic is relevant to countries with both forms of fiscal governance.
[117] As noted in Section 4.2.1, Hallerberg et al. (2009) and Hallerberg and Yläoutinen (2010) present similar results.
[118] These studies also show similarly high rankings in both indices for some countries - France, Ireland and Greece in Hallerberg et al. (2009) and Slovenia in Hallerberg and Yläoutinen (2010). However, overall, the country rankings in the two indices differ from those presented in this Section, reflecting not only differences in the institutional characteristics included in the indices but also the different timeframes.

difference in ranking in the two indices is used to establish more clearly the predominant form of fiscal governance:

$Rank_{difference} = Rank_{delegation} – Rank_{contracts}$

where

$Rank_{delegation}$ is the country ranking in the delegation approach index

$Rank_{contracts}$ is the country ranking in the contracts approach index

$Rank_{difference} > 0$ indicates a predominantly contracts approach

$Rank_{difference} < 0$ indicates a predominantly delegation approach

$Rank_{difference} = 0$ indicates a 'hybrid' approach (similar ranking in the delegation and contracts indices)

On the basis of these criteria, the Netherlands and Latvia clearly have a contracts approach, whereas Cyprus, Greece and Slovenia evidently adopt a delegation approach. Other EA member states have forms of fiscal governance which are closer to either of these two approaches, as shown in Figure 4.13. However, Portugal, Italy, Slovakia, Spain and Belgium rank similarly in the two indices, suggesting a 'hybrid' form of fiscal governance. In particular, Spain has top scores in both the delegation and contracts indices. Thus, whilst the SGP and the common EA requirements reflect a rules-based approach, on the assumption that:

> "the Scandinavian and Dutch frameworks should be an example for all countries" (Hallerberg 2011: 136),

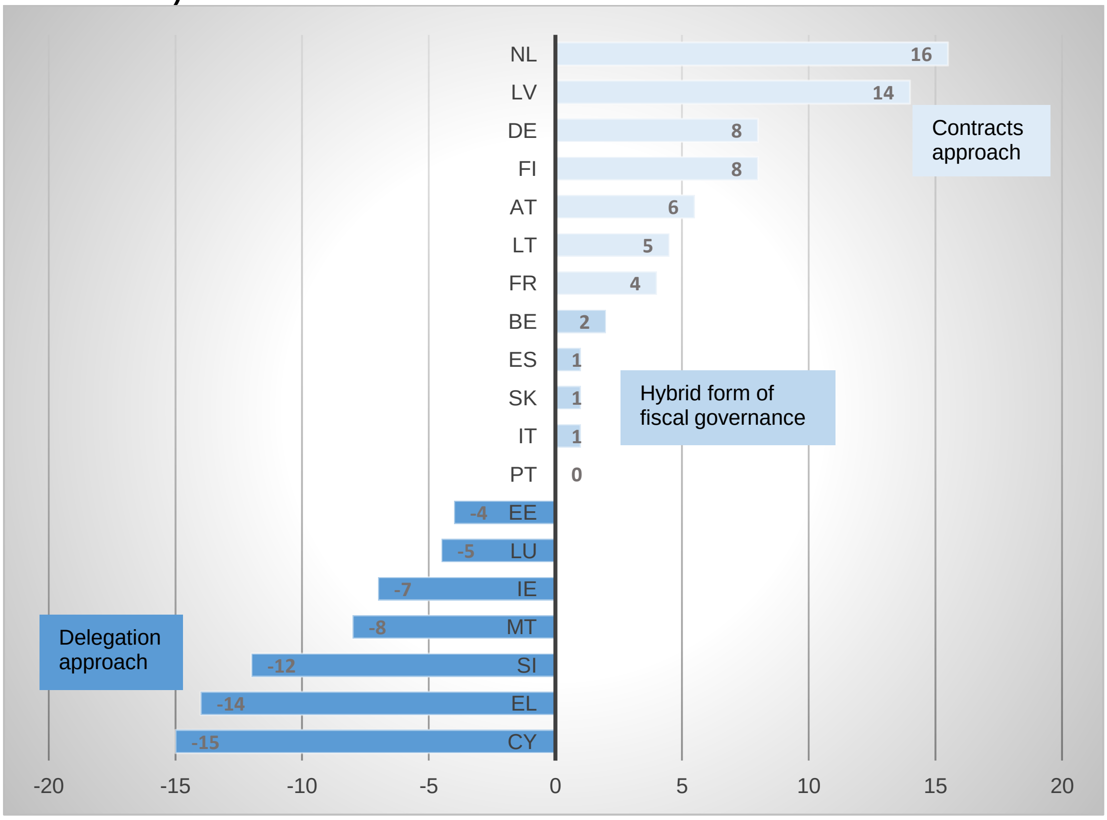
in several EA countries, the role of the finance minister remains crucial to attain fiscal discipline.

It is also pertinent to note that within the group of bailed-out countries, only Latvia has a contracts approach, whilst the others have a delegation or hybrid form of fiscal governance. There is more diversity among the other group of countries. Similarly, countries with the top scores in the quality of budget institutions index adopt different approaches to their budget institutions and this applies also to the medium and low score categories.

The resulting form of fiscal governance in each EA country has then been compared to the expected approach based on their type of government, as hypothesised by Hallerberg and von Hagen (1999) and discussed in Section

4.2.1. Following the approach adopted by Hallerberg and Yläoutinen (2010), a simple distinction is made between single-party majority governments and coalition or single-party minority governments[119]. The results are shown in Table 4.10.

Figure 4.13: Delegation and contracts indices – difference in country ranking (post-crisis data)



Source: Results are produced by author

However, in contrast to previous findings for the EU15 (Halleberg et al. 2007, 2009) and for the CEECs (Yläoutinen 2004; Hallerberg and Yläoutinen 2010), the findings show a discrepancy between the actual and the expected form of fiscal governance in various EA countries. Out of the 16 EA countries which had mostly a coalition type of government during 2012-15, only seven have a predominantly contracts approach[120] and similarly, among the three countries which mostly had a single-party majority government during the period under review, only one had a predominantly delegation form of fiscal governance.

[119] Yläoutinen (2004) and Hallerberg et al. (2009) use a more sophisticated approach, based on various indicators of the political and electoral system

[120] Greece and Portugal shifted from a single-party majority government in previous years to a coalition or single-party minority government during period under review. Excluding them from this category would not impact substantially on the results.

Table 4.10: Factors influencing the form of fiscal governance in the EA

EA country	Type of government during 2012-2015[1,2,3]	Expected form of fiscal governance based on type of government	Size of country – based on population size[4]	Actual form of fiscal governance
Austria	Coalition	Contracts	Large	Contracts
Belgium	Coalition	Contracts	Large	Hybrid
Cyprus	Mostly coalition (single-party minority in 2012 and first part of 2013)	Contracts	Small	Delegation
Estonia	Coalition	Contracts	Small	Delegation
Finland	Coalition	Contracts	Small	Contracts
France	Coalition	Contracts	Large	Contracts
Germany	Coalition	Contracts	Large	Contracts
Greece	Coalition (technocrat government in 2011-12)	Contracts	Large	Delegation
Ireland	Coalition	Contracts	Small	Delegation
Italy	Coalition (technocrat government in 2011-12)	Contracts	Large	Hybrid
Latvia	Coalition	Contracts	Small	Contracts
Lithuania	Coalition	Contracts	Small	Contracts
Luxembourg	Coalition	Contracts	Small	Delegation
Malta	Single-party majority	Delegation	Small	Delegation
Netherlands	Coalition	Contracts	Large	Contracts
Portugal	Mostly coalition (single-party minority in last part of 2015)	Contracts	Large	Hybrid
Slovakia	Single-party majority	Delegation	Small	Hybrid
Slovenia	Coalition	Contracts	Small	Delegation
Spain	Mostly single-party majority (single-party minority in 2015)	Delegation	Large	Hybrid

Notes:
[1] Data on cabinets in EA countries is from Parliaments and governments database (Döring and Manow 2016).
[2] The post-crisis data for budget institutions refers to 2012-16.
[3] All EA member states are parliamentary systems, except CY and LT which have presidential systems.
[4] Countries with a population of 5.5 million (which corresponds to the 50% percentile for the EA countries) or less are considered as small countries. Data is from Eurostat (2018a).

Source: Döring and Manow (2016); Eurostat (2018a); other results are produced by author

On the other hand, the results suggest that the form of fiscal governance adopted by a country may be influenced by its size. Distinguishing between small and large countries on the basis of the population size (as described in Table 4.10)[121], out of the 10 small EA countries, six adopt a delegation approach, whilst only three adopt a contracts approach and one adopts a hybrid approach. This prevalence of the delegation approach among small EA countries is notable given the increased influence of the rules-based approach

[121] There is no consensus on the definition of a small state and other criteria that are used include territory size and the size of the economy. Any benchmark applied is arbitrary – for further discussion, see, for example, Thorhallson and Wivel (2006) and Randma-Liiv (2002).

on budget institutions following the reforms implemented since the Great Crisis and also since it contrasts with the expected form of fiscal governance based on the type of government in most of these countries. Certain characteristics of small states' public administration, for instance, the limited availability of human resources, the importance of personal contacts and the greater influence of politicians (Randma-Liiv 2002; Sarapu 2010) facilitate the centralisation of the budgetary process through a powerful finance minister, which is typical of the delegation form of fiscal governance. However, there is scope to analyse further this relationship in future research work.

4.5 Summary of results and conclusions

This Chapter presents a broad and comparable composite index for the quality of budget institutions in the 19 EA countries, which captures institutional reforms implemented after the Great Crisis. The results show that overall EA countries have medium quality of budget institutions. The findings do not show a clear distinction in the overall quality of budget institutions between the bailed-out countries and the other EA member states. Indeed, all the bailed-out countries, except Portugal, have top or medium scores in the composite index; whilst the other member states feature in all three score categories. Similarly, at a sub-index level, the average scores are quite similar for the two groups of countries.

In general, EA countries fare more strongly in terms of MTBFs and the structure of budget negotiations. The quality of fiscal rules, procedures during budget implementation and budget transparency are also quite good. On the other hand, the structure of the parliamentary process to approve the budget constitutes the poorest dimension of budget institutions and overall, fiscal councils are also quite weak. The analysis of the findings at a sub-index level has identified main elements of strengths as well as weaknesses in budget institutions for the EA. For instance, there is scope for stronger enforcement of national MTBFs and fiscal rules; more connectedness between the SP and the national budgetary process; a top-down approach for parliamentary voting in the budget approval stage; less executive flexibility to increase spending during budget implementation and increased independence and a strengthening of the organisational capacity of fiscal councils.

Whilst data constraints limit the comparability of the pre- and post-crisis indices, there are indications of an overall improvement in the quality of budget institutions during the period under review. This is reflected in the performance of almost all EA countries, with the most marked improvements being registered by bailed-out countries (Greece, Ireland and Spain), reflecting conditions imposed as part of their financial assistance programmes. Furthermore, the major changes to budget institutions during the period under review involved a notable strengthening of fiscal rules and fiscal councils. Thus, they were largely triggered by the common EA requirements introduced after the Great Crisis, rather than more broad-based reforms driven by a national policy agenda.

Whilst the degree of variation in the scores for the quality of budget institutions index among EA countries is quite limited (both for the pre- and post-crisis periods), there is more variation at a sub-index level. There is also considerable variation among the member states in the specific characteristics of each institutional dimension. These findings indicate that there can be different models for achieving good quality budget institutions, rather than a 'one-size-fits-all' form of fiscal governance. It is noteworthy that there is considerable variation across EA countries also in the strength of their MTBFs, fiscal rules and fiscal councils, despite the thrust for more homogenous budget institutions through common requirements for all EA countries. This supra-nationally imposed apporach to reform budget institutions ignores the diversity in the political system and institutional set-up of the different countries. Furthermore, being imposed supra-nationally, these common institutional requirements are less likely to be effective due to a lack of national ownership, as argued by Kopits (2012).

Finally, as regards different forms of fiscal governance, despite the rules-based nature of the SGP and of the common EA requirements introduced since the Great Crisis, a notable number of countries have a predominantly delegation form of fiscal governance, whilst some other member states have a hybrid system, comprising elements of the two approaches. This further shows the limits of centrally-mandated reforms to national budget institutions. Moreover, in contrast to previous studies, evidence of a strong relationship between the type of government in a country and its form of fiscal governance is not found. Rather, the results suggest that the size of the country may be a more important determinant of the form of fiscal governance adopted, with the delegation approach being more prevalent among the small EA countries.

Chapter 5:

Legislative Budgetary Power in the Euro Area

5.1 Introduction

This Chapter focuses on a specific aspect of budget institutions, namely the budgetary power of national legislatures in the EA. As discussed in the previous Chapter, the literature on budget institutions has generally considered strong legislative budgetary powers, especially amendment powers, as conflicting with fiscal discipline. However, as highlighted in Chapter 1, the legislature, as the representative body of the people, has a key role to ensure that budgetary decisions are democratically legitimate. Furthermore, other aspects of legislative budgeting may actually contribute to more fiscal discipline, as discussed in Chapter 3.

In the EA, achieving democratic legitimacy to budgetary decisions is more challenging and complex, because whilst budgetary decisions are taken at a national level, these are subject to the SGP's supra-national constraints. The latter are beyond the national parliaments' span of control, thus limiting their powers to scrutinise and control budgetary policy (Crum 2018). At the same time, the CION, despite its key role in the implementation of the SGP, lacks the democratic mandate to pass judgement on national budgetary policy, whilst measures or sanctions imposed on a country by a majority decision of finance ministers in Council also lack democratic legitimacy since ministers are only accountable to the electorate in their home country (Beukers 2013). Indeed, voters can only sanction their national governments, but not the EU institutions or governments of creditor countries that are prescribing their budgets (Crum 2013).

This fundamental conflict, in political terms, between the supra-national fiscal rules and the democratic principle for national parliaments' authority to approve the budget (Krogstrup and Wyplosz 2009), has been exacerbated with the tightening of the SGP following the Great Crisis and the increased surveillance of budgetary policies by EU institutions. At the same time there is no effective scrutiny at the European level. Whilst the European Parliament had an important role in the legislative process leading to the 'Six-Pack' and 'Two-Pack', its role in the implementation of the SGP has remained marginal (Crum 2018). The reforms to the EU economic governance framework since the Crisis have resulted in new provisions for economic dialogue between the European Parliament and other EU institutions as well as with national parliaments, but otherwise, the European Parliament's powers have not been strengthened (Dawson 2015). This dialogue process[122] is of an informative and consultative nature and the European Parliament does not have any power to intervene in the implementation of the SGP, leaving it in a "rather passive, receptive position" (Crum 2018: 276).

In this context, both the European Commission's (2014a) review of the implementation of the 'Six-Pack' and the 'Two-Pack' as well as its communication on completing EMU (European Commission 2017a) call for more involvement of national parliaments to ensure the democratic accountability and legitimacy of the EU's economic governance. This reflects the principle that democratic control and accountability should take place at the level at which decisions are taken (Crum 2018) – i.e. at the national level for budgetary decisions.

However, to date, attempts to involve national parliaments in the SGP procedures have been very modest. Whilst governments are encouraged to do so, this is not mandatory and the only specific requirements are that the SP must indicate whether it has been presented to and approved by parliament, and whether the Council Opinion on the previous Programme and any relevant warnings, recommendations or decisions by EU institutions have been discussed in parliament (Council of the European Union 2017: 3, 19). Furthermore, the reforms to the EA fiscal governance framework have not provided for increased involvement of national parliaments in the SGP, except for the provisions relating to economic dialogue, referred to above. Rather, they entail stricter rules and stronger central monitoring and enforcement by EU institutions, which have further constrained the role and relevance of national parliaments in the budgetary process. In particular, the 'Two-Pack'

[122] Article 3, Regulation (EU) No 1173/2011 and Article 15, Regulation (EU) No 473/2013 provide for more economic dialogue between national parliaments and the European Parliament, whilst Article 13 of the TSCG also provides for inter-parliamentary co-operation between the European Parliament and national parliaments. However, these processes are outside the scope of this thesis: as highlighted in Chapter 1, the European Parliament does not have an effective influence in the implementation of the SGP and thus its role is not considered in this study.

requires that the executive's draft budgets are vetted by the CION[123], which limits the relevance of the legislature's role to discuss, amend and approve the budget[124]. Furthermore, the SGP reforms also require that the national budgetary cycle follows a common timeline[125], which may also constrain the possibility for legislative involvement in the respective procedures. For example, in a study on the European Semester, Hallerberg et al. (2011) found that the tight timeframe available as regards the SP constrained the ability of the six countries in their sample to involve their national parliaments. Similarly, Dawson (2015) notes how the possibility for national parliaments to react to the CION's opinion on the Draft Budgetary Plan is constrained by the tight timeframes involved[126].

In view of these challenges, this Chapter aims to gain an understanding of the budgetary role of national legislatures in EA countries. In particular, this Chapter aims to address the following research questions:

- What is the budgetary power of national legislatures in the EA and what are the main differences across the member states?
- How has legislative budgetary power changed in the EA following the Great Crisis?

Legislative budgetary power is measured through a composite numerical index, which provides a recent and comprehensive measure of legislative budgetary power for all the 19 EA member states. The index captures effects of the reforms to the EA's fiscal governance framework on legislative budgetary power. Furthermore, the index has a broad scope and captures the role of the legislature throughout the budgetary process, including the

[123] Articles 6 and 7, Regulation (EU) No 473/2013.
[124] The possibility that the CION presents its opinion on the draft budget to the national parliament (and similarly for its recommendations under the EDP, (Article 11, Regulation (EU) No 473/2013)) is not being implemented. In fact, in its Communication on steps towards completing EMU, the European Commission (2015b: 15) proposes to "give more life to the right recognised in the 'Two-Pack' to convene a Commissioner".
[125] The national medium-term fiscal plans and the SPs must be made public by 30 April, whilst the draft budget should be public by 15 October and the budget for the forthcoming year should be approved and adopted by 31 December (Article 4, Regulation (EU) No 473/2013).
[126] The CION is required to publish its opinion on the Draft Budgetary Plans by 30 November (Article 7, Regulation (EU) No 473/2013), whilst the budget must be approved by parliament by the end of the year.

formulation, approval and implementation stages, as well as its involvement in the implementation of the SGP. Other novel features of the index concern the legislature's involvement in fiscal rules and its relationship with the fiscal council. Moreover, the different institutional characteristics are measured in considerable detail, thus providing a comprehensive estimate of legislative budgetary power and the index also uses unique data on certain aspects of legislative budgeting, generated through questionnaires to national authorities. Finally, an index for the pre-crisis period is also constructed in order to address the second research question.

The rest of this Chapter is structured as follows: the next Section presents a review of the literature which measures legislative budgetary power; this is followed by a discussion on the methodology applied, including the selected variables, the data sources and the approaches applied to construct the index and carry out the comparative analysis; finally, the results are presented and discussed and the Chapter ends with a summary of the results and conclusions.

5.2 Literature review: measuring legislative budgetary power

In their literature review on the fiscal scrutiny function of parliaments worldwide, Gaspard et al. (2016) note that the role of legislatures to scrutinise public finances has not been sufficiently researched in neither the literature on parliament nor on public finances. The role of the legislature in the budgetary process is captured, to some extent, in the literature on budget institutions, reviewed in the previous Chapter. But these studies have a broader scope and capture only particular aspects of legislative budgeting. On the other hand, studies which focus on legislative budgeting and analyse it in a more comprehensive manner are scarce.

5.2.1 Legislative budgeting in the literature on budget institutions

The quality of budget institutions indices, reviewed in the previous Chapter, capture legislative budgeting mainly through its role in the budget approval stage. As shown in Table 5.1, these indices thus consider characteristics such as whether any restrictions apply to legislative amendments to the executive's draft budget; whether an amendment can cause the fall of the government; reversionary budgets and whether government can call a vote of confidence when the vote of the budget takes place[127].

Table 5.1: Legislative budgeting in the quality of budget institutions indices for European countries

Author	Date	Sample		Characteristics of legislative budgetary power included in the index
von Hagen	1992	12 EEC countries	1991	- legislative power to amend the executive's draft budget - whether legislative amendments to the budget can cause the fall of the government - reversionary budget - time available for budget scrutiny - whether and how legislature is informed on budget implementation - authorisation function of the legislature for changes to the budget during implementation
Gleich	2003	10 CEECs	1998-2000	- relative budgetary power of the upper house vis-à-vis the lower house in the legislature - legislative power to amend the executive's draft budget - whether legislative amendments to the budget can cause the fall of the government - reversionary budget - veto right of the president in the budgetary procedure - authorisation function of the legislature for changes to the budget during implementation
Yläoutinen	2004	10 CEECs	2003	Index capturing the parliamentary process to approve the budget: - whether the legislature can propose the annual budget independently from the government - legislative power to amend the executive's draft budget - whether legislative amendments to the budget can cause the fall of the government - whether government can call a vote of confidence when the budget vote takes place - the degree of party discipline in budget votes - estimation of the total size of legislative budgetary amendments - time available for budget scrutiny - reversionary budget Qualitative information on: - veto right of the president in the budgetary procedure - parliament's role in monitoring budget implementation

[127] Several of these indices also include whether parliament first votes on the budget size and then on its composition. However, this characteristic is more relevant for its contribution to fiscal discipline, rather than for legislative budgetary power.

Table 5.1: Legislative budgeting in the quality of budget institutions indices for European countries (cont.)

Author	Date	Sample		Characteristics of legislative budgeting included in the index
Fabrizio and Mody	2006	10 CEECs	1997, 2003	- legislative power to amend the executive's draft budget - whether legislative amendments to the budget can cause the fall of the government - whether government can call a vote of confidence when the budget vote takes place - reversionary budget - veto right of the president in the budgetary procedure - authorisation function of the legislature for changes to the budget during implementation
Hallerberg et al.	2007	EU15	1990-91, 2000-1, 2004	- legislative power to amend the executive's draft budget - whether legislative amendments to the budget can cause the fall of the government - authorisation function of the legislature for changes to the budget during implementation
Hallerberg et al.	2009	EU15	1990-91, 2000-1, 2004	- legislative power to amend the executive's draft budget - whether legislative amendments to the budget can cause the fall of the government - authorisation function of the legislature for changes to the budget during implementation - comprehensiveness of budget document presented to the legislature - whether the budget is included in one document
Hallerberg et al.	2009	10 CEECs	1998-2000, 2003	As in Gleich (2003)
Darvas and Kostyleva	2011	20 central, eastern and south eastern European countries; 25 OECD countries	2007-2008	- legislative power to amend the executive's draft budget
Olden et al.	2012	10 south eastern European countries	2009-2011	- legislative power to amend the executive's draft budget - whether parliament approves all new contingent liabilities - whether a budget orientation debate and vote takes place - authorisation function of the legislature for changes to the budget during implementation
European Commission	2017	EU28	1990-2016[1]	Fiscal rules index: - whether monitoring and enforcement of the fiscal rule is carried out by an independent body (including parliament) - legislative authorisation for government to change the target of the fiscal rule[2] MTBF index: - involvement of the legislature in the preparation of the medium-term budgetary plans (presentation or vote)

Notes:
[1] fiscal rules index 1990-2016; MTBF index 2006, 2008-2016 (all indices are updated annually)
[2] This characteristic was introduced in the fiscal rules index based on 'new' methodology published in 2017.

Moreover, presidential veto rights in the budget approval stage are also considered by Gleich (2003), Yläoutinen (2004) and Fabrizio and Mody (2006). Most of the indices also include the authorisation function of parliament for budget changes during the implementation stage, whilst other aspects of the legislature's role in monitoring budget performance are taken into account by von Hagen (1992) and Yläoutinen (2004). In contrast, few indices consider the role of the legislature during the budget formulation stage: Olden et al.'s index (2012) captures whether a budget orientation debate and vote takes place in the legislature; the European Commission's (2017e) indices measure parliament's role vis-à-vis the medium term fiscal strategy and fiscal rules, whilst Yläoutinen (2004) also considers whether parliament can propose the annual budget independently from the executive. Legislative budgetary organisational capacity is included in only some of the indices and only in a limited manner: von Hagen (1992) and Yläoutinen (2004) include the time available for budget scrutiny whilst Hallerberg et al. (2009) capture the comprehensiveness of the budget document presented to the legislature.

5.2.2 The literature on legislative budgeting

The literature on legislative budgeting is scarcer and less established than that on the quality of budget institutions. Moreover, most of the available research on legislative budgeting is descriptive and comprises a number of single-country studies[128]. Coombes (1976) provides one of the first comparative studies on six European countries. More recently, Krafchik and Wehner (1998) carry out a structured comparison of legislative budgeting in Australia, Germany, India and the United Kingdom, whilst LeLoup and Ferfila (2003) compare legislative budgeting in Hungary and Slovenia and Stapenhurst and Imbeau (2017) present a survey of legislative finance committees in Francophone countries. Larger comparative studies, covering around 30 countries, are found in Schick (2002) and Wehner (2004), with the former focusing on legislative budget amendment powers, whereas the latter developed broader typologies of legislative budgeting. Santiso (2005)

[128] Recent examples of country studies on legislative budgeting for EA countries include Leston-Bandeira (1999) on Portugal; Wehner (2001) on Germany; Forestiere and Pelizzo (2004, 2008) on Italy; and Djouldem (2017) on France.

developed similar categories for legislative budgeting for around 20 Latin American countries.

Few studies have developed quantitative measures of legislative budgetary power, namely Lienert (2005), Wehner (2006, 2010b) and Ríos et al. (2018)[129]. As shown in Table 5.2, the legislative budgetary indices by the former two authors are both based on survey-based data from the OECD/World Bank and cover around 30 countries. Whilst Lienert's (2005) index includes the legislature's involvement in the medium-term budget strategy, Wehner's (2006, 2010b) index is broader in scope and also distinguishes between formal legislative budgetary powers and its organisational capacity. Furthermore, Wehner (2006, 2010b) assumes that a certain degree of both formal powers and organisational capacity is required for the legislature to influence the budget process, but Lienert (2005) assumes substitutability between all the institutional characteristics. Recently, Kim (2015) has developed further Wehner's (2006, 2010b) index by using an alternative weighting structure, based on the analytic hierarchy process[130] and applying it to a broader and more diverse sample of 60 countries.

Finally, Ríos et al.'s (2018) legislative budgetary oversight index covers 75 countries and uses data from the Open Budget Survey by the International Budget Partnership. Like in Lienert (2005), this index also captures the role of the legislature during budget preparation and it includes some institutional characteristics which are similar to the other indices, but it focuses more on aspects concerning budget transparency and its measure of the legislature's role during budget implementation is quite narrow.

[129] A few indices with a broader scope also capture some aspects of legislative budgeting: for example, Fish (2006) in a parliamentary power index for 25 post-communist countries; and Lavielle et al. (2003) in a budget transparency index for ten Latin American countries.
[130] This technique extracts expert opinion on different attributes by means of systematic pairwise comparisons (OECD and Joint Research Centre - European Commission 2008).

Table 5.2: Legislative budgetary power indices

Author	Date	Sample		Scope of index	Data Sources
Lienert	2005	2003	28 countries	- whether legislature approves the medium-term budget strategy - legislative power to amend the executive's draft budget - time available for budget scrutiny - technical support to the legislature through a specialized budget advisory/research organization - authorisation function of the legislature for changes to the budget during implementation	OECD/World Bank (2003) survey on budget practices and procedures
Wehner	2006, 2010	2007	36 countries (2006) 30 OECD countries (2010)	Formal powers: - legislative power to amend the executive's draft budget - reversionary budget - authorisation function of the legislature for changes to the budget during implementation Organisational capacity: - time available for budget scrutiny - committee capacity - access to budgetary information (proxied by existence and size of specialised budget research units within the legislature)	OECD/World Bank (2003) and OECD (2007) surveys on budget practices and procedures
Kim	2015	2007, 2008	60 countries	Same dimensions as in Wehner (2010b)	OECD/World Bank (2007, 2008) survey on budget practices and procedures, supplemented with questionnaires and interviews with public officials in charge of finance and expert opinions conducted by embassies in the countries concerned
Ríos et al	2018	2009	75 countries	- involvement of the legislature during the budget preparation phase (whether executive holds consultations on budget priorities) - time available for budget scrutiny - legislative committee scrutiny of macroeconomic and fiscal framework presented in the budget - public hearings by legislative committees on individual budgets of central government administrative units - comprehensiveness of budgetary information - legislative power to amend the executive's draft budget - authorisation function of the legislature for shifts of funds between administrative unit - timing of legislative approval of supplemental budgets and of expenditure of contingency funds or similar funds - legislative scrutiny of audit reports	Open Budget Survey, International Budget Partnership (2010)

All these indices show considerable variation in the degree of legislative budgetary power among the countries included in their respective samples, with a broad range in the country scores, also among the EA member states included in these studies[131]. Such diversity has been largely attributed to whether a country has a presidential or parliamentary system, and to other political factors, namely minority governments and party discipline.[132]

Finally, it is relevant to point out that these indices of legislative budgetary power all measure legislative influence over the budget through its institutional characteristics, rather than through direct measures of its policy influence. However, strong legislative budgetary power does not necessarily result in a strong influence over the budget. For instance, using OECD survey data, Schick (2002) and Wehner (2004) find that although some OECD countries had considerable formal amendment powers, most countries typically made either no changes or only minor adjustments to the executive's draft budget. However, data limitations can constrain the possibility of measuring this direct legislative policy influence. Furthermore, besides amendments to the draft budget, legislative policy influence can involve informal contacts between legislators and the executive and anticipatory behaviour by the executive during budget formulation, as discussed in Chapter 3, which is even more difficult to quantify.

5.2.3 Contribution to the literature

This Chapter contributes to the scant literature on legislative budgeting by providing a recent, comprehensive and comparable measure of legislative budgetary power for all the 19 current members of the EA. The few available legislative budgetary power indices do not include all the EA countries, whilst at the same time they include also other countries which are more diverse. There is more analytical relevance in analysing differences in legislative budgetary power among the EA member states, since they are subject to a common supra-national fiscal governance framework.

[131] Results by country for Ríos et al. (2018) are not publicly available.
[132] For further discussion on these issues, see Lienert (2005), Wehner (2010b) and Ríos et al. (2018)

The constructed index provides a more comprehensive measure of legislative budgeting, including in the implementation of the SGP. In this manner, this Chapter extends the literature on legislative budgeting to the supra-national level and provides a link between the literature on legislative budgeting and the literature on the SGP. The constructed index also has a broader scope as regards the legislature's role in the formulation, approval and implementation stages of the national budget. In particular, it captures the involvement of the legislature in fiscal rules as well as the relationship of the legislature with IFIs, which are now prominent features in budget institutions in EA countries, but are not included in any of the existing indices. Other novel features of the index include the institutional strength of parliamentary budget committees, legislative authority regarding off-budget expenditures and contingent liabilities as well as a wider measure of access to budgetary information. Moreover, different components of legislative budgeting are measured in a detailed manner, thus providing a more complete measure of legislative budgetary power than existing indices. In addition, the index involves unique data on certain aspects of legislative budgeting, generated from questionnaires to national authorities.

Finally, the data used to compile the index pertains to 2012 or later and thus, it provides a more recent measure of legislative budgetary power in EA countries, which also captures repercussion of the reforms to the EA's fiscal governance framework implemented since the Great Crisis.

5.3 Methodology: constructing a composite index to measure legislative budgetary power in the EA

As in the previous Chapter, the research design adopted to measure legislative budgetary power involves the construction of a composite index. The research is descriptive and provides an assessment of legislative budgetary power in the EA, together with a comparative analysis of the member states and of developments since the Great Crisis.

The implications of using composite indices to measure budget institutions, as well as the philosophy underpinning this research design have been discussed in Section 4.3.1 of the previous Chapter. Thus, this Section focuses on differing aspects concerning the specific methods applied to construct the legislative budgetary power index and concludes by discussing the relevant ethical issues.

5.3.1 Research methods: constructing the composite index

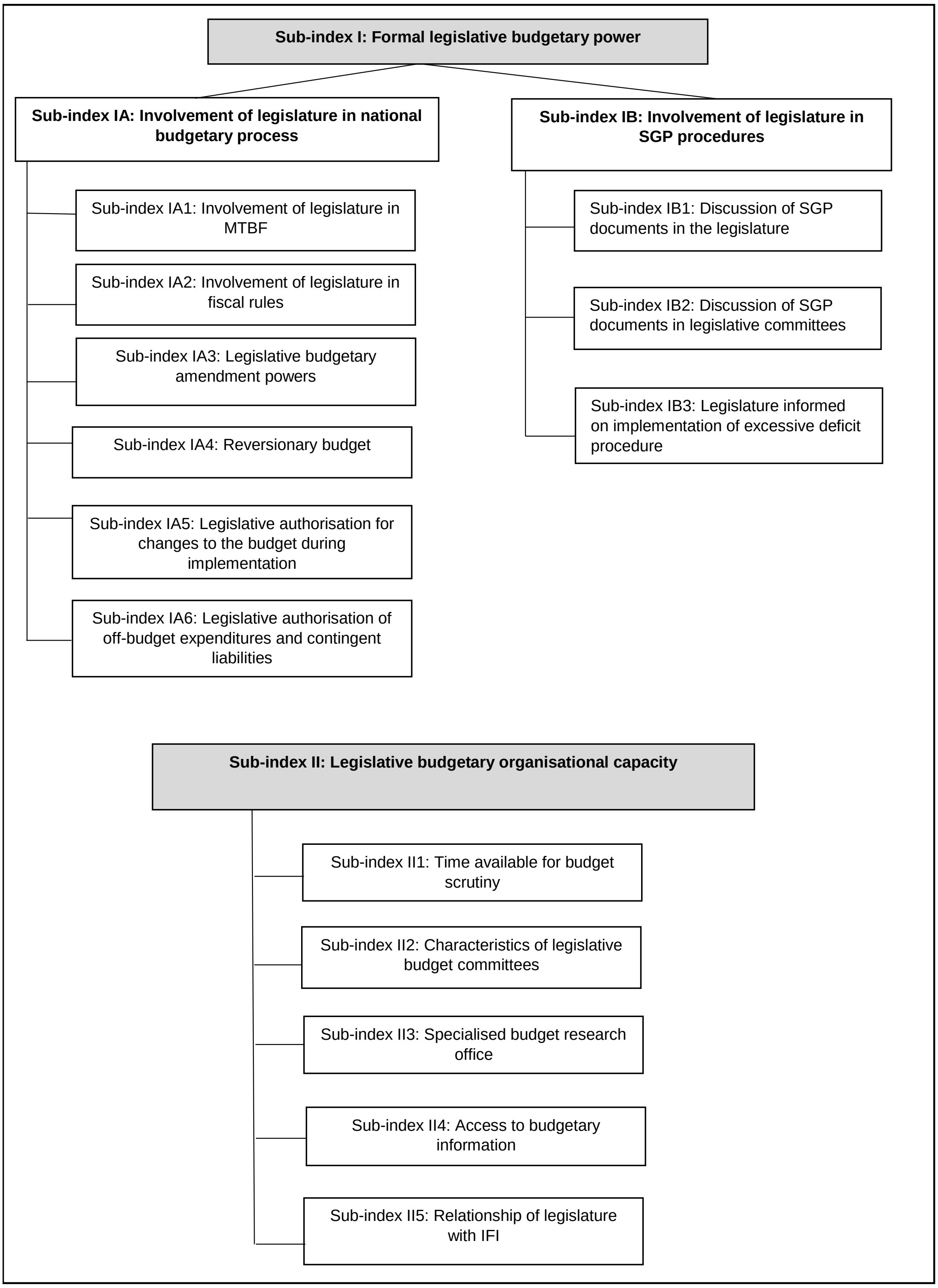
The following discussion starts with a description of the variables chosen to capture the main characteristics of legislative budgetary power. Subsequently, the data sources used are identified and the aggregation method used to construct the index is discussed. This is followed by a discussion on the approaches used to check the robustness of the index and to carry out the comparative analysis.

5.3.1.1 The selected variables

It would not have been feasible to include every potentially relevant characteristic in the legislative budgetary power index. Rather, variables were selected, drawing on and further developing the existing indices by Lienert (2005), Wehner (2006, 2010b) and Ríos et al. (2018). In particular, the constructed index draws heavily on the index developed by (Wehner 2006, 2010b), being the most comprehensive measure of legislative budgetary power available, and similarly distinguishes between formal powers and organisational capacity. However, as highlighted earlier (Section 5.2.3), the index provides a more comprehensive measure of legislative budgetary power throughout the budgetary process and also captures the legislature's involvement in the implementation of the SGP procedures.

Figure 5.1 presents the structure of the legislative budgetary power index. The first main component relates to formal power, which in turn comprises the involvement of the legislature in the national budgetary process and in SGP procedures. These two components are measured through six and three sub-indices, respectively. The second component concerns organisational capacity and includes five sub-indices. The specific indicators used to capture these different characteristics of legislative budgetary power index are described below and are presented in detail in Table AXII in Appendix II.

Figure 5.1: Legislative budgetary power index - composition



Source: Figure drawn by author

The first two sub-indices relating to the legislature's formal powers in the national budgetary process relate to its involvement in numerical budgetary constraints. As discussed in Section 3.3.1 of Chapter 3, this can contribute to wider ownership and improved credibility and effectiveness to instil fiscal discipline. The first sub-index captures the legislature's role vis-à-vis the national MTBF, specifically to establish its objectives or targets, to monitor respect of the targets in the annual draft budget and whether the MTBF is presented to the legislature and whether there is a vote. The second sub-index measures the legislature's involvement in fiscal rules[133], namely whether it is in charge of monitoring and enforcing compliance to the fiscal rule and whether a corrective plan is presented to the legislature in case of non-compliance.

The third sub-index includes the most prominent aspect of legislative budgetary power, namely its formal amendment powers. As discussed in Section 3.2.3 of Chapter 3, the influence of the legislature over the budget is obviously greater with unfettered powers than with restricted powers[134], whilst a spending constraint is more restrictive than a budget deficit constraint, since with the former the legislature can only reallocate spending across different line items. However, such amendment powers may not be availed of if rejecting the draft budget is considered as a vote of no confidence in the government[135]. Furthermore, the sub-index also includes whether parliament can propose the annual budget independent from the government as well as executive veto powers. The fourth sub-index also concerns the budget approval stage and involves the reversionary budget, with legislative budgetary power being strongest when no spending can be carried out if the budget is not approved and weakest when there is reversion to the executive's draft budget[136].

The fifth sub-index captures executive flexibility during budget implementation. Such authority undermines legislative amendment power during budget approval. Thus, the application of restrictions on such power, through

[133] This is measured only vis-à-vis the fiscal rule with the largest coverage of general government finances.
[134] However, stronger amendment powers conflict with fiscal discipline. Thus, the scoring scheme applied to legislative amendment powers is different than that used in the quality of budget institutions index (see Section 4.3.2 of the previous Chapter).
[135] As discussed in Section 3.2.3 of Chapter 3, the effect on legislative budgetary power depends on the type of government. The scoring scheme applied reflects the case of single-party majority government, since the effect with coalition governments is uncertain, whilst minority governments tend to be rather short-lived.
[136] Other reversionary budgets between these two extreme positions are considered as intermediate scenarios and assigned a score accordingly, since, as explained in Section 3.2.3, the implications for legislative budgetary power depend on the relative budgetary preferences of the legislature and the executive.

thresholds and required approval by the legislature are considered as improving legislative budgetary power during the implementation stage[137], with the requirement of ex-ante approval contributing more strongly than when only ex-post approval is required.

The last sub-index relating to the legislature's formal powers in the national budgetary process concerns legislative authorisation for off-budget expenditures and contingent liabilities, which implies more comprehensive legislative control over the budget. It also contributes towards more budget transparency and provides another example of how legislative budgetary power can contribute towards fiscal discipline.

As regards the legislature's role in the implementation of the SGP, the following procedures are considered: the SP, which comprises medium-term budgetary targets and constitutes a core element in the SGP's preventive arm; the EDP, which sets ceilings on the budget balance and government debt; and the Draft Budgetary Plan (DBP), which, as discussed in Section 5.1, constitutes a more recent addition to the SGP and involves direct scrutiny by the CION before the budget is approved by the national parliament[138]. Drawing on Hallerberg et al. (2011), the involvement of the legislature in the different aspects of the SGP is measured by whether the relevant national and EU documents are presented to and/or discussed in the legislature. In the case of the SP, account is also taken of whether a vote is taken, whilst for the EDP, the sub-index also captures whether the legislature is kept informed on the implementation of the relevant Council's recommendations. The legislature is expected to have more influence if it is involved before a document is sent to the EU institutions and before a relevant Council meeting. Similarly, due to its

[137] In contrast, executive authority to cut, cancel or re-allocate spending is considered to improve the quality of budget institutions, whilst power to increase spending weakens it (see Section 4.3.2 of the previous Chapter). Hence, the scoring schemes applied in the two indices are different. Furthermore, in the legislative budgetary power sub-index, higher scores are assigned only if legislative authorisation is required, whereas the scoring scheme used in the quality of budget institutions index considered all types of authorisation (including from the finance ministry or government). Finally, the data available on supplementary budgets only concerns the top reason for their use, which is considered as relevant for the quality of budget institutions index but not to measure legislative budgetary power, and thus this variable is not included in the index measuring the latter.
[138] For Estonia and Luxembourg, only the SP and the DBP are considered in this sub-index, since both countries have never been subject to an EDP.

specialised expertise, involvement at a budget committee level is expected to result in more effective engagement of the legislature in the implementation of the SGP.

Despite extensive formal powers, a legislature may still not be able to influence the budget, due to transaction costs in legislative decision making (Wehner 2010b). Thus, the last five sub-indices measure the legislature's budgetary organisational capacity[139]. This includes whether the legislature has sufficient time to scrutinise the budget and the characteristics of a specialised budget committee. Adequate access to good quality budgetary information is also important, as otherwise it is difficult for the legislature to analyse and monitor the budget (von Hagen 1992; Krafchik and Wehner 1998). The asymmetry of budgetary information between the executive and the legislature can also be addressed through the establishment of an independent and non-partisan fiscal analysis capacity within the legislature (Lienert 2010), which is captured by the third organisational sub-index. Furthermore, in line with Lienert's (2010) suggestions for good practice, the fourth organisational capacity sub-index captures the comprehensiveness of budget documentation and the public availability of budgetary information. Additionally, this sub-index also includes whether the legislature is informed on implementation of the budget, the timely availability of an audited year-end fiscal report and whether this is discussed in the legislature. The last organisational capacity sub-index measures the relationship of the legislature with IFIs. Using case studies involving five EU countries, Fasone and Griglio's (2013) have shown that fiscal councils can strengthen parliaments' ability to undertake scrutiny and oversight of the budget by providing it with another source of budgetary information, independent from the executive. This sub-index thus captures the interaction of the two institutions during the budget preparation stage and whether reports by the IFIs are submitted to the legislature. Additionally, characteristics relating to the accountability of fiscal councils are captured through the legislature's

[139] Some of these aspects, namely the structure of parliamentary budget committees and access to budgetary information are also included in the quality of budget institutions index, as explained in Section 4.3.2 of the previous Chapter.

power to summon the IFI's leadership and its involvement in their appointment and dismissal procedures[140].

5.3.1.2 Data sources

The secondary data sources used to compile the legislative budgetary power index are the same as those used for the quality of budget institutions index, namely the OECD budgeting practices and procedures database and the CION's fiscal governance databases, with a minor input from the IMF Fiscal Councils Dataset. On the other hand, primary data, generated from a questionnaire to national authorities, features more prominently in the legislative budgetary power index. Table AXII in Appendix II shows the main data sources used to compile the different sub-indices comprised in the legislative budgetary power index. Other secondary sources used in the compilation of the index are included in Table AII in Appendix I.

Like Lienert (2005) and Wehner (2006, 2010b), the OECD budgeting practices and procedures database constitutes an important source of data for the constructed index, but more recent data (2012) is used. This source has been primarily used to compile the sub-indices relating to budget approval and implementation as well as some aspects of organisational capacity. As for the quality of budget institutions index, matching data for the four non-OECD EA countries (Cyprus, Latvia, Lithuania and Malta) was obtained through a questionnaire directed to relevant national authorities[141]. On the other hand, the CION's databases (including some data which is not available online, as described in Section 4.3.2 of the previous Chapter) have been primarily used in the sub-indices relating to the legislature's involvement in MTBF and fiscal rules as well as some aspects relating to SGP procedures and organisational capacity, whilst the IMF's data was used in the sub-index relating to the relationship of the legislature with the IFI. Meanwhile, primary data has been used to compile various elements relating to the legislature's involvement in SGP procedures as well as some organisational capacity characteristics. This

[140] The latter is included as one of the OECD's (2014) principles for IFIs.
[141] The questionnaire also comprised questions on the structure of budget negotiations (see Section 4.3.2 of the previous Chapter) and on other aspects of legislative budgeting (as discussed further on), which were directed to all EA countries.

unique data was generated through a questionnaire to national authorities in all the 19 EA countries.

Another legislative budgetary power index, mostly referring to 2007, was compiled in order to assess developments since the Great Crisis. As for the pre-crisis quality of budget institutions index, this index is compiled using only secondary data and has more limited geographical coverage (it excludes Cyprus, Estonia, Latvia, Lithuania and Malta). Some differences in the pre- and post-crisis OECD and CION databases limit the comparability of the pre- and post-crisis indices. In particular, the pre-crisis index does not include neither the involvement of the legislature in the SGP[142] nor the relationship of the legislature with the IFI, whilst certain characteristics are also measured in less detail. Despite these differences, the comparison of the pre- and post-crisis indices permits the identification of key changes to legislative budgetary power during this period.

A discussion on the questionnaire used to generate data for the post-crisis legislative budgetary power index is presented below. A detailed discussion on the secondary data sources used has been provided in Section 4.3.2 of the previous Chapter.

5.3.1.3 Questionnaire

A single questionnaire was directed to the national authorities of each EA country, comprising questions relating to legislative budget budgetary power as well as the quality of budget institutions. The questionnaires to non-OECD EA countries also included the relevant questions from the OECD 2012 budget practices and procedures survey, to create matching data to that available for

[142] Thus, an analysis of developments regarding the involvement of national parliaments in the implementation of the SGP since the Great Crisis cannot be carried out. Nevertheless, it is relevant to note that the 21st bi-annual report by the Conference of Parliamentary Committees for Union Affairs of Parliaments of the EU (COSAC 2014) reports increasing scrutiny by national parliaments since 2011. Based on a review of procedures in France, Italy, Portugal, Spain and Germany, Fasone (2015) presents similar findings. However, Crum (2018) points out that the increased scrutiny generally involves low level of accountability through information, consultation and debate.

the OECD countries. A sample copy of the questionnaire for the two groups of countries is provided in Appendix II[143].

The first potential participants were contacted towards the end of June 2016, through an email, which informed them briefly on the aims of the research and to which a copy of the questionnaire (as a Microsoft Word document) and the participant information sheet (a copy of which is provided in Appendix II) were attached[144]. Initially, the budget directors (or equivalent designation) in each EA country were targeted, but in view of the very limited response, the questionnaire was subsequently sent simultaneously to two participants from a reserve list, comprising officers from national fiscal councils, parliamentary budget offices and parliamentary budget committees. Contact details were obtained mainly from the websites of the entities concerned. Reminders were sent as necessary and other potential participants were contacted if response was not forthcoming, including country representatives in the Economic Policy Committee[145] as well as the embassy in Malta for one country where response was still not forthcoming despite several potential participants being contacted.

Table 5.3: Responses to the questionnaire

Organisation	**Number of responses**
Budget Offices/Ministries of Finance	5
Fiscal Councils	7 (and 1 partial response)
Parliamentary Budget Offices	3
Parliamentary Budget/Finance Committees	7
Economic Policy Committee members	1
Country embassy in Malta	1
Total number of responses	**24 (and 1 partial response)**

Source: Produced by author

In total, 60 potential participants were contacted during the second half of 2016 and by the end of the year, a response to the questionnaire had been received from all the 19 EA countries. As shown in Table 5.3, twenty-four fully completed questionnaires were received together with one partial response,

[143] Where possible, information was obtained from secondary sources. Thus, the actual questionnaire sent to participants in the different countries differs from this sample.
[144] The questionnaire was drawn in English - although it is not a first language for many of the participants, it constitutes a working language in the EA.
[145] This committee contributes to the work of Ecofin and the CION, including in the area of the quality of public finances. More information is available at: https://europa.eu/epc/home_en.

implying a response rate of around 40%. Responses from two participants were received from six countries[146] and in these cases, the answers from the more relevant institution for the question concerned was used to compile the index, whilst also taking into account the overall coherence and detail provided in the responses.

5.3.1.4 Constructing the index and comparative analysis

A similar approach as that applied for the quality of budget institutions index (as described in Section 4.3.2 of Chapter 4) was applied to construct the legislative budgetary power index and to check the robustness of the results. The scoring scheme for the different indicators included in the legislative budgetary power index is presented in Table AXII in Appendix II, whilst the weighting structure is shown in Table 5.4.

As in the quality of budget institutions index and also reflecting the approach used in most other legislative budgetary power indices, equal weights are generally assigned to the different components, with few exceptions. In particular, within formal powers, more importance is assigned to the involvement of the legislature in the national budgetary process than to its involvement in the SGP, since the latter provides an indirect effect on the budget. Furthermore, in the amendment powers sub-index, less weight is attached to whether the legislature can propose a budget independently from the executive and to executive veto power, since these are relatively uncommon characteristics in EA countries. As regards discussion of SGP documents, more importance is assigned to whether such discussion takes place in the legislature than to its timing, whilst in the parliamentary committee sub-index, the centralised nature of the budget committee is deemed more important than the length of tenure of its members and its power to summon witnesses. Robustness tests were carried out to assess the sensitivity of the country rankings to alternative weighting structures, including Kim's (2015) scheme based on expert opinions.

[146] Belgium, Finland, Lithuania, Luxembourg, Portugal and Spain.

Table 5.4: Legislative budgetary power index – weighting structure

Sub-index	Weight		
I. Formal legislative budgetary power	0.50		
IA. Involvement of legislature in national budgetary process		0.67	
IA1. Involvement of legislature in MTBF			0.17
1A2. Involvement of legislature in fiscal rule			0.17
1A3. Legislative budgetary amendment powers[1]			0.17
1A4. Reversionary budget			0.17
1A5. Legislative authorisation for changes to the budget during implementation			0.17
1A6. Legislative authorisation of off-budget expenditures and contingent liabilities			0.17
IB. Involvement of legislature in SGP procedures[2]		0.33	
IB1. Discussion of SGP documents in the legislature			0.33
1B2. Discussion of SGP documents in legislative committees			0.33
1B3. Legislature informed on the implementation of Council's recommendations to end the excessive deficit situation in the country			0.33
II. Legislative budget organisational capacity	0.50		
II1. Time available for budget scrutiny		0.20	
II2. Characteristics of legislative budget committees[3]		0.20	
II3. Specialised budget research office		0.20	
II4. Access to budgetary information		0.20	
II5. Relationship of legislature with IFI		0.20	

Notes:
[1] When measuring amendment powers, formal authority to amend the budget and whether a vote on the budget constitutes a vote of confidence in the government are assigned a larger weight (0.33 each) than whether parliament can propose the annual budget independent from the executive and whether the executive has veto power (0.17 each) because the latter two characteristics are not that common among EA countries.
[2] In the respective variables, more weight is assigned to whether a document is discussed in the legislature (0.67) than to the timing of the discussion (0.33).
[3] A larger weight is assigned to the structure of parliamentary committees dealing with the budget (0.50) than to the members' length of tenure and to the power to summon witnesses (0.25 each).

Source: Produced by author

A major difference in the approach used to construct the legislative budgetary power index, compared to the quality of budget institutions index, concerns the aggregation method. For the legislative budgetary power index, a blended additive and multiplicative approach, as in Wehner (2006, 2010b), is used, whilst a linear additive method was adopted for the quality of budget institutions index (see Section 4.3.2 of the previous Chapter). Formal legislative budgetary powers and organisational capacity were aggregated using a multiplicative approach, thus assuming that a certain degree of both is required for the legislature to influence the budgetary process, whilst substitutability is assumed within the different sub-indices of both formal powers and organisational capacity.

Thus, for each sub-index, *D*:

$$D_j = \sum_{i=1}^{N} w_i x_i$$

where x_i is the score of the variable i[147] and w_i is the weight attached to it, with

$$\sum_{i=1}^{N} w_i = 1$$

and $0<w_i<1$ and $i=1,2, \ldots N$.

The different relevant sub-indices are then aggregated into involvement of the legislature in the national budgetary process (I_N); involvement of the legislature in the SGP (I_S) and the legislature's organisational budgetary capacity (I_O), using a similar computation, with

N=6 for I_N; N= 3 for I_S and N=5 for I_O.

The formal powers sub-index, I_F, is then compiled as follows:

$$I_F = w_N I_N + w_S I_S$$

where $w_N = 0.67$ and $w_S = 0.33$, as described in Table 5.4.

Finally, formal powers, I_F, and organisational capacity, I_O, are aggregated into the legislative budgetary power index, I_L, with:

$$I_L = \prod_{k=F}^{O} I_k$$

The analysis of the results for the legislative budgetary power index follows the same approach adopted for the quality of budget institutions index (see Section 4.3.2 of Chapter 4). But additionally, the country rankings for the legislative budgetary power and quality of budget institutions indices are also compared. This provides a preliminary test for whether legislative budgetary power conflicts with fiscal discipline, which is examined in more depth in the econometric analysis presented in Chapter 6.

[147] Variable *i* refers to the components comprised in each sub-index, as described in Table AXII in Appendix II, with *N* representing the number of components comprised in each sub-index.

5.3.2 Ethical issues

This Section focuses on ethical issues concerning the generation of data by the questionnaire, whilst ethical issues concerning the secondary data sources have been discussed in Section 4.3.3 of the previous Chapter.

Approval to carry out the questionnaire was granted by the Chair of the Humanities, Social and Health Science Research Ethics Panel at the University of Bradford on 17th June 2016[148]. The procedures followed to carry out the questionnaire and to generate and store the primary data are in line with the requirements specified in the ethics application form (a copy is provided in Appendix II).

When first contacted, participants were sent an information sheet (see Appendix II) which informed them about the aims and nature of the research, as well as confidentiality issues, whilst also explaining that filling out and returning the questionnaire would indicate their consent to participate in the research. Participants were also informed that they could respond only partially or not at all to the questionnaire and that they could withdraw their participation at any time, even after they have submitted their responses to the questionnaire.

The participants in the questionnaire do not constitute particularly vulnerable individuals and the questions do not concern sensitive information, but rather factual information on the budget process. Nevertheless, filling up the questionnaire could have constituted an inconvenience to the high-ranking participants, since it is rather long and time-consuming, especially that directed to non-OECD countries. To alleviate this problem and reduce the response burden, country information was also sought from other secondary sources and where this was available, the questionnaires were adjusted accordingly. Furthermore, the participants were mostly contacted during June-August 2016, thus avoiding known busy periods relating to the presentation of the draft budgets in October.

[148] This also covered the carrying out of interviews with key stakeholders in the budgetary process for the case study on Malta, which is presented in Chapter 7.

Due to the high-ranking status of the participants, the responses to the questionnaire are confidential. Although it was not possible to gather the data through completely coded collection techniques, the participants are not named or otherwise identified in this thesis, nor in other fora where the research results will be disseminated or published. Furthermore, the data generated through the questionnaires is stored securely and separately from the participants' names and contact details, with access to this information restricted to the author.

5.4 Results: legislative budgetary power in the EA

The presentation of the results for the legislative budgetary power index follows the same structure as that applied for the quality of budget institutions index (Section 4.4 of the previous Chapter). First, the findings at a sub-index level are discussed, followed by the results for the overall index. Elements of strengths and weaknesses for legislative budgetary power in the EA are thus identified and the extent of variation among the member states is also assessed. Subsequently, legislative budgetary power in the bailed-out countries is compared to that in the other EA member states. This is then followed by a comparison of the pre- and post-crisis legislative budgetary power indices[149]. Finally, an analysis of the correlation between legislative budgetary power and quality of budget institutions is presented. The robustness of the results is assessed, mainly by comparing the findings to those using alternative methodologies. The detailed results for the post-crisis legislative budgetary power index are provided in Table AXIII in Appendix II, whilst Table AXIV shows the results for the pre-crisis index.

5.4.1 The legislative budgetary power index: results at a sub-index level

The country scores for the legislative budgetary power index and its main components are presented in Table 5.6. The countries are ranked according to their overall scores and grouped into three categories, comprising the top,

[149] This comparison cannot be carried out for legislative involvement in the SGP procedures as comparable data (mostly generated from the questionnaire to national authorities) is not available for the pre-crisis period.

second and third, and bottom quartiles, respectively. The key descriptive statistics for the different sub-indices are presented in Table 5.5.

Table 5.5: Legislative budgetary power sub-indices - descriptive statistics (post-crisis data)

	Mean	Median	Standard deviation	Range
I. Formal legislative budgetary power	**4.3**	**4.2**	**1.0**	**2.4 – 6.0**
IA. Involvement of legislature in national budgetary process	***3.2***	***2.9***	***0.8***	***2.2 – 5.2***
IA1. Involvement of legislature in MTBF	2.9	2.5	2.1	0.0 – 6.3
IA2. Involvement of legislature in fiscal rules	1.2	0.0	2.1	0.0 – 6.7
IA3. Legislative budgetary amendment powers	5.8	6.4	2.2	1.7 – 10.0
IA4. Reversionary budget	6.5	6.7	2.1	0.0 – 10.0
IA5. Legislative authorisation for changes to the budget during implementation	3.0	2.2	2.0	0.8 – 6.7
IA6. Legislative authorisation of off-budget expenditures and contingent liabilities	7.1	10.0	3.7	0.0 – 10.0
IB. Involvement of legislature in SGP procedures	***6.4***	***7.3***	***2.6***	***1.3 – 9.6***
IB1. Discussion of SGP documents in the legislature	5.2	4.9	2.2	0.5 – 8.8
IB2. Discussion of SGP documents in legislative committees	7.0	8.0	3.1	0.0 - 10.0
IB3. Legislature informed on implementation of EDP	7.1	8.3	3.2	3.3 – 10.0
II. Legislative budgetary organisational capacity	**5.9**	**5.9**	**1.5**	**2.4 – 8.3**
II1. Time available for budget scrutiny	5.0	5.0	3.3	0.0 – 10.0
II2. Characteristics of legislative budget committees	7.9	8.5	2.5	0.0 – 10.0
II3. Specialised budget research office	2.9	0.0	3.8	0.0 – 10.0
II4. Access to budgetary information	7.7	7.5	1.0	5.3 – 9.0
II5. Relationship of legislature with IFI	6.0	6.3	2.3	1.9 – 10.0

Source: Results are produced by author

Table 5.6: Legislative budgetary power index – results (post-crisis data)

	Top score category					Medium score category										Low score category				
	FR	**LT**	**FI**	**AT**	**NL**	**CY**	**ES**	**DE**	**EL**	**IT**	**EE**	**PT**	**IE**	**LV**	**LU**	**BE**	**SI**	**SK**	**MT**
Overall index	**4.2**	**3.6**	**3.3**	**3.3**	**3.2**	**3.0**	**3.0**	**2.9**	**2.8**	**2.8**	**2.7**	**2.7**	**2.3**	**2.2**	**2.0**	**1.6**	**1.4**	**1.3**	**0.6**
I. Formal powers	***5.3***	***6.0***	***4.6***	***5.7***	***5.9***	***4.4***	***3.6***	***4.6***	***4.9***	***3.5***	***4.2***	***4.2***	***4.5***	***3.9***	***3.7***	***3.4***	***3.9***	***2.9***	***2.4***
IA. National budgetary process	3.8	5.2	2.2	4.0	4.1	2.5	2.7	2.8	2.7	4.1	2.6	4.1	2.6	3.1	3.4	2.5	3.4	2.9	2.9
IB. SGP procedures	8.2	7.6	9.2	9.0	9.6	8.3	5.4	8.2	9.3	2.4	7.3	4.4	8.5	5.3	4.3	5.2	4.9	2.8	1.3
II. Technical capacity	***7.9***	***6.0***	***7.2***	***5.8***	***5.4***	***6.7***	***8.3***	***6.4***	***5.9***	***7.9***	***6.6***	***6.4***	***5.1***	***5.7***	***5.4***	***4.6***	***3.5***	***4.5***	***2.4***

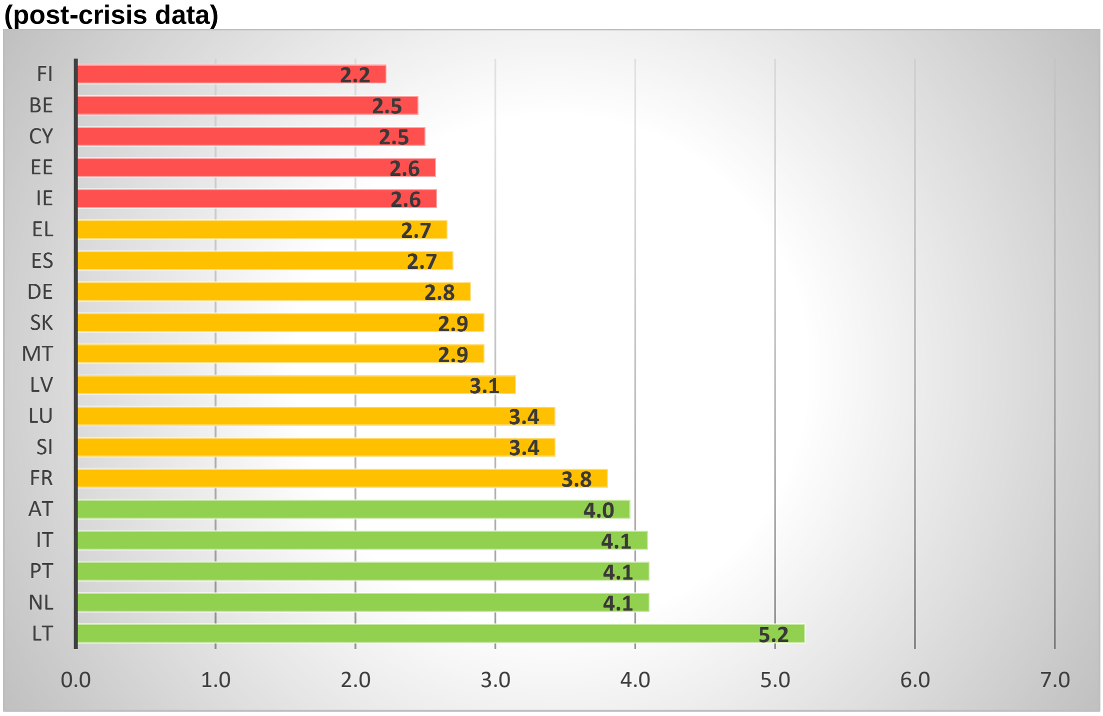
Source: Results are produced by author

5.4.1.1 Involvement of legislature in national budgetary process

Overall, formal legislative power in the national budgetary process is rather weak, with average score values of around 3 and with a maximum score of just 5.2, as shown in Figure 5.2. Legislative budgetary power is particularly weak in the budget formulation stage and also during budget implementation (Figure 5.3).

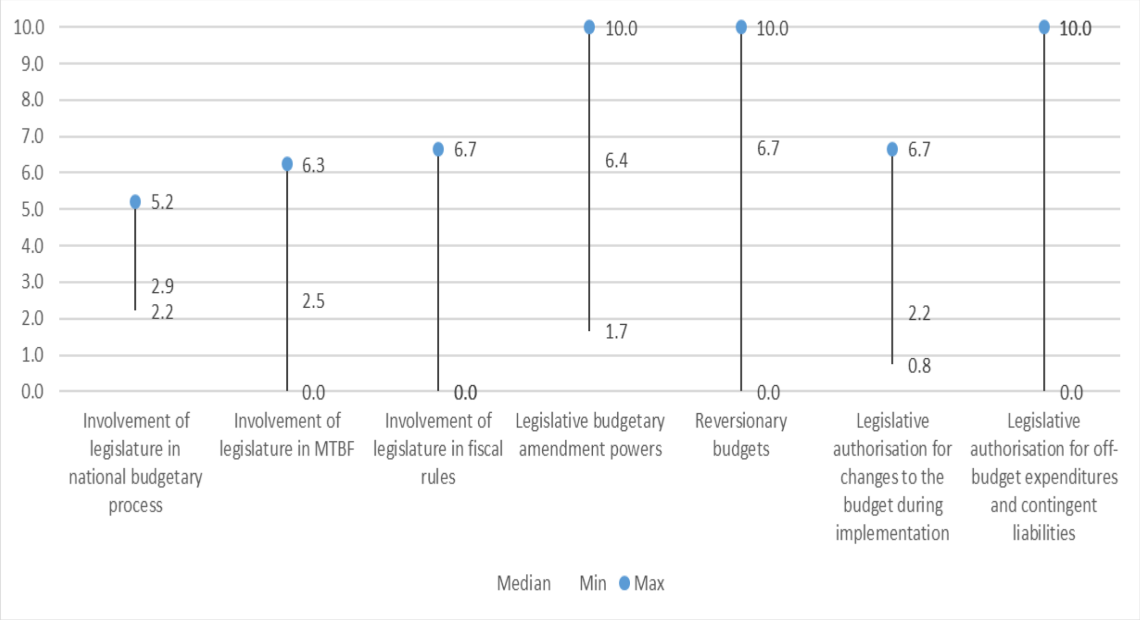
Whilst all EA countries are required to have in place MTBFs which guide the annual budget targets, involvement of the legislature in this aspect is weak, with median values of just 2.5. In particular, parliament (in conjunction with other entities) is involved in setting the MTBF targets or objectives in only six EA countries and it is involved in monitoring respect of the relevant budgetary targets in only two countries. More active involvement in this regard would contribute to increase legislative ownership of the MTBF, thus enhancing its credibility. On the other hand, in line with Lienert's (2010) recommendation for legislatures to endorse the medium-term budgetary targets, the MTBF is discussed in parliament in sixteen EA countries, but there is a vote in only nine of them.

Figure 5.2: Sub-index IA - Involvement of legislature in national budgetary process (post-crisis data)



Source: Results are produced by author

Figure 5.3: Sub-index IA - Involvement of legislature in national budgetary process and its sub-indices (post-crisis data)



Source: Results are produced by author

Legislative involvement in fiscal rules is even weaker, with the legislature (together with other institutions) in charge of monitoring compliance with the fiscal rule in only one country and of enforcing it in only two countries.

In contrast, legislative budgetary power is stronger in the budget approval stage, as reflected in an average score value of around 6 for the respective sub-index. The country rankings are robust to tests using an alternative weighting structure for the different variables included in this sub-index, as shown in Table AXV in Appendix II. Formal legislative amendment powers are unrestricted in nine EA countries, whilst at the other extreme, the legislature can only approve or reject the draft budget in only two countries. Amendment powers are subject to a deficit constraint or other restrictions in eight countries. However, in twelve EA countries, including six with unrestricted formal amendment powers, a vote on the budget is considered as a vote of confidence in the government. Constraints on amendment powers through executive veto power are less widespread in the EA, being present in only three countries (all of which have restricted formal amendment powers).

The reversionary budget involves government shutdown in only two countries. As discussed in Section 3.2.3 of Chapter 3, this can strengthen legislative budgetary power by inducing the executive to accept its amendments. At the other extreme, in two countries, if the budget is not approved in time, the executive's budget proposal takes effect (albeit only for a limited period in one of them), thereby weakening their unrestricted formal legislative amendment powers[150]. In the remaining 15 EA countries, the reversionary budget involves more intermediate outcomes, such as the previous year's budget takes effect for a limited period or other interim measures are voted upon by the legislature.

Furthermore, legislative amendment powers are weakened by its general lack of control during budget implementation. In fact, the median value for the relevant sub-index is only around 2. It is also pertinent to note that considerable executive flexibility during budget implementation also weakens legislative budgetary powers in the three EA countries where unrestricted legislative amendment powers are not limited in practice by the vote on the budget being considered as a vote of confidence for the government or reversionary budgets. More countries apply restrictions, such as limiting such flexibility to certain spending categories and applying thresholds for spending increases, than for cuts or cancellation of expenditures and similarly for requirements for legislative authorisation. Moreover, the executive has even more flexibility to re-allocate spending among different budget items. The executive can circumvent legislative control over budget implementation by putting items off-budget or through contingent liabilities. However, EA countries score rather highly in the sixth sub-index, with legislative authorisation required for all or most existing off-budget expenditures and contingent liabilities in twelve EA countries.

As shown in Table 5.6 and Figure 5.3, although the degree of variation in the overall measure of formal legislative power vis-à-vis the national budgetary process is quite low, there is more diversity among EA countries at a sub-index level. For instance, within the top score category, Austria and Portugal have strong amendment powers but weak legislative control during budget implementation, whereas Italy and the Netherlands fare more strongly in the latter characteristic, whilst Lithuania has relatively strong powers both during

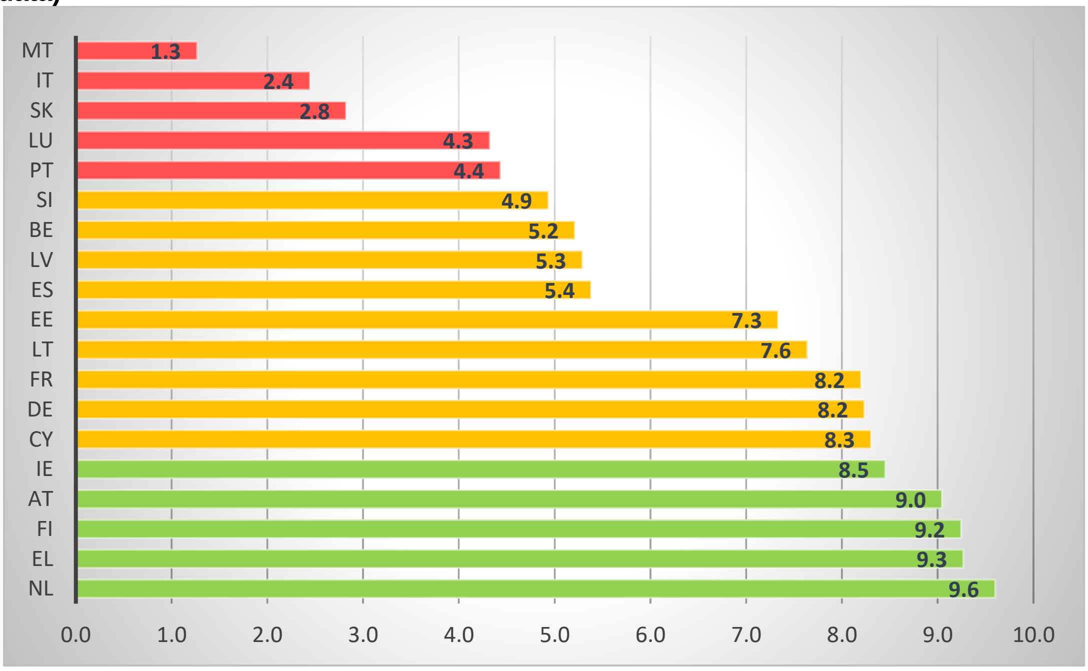
[150] In these two countries, amendment powers are also weakened by a vote on the budget being considered as a vote of confidence in the government.

the approval and the implementation stages. This suggests that EA countries adopt different approaches to legislative budgeting[151], which is also corroborated by the weak correlation among the six different sub-indices (Table AXVI in Appendix II). Thus, in the EA, there does not seem to be a reinforcement of legislative budgetary power through different dimensions. In particular, as also noted previously, amendment powers tend to be weakened by executive flexibility during budget implementation.

5.4.1.2 Involvement of legislature in SGP procedures

As regards the second component of formal legislative budgetary powers, overall in the EA, legislatures are quite well engaged in the SGP procedures, with a median score value for the respective sub-index of around 7, as shown in Figures 5.4 and 5.5. This should contribute towards more 'ownership' by the national parliaments of the supra-national fiscal requirements.

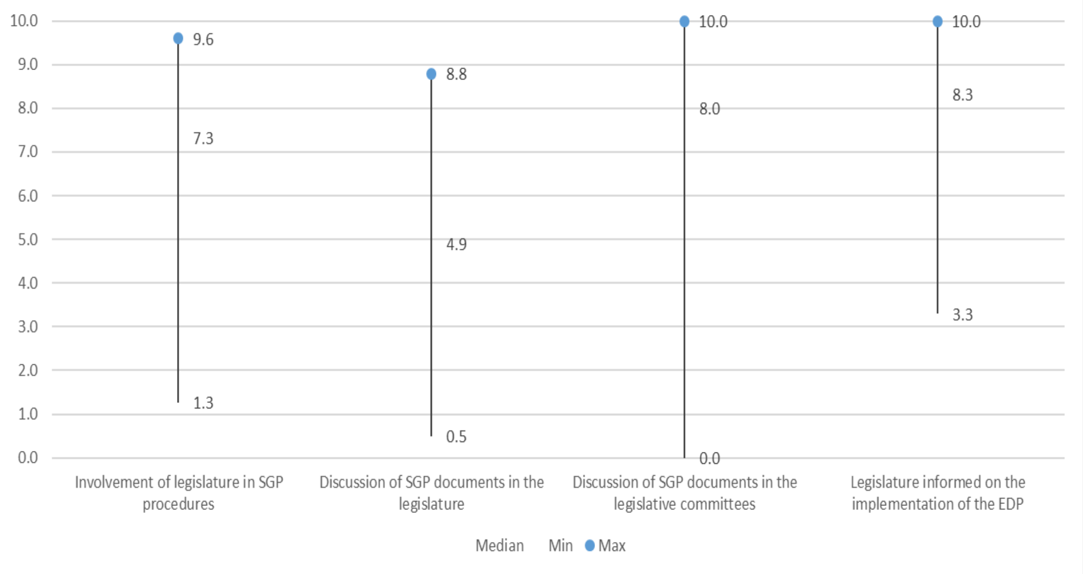
Figure 5.4: Sub-index IB - Involvement of legislature in SGP procedures (post-crisis data)



Source: Results are produced by author

[151] Similar results were found for the quality of budget institutions index, as discussed in Section 4.4.2 of the previous Chapter.

Figure 5.5: Sub-index IB - Involvement of legislature in SGP procedures and its sub-indices (post-crisis data)



Source: Results are produced by author

The average score values for the sub-index capturing discussion of SGP documents in the legislature is around 5. The country rankings are robust to alternative weighting schemes in respect of the timing component in this sub-index (see Table AXVII in Appendix II). The SP is presented and discussed in parliament in 14 EA countries, but there is a vote in only two countries. Moreover, whilst in 12 to 16 countries, the legislatures discuss the opinions, recommendations or decisions by EU institutions on the different SGP procedures, such discussion takes place before the relevant Council meeting in only around three to four countries, which again shows limited scope for legislative influence. A report by the European Parliament (2014) based on survey responses from national parliaments of 15 EA countries presents broadly similar findings regarding voting on the SP and the timing of the parliamentary debate.

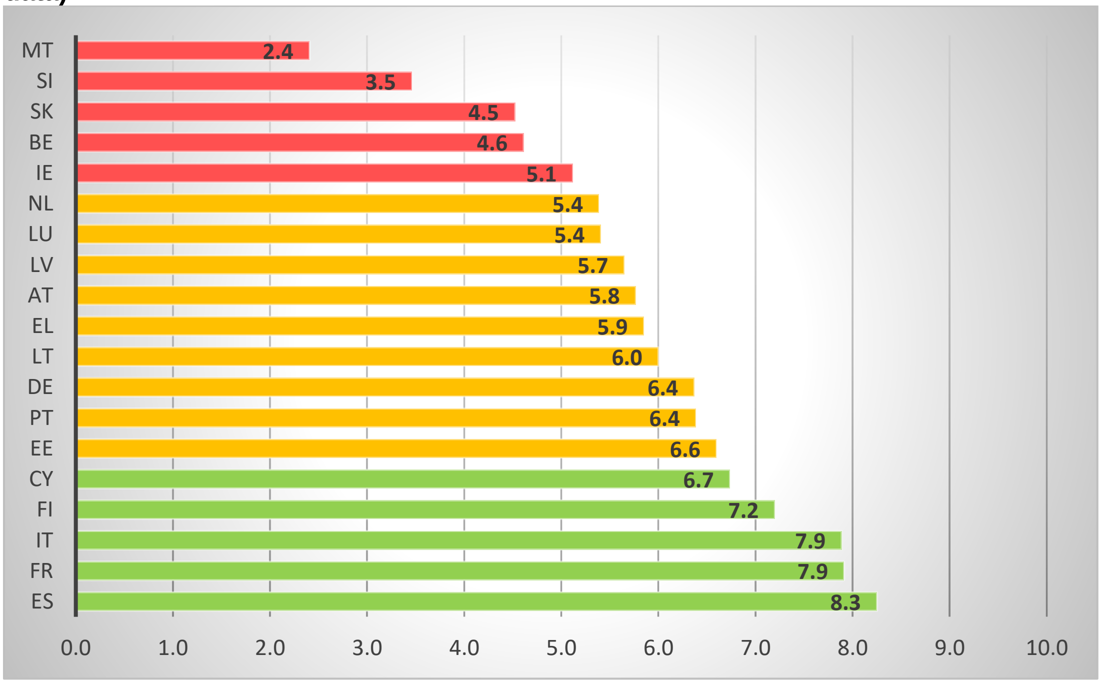
On the other hand, there is a good level of engagement with SGP documents at a parliamentary committee level. Seven countries discuss all the documents considered in this sub-index regularly in their budget or finance parliamentary committee, which should contribute towards more connectedness between the respective SGP procedures and the national budgetary process. Overall, legislatures in the EA are also kept well informed on the implementation of the EDP recommendations. In eight countries, the legislature is informed automatically on a regular basis on the implementation of Council's EDP recommendations.

As shown in Figure 5.5, there is a high degree of variation among the EA countries as regards legislative involvement in SGP procedures. The extent of diversity is similarly high also at a sub-index level. Thus, strong engagement in the SGP by legislatures in EA countries is reflected in the different components and similarly for weak involvement by legislatures in the SGP.

5.4.1.3 Legislative budgetary organisational capacity

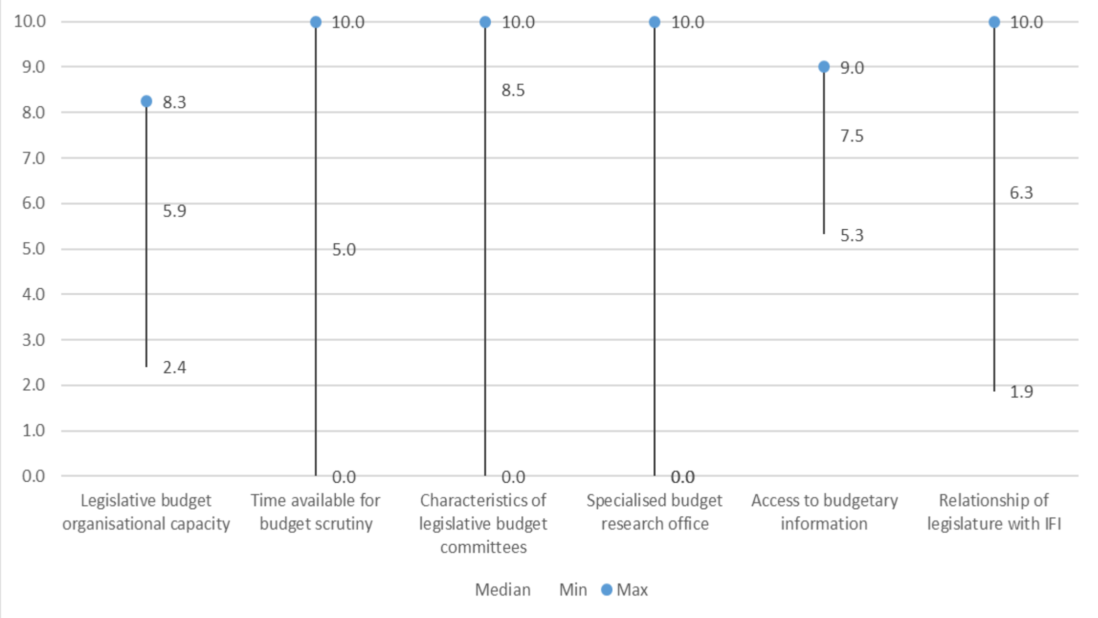
The findings suggest that overall, legislatures in the EA tend to have adequate organisational capacity, with an average score value of around 6. Although, as shown in Figure 5.6, the three countries with the highest scores (Spain, France and Italy) all constitute large member states, a country's small size does not necessarily impose a constraint on legislative budgetary organisational capacity, as indicated by the relatively good performance of Cyprus and Estonia, for example. In general, the stronger aspects of organisational capacity in the EA relate to budget committees and access to budgetary information, whilst the weakest aspect concerns specialised budget research office (Figure 5.7).

Figure 5.6: Sub-index II - Legislative budgetary organisational capacity (post-crisis data)



Source: Results are produced by author

Figure 5.7: Sub-index II - Legislative budgetary organisational capacity and its sub-indices (post-crisis data)



Source: Results are produced by author

Eleven countries allow two months for budget scrutiny, which corresponds to the minimum suggested period by Lienert (2010). This timeframe also broadly corresponds to the minimum period provided by the common budgetary timeline for EA countries[152]. Four countries allow more time, with a maximum of four months, whilst the other countries allow less (just one month).

In general, EA countries have relatively strong and centralised parliamentary budget committees and the country rankings are robust to alternative weighting structures applied to the different components included in this sub-index (see Table AXVIII in Appendix II). Thirteen countries have a budget or finance committee which co-ordinates the whole budgetary process. This centralised structure facilitates legislative budgetary influence, whilst also contributing towards a more comprehensive view of the budget, as reflected in the fourth sub-index of the quality of budget institutions index. In the EA, the development of expertise of budget committees is facilitated through the generally long tenures of its members: of four years or more or equal to the electoral term in 16 countries. In addition, all the budget committees in place

[152] Article 4, Regulation (EU) No 473/2013 specifies that the draft budget must be published by 15th October and the budget must be approved by 31st December. The countries that reported a shorter time for budget scrutiny had not yet abided to these requirements (data refers to 2014).

have the power to request witnesses and to question ministers or senior civil servants. Malta stands out among the EA countries as being the only one without a parliamentary budget committee.

Although a specialised budget research office can address the legislature's disadvantage vis-à-vis the executive as regards budget information (Anderson 2009), eleven countries do not have such a unit in place, whilst the existing offices tend to be rather small, with half of them having less than ten staff. It is pertinent to note that in two countries, the specialised budget research office also constitutes their IFI. In some countries, the lack of a specialised budget research office seems to be compensated by a strong budget committee structure, for instance, in Germany and a few small EA countries (Estonia, Lithuania, Luxembourg and Slovenia).

On the other hand, legislatures in EA countries tend to address the information asymmetry vis-à-vis the executive, through direct good access to budgetary information, as reflected in average score values of around 7.5 in the fourth organisational capacity sub-index[153]. Furthermore, in 17 countries, the legislature is informed automatically on the implementation of the budget and explanations of deviations from the budget are provided, which should facilitate its role to monitor budget execution. Timely scrutiny of the budget post-implementation is also facilitated as the audited year-end fiscal report is released within six months of the end of the fiscal year in 13 EA countries and this is discussed in the legislature in all but one member state.

Legislatures in EA countries generally have a fairly good relationship with fiscal councils[154], as reflected in average score values of around 6 for the last organisational capacity sub-index[155]. In 16 EA countries, reports by the IFI are submitted to the legislature and these generally constitute an important input in legislative budget debates. Furthermore, in 14 member states, the

[153] There is a degree of overlap between this sub-index and the sixth sub-index in the quality of budget institutions index. A detailed assessment of the findings regarding budget transparency is provided in Section 4.4.1 of the previous Chapter.
[154] Some of the characteristics included in this sub-index are also captured by the IFI sub-index of the quality of budget institutions index, with the relevant results being discussed in Section 4.4.1 of the previous Chapter.
[155] The IFI is attached to the legislature in three countries, all having top scores in this sub-index.

legislature and/or its budget or finance committee summons the IFI's leadership at least once a year. IFIs thus constitute an alternative source of budgetary information and technical expertise in EA countries, which is particularly relevant when a specialised budget research office is not in place. There is also good interaction during the budget planning stage, with the national parliament auditioning the fiscal council in ten countries. On the other hand, democratic accountability of IFIs could be strengthened since the legislature is not involved in the appointment and/or dismissal procedures for their governing members in around 10 countries. There is potential to strengthen legislative budget organisational capacity through more effective and cooperative relationships with fiscal councils but this is not yet properly exploited since in many countries, IFIs constitute relatively recent institutional developments (Fasone 2015).

As shown in Figure 5.7, variation among the EA countries is generally wider for the individual sub-indices than for the aggregate measure of organisational capacity. Thus, similarly to the finding for formal legislative power vis-à-vis the national budgetary process, there seems to be a tendency for EA countries to derive their budget organisational capacity through different institutional approaches, reflecting their national institutional, social and political context. On the other hand, access to budgetary information seems to constitute an important element in most legislatures.

5.4.2 The legislative budgetary power index: results for the composite index

At just below 3, the average score values for the composite index show relatively weak legislative budgetary power in the EA. The degree of variation among the countries is rather low, with a standard deviation of 0.9 and a range between 0.6 and 4.2 (Table 5.7 and Figure 5.8). Due to the few EA countries having presidential systems, robust conclusions on whether this is important for legislative budgetary power cannot be derived from the sample[156].

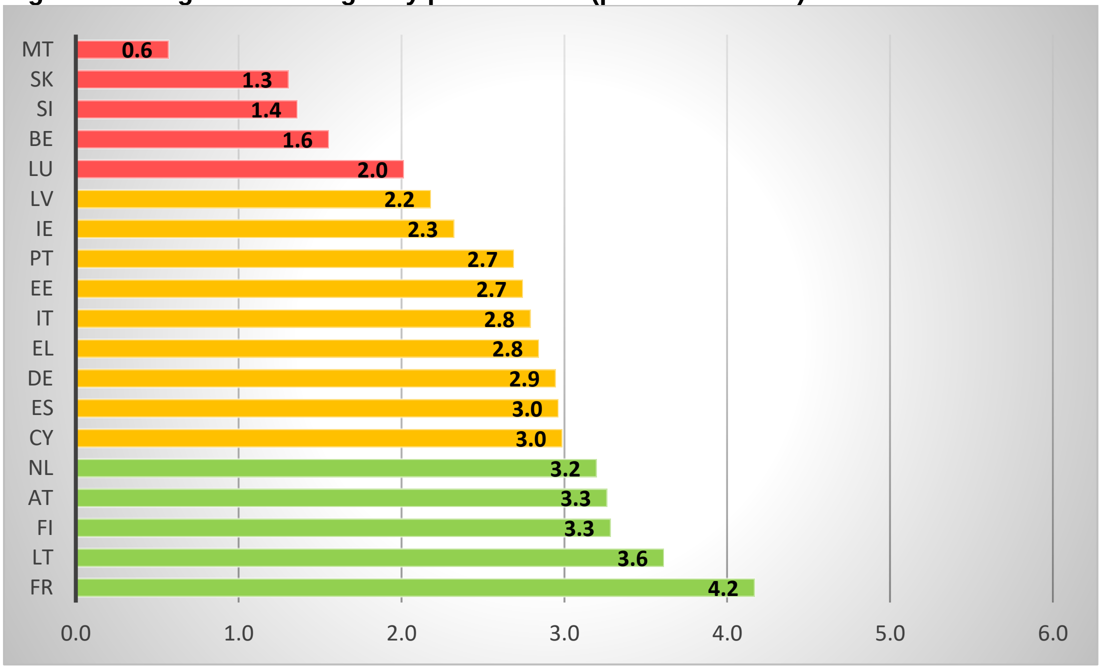
[156] Lithuania and Cyprus have presidential systems (Inter-American Development Bank 2015) and have top and medium scores in the legislative budgetary power index, respectively. Estonia, whose president is elected by parliament, is also in the medium score category.

Table 5.7: Legislative budgetary power index - descriptive statistics (post-crisis data)

	Mean	Median	Standard deviation	Range
All EA countries	2.6	2.8	0.9	0.6 – 4.2

Source: Results are produced by author

Figure 5.8: Legislative budgetary power index (post-crisis data)

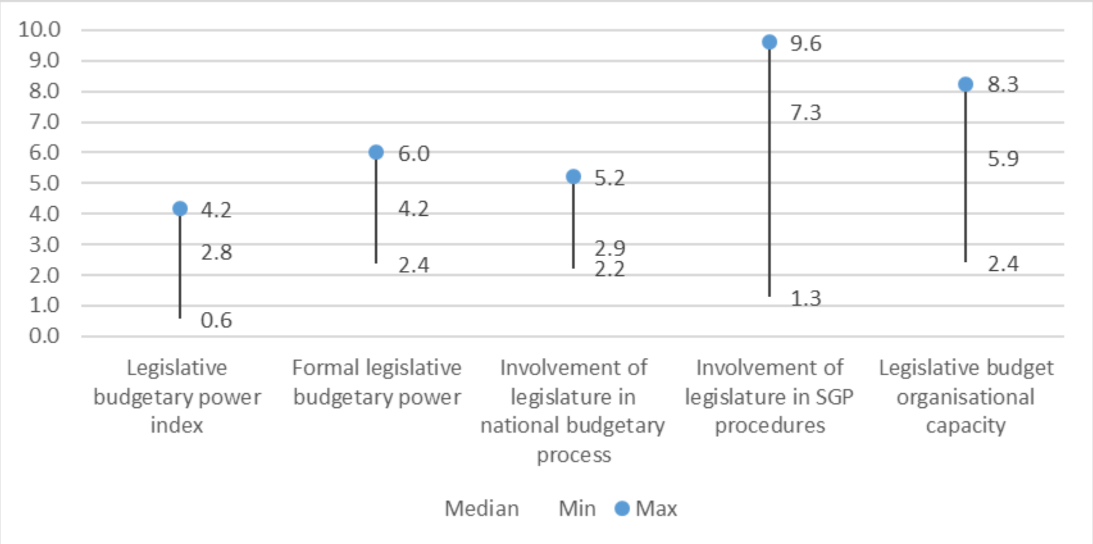


Source: Results are produced by author

It is pertinent to note that the rather low country scores reflect the multiplicative method used to aggregate the formal powers and organisational capacity sub-indices, which emphasises high or low scores obtained in either of the two components. However, using an alternative linear additive approach to aggregate these two sub-indices would still show relatively weak legislative budgetary power in the EA and rather low variation among the member states, whilst the country rankings would also not be affected substantially (see Tables AXIX, AXX and AXXI in Appendix II). The results are also robust when tested using different weighting structures, based on that using expert opinion in Kim's (2015) index and involving different assumptions regarding legislative involvement in the national budgetary process and in the implementation of the SGP. Tables AXXII and AXXIII in Appendix II present these different weighting structures together with the respective Spearman rank correlation coefficients.

Figure 5.9 shows that the overall weak legislative budgetary power mainly reflects formal legislative power in the national budgetary process, rather than a lack of legislative involvement in SGP procedures or in organisational capacity. Furthermore, the legislature's role in the national budget seems to be weak across the EA countries, whereas on the other hand, there is more diversity among the member states as regards involvement in the implementation of the SGP and in legislative budget organisational capacity. It is also relevant to note that there is a negative, albeit weak, correlation between the two aspects of formal powers (Table AXXIV in Appendix II), which weakens the legislature's potential to ensure connectedness between the national budgetary process and the supra-national fiscal framework. Finally, organisational capacity is more malleable and can be reformed more easily than formal powers which tend to be enshrined in a country's legislation or even its constitution (Wehner 2010b). Indeed, the findings indicate that some legislatures may be countering their limited formal powers through strong organisational capacity. Italy and Spain constitute two clear examples in this respect.

Figure 5.9: Legislative budgetary power index and its sub-indices (post-crisis data)



Source: Results are produced by author

5.4.3 Legislative budgetary power in bailed-out and other EA countries

As in the comparison of the quality of budget institutions in bailed-out countries and other EA member states (presented in Section 4.4.3 of the previous

Chapter), likewise the results for legislative budgetary power do not show a marked difference among the two groups of countries.

Table 5.8: Legislative budgetary power in bailed-out[1] and other EA countries – descriptive statistics (post-crisis data)

	Mean		**Median**		**Standard deviation**		**Range**	
	Bailed-out	**Other**	**Bailed-out**	**Other**	**Bailed-out**	**Other**	**Bailed-out**	**Other**
Legislative budgetary power	**2.7**	**2.5**	**2.8**	**2.8**	**0.3**	**1.1**	**2.2 – 3.0**	**0.6 – 4.2**
I. Formal legislative budgetary powers	4.3	4.3	4.3	4.2	0.5	1.2	3.6 – 4.9	2.4 – 6.0
IA. Involvement of legislature in national budgetary process	2.9	3.4	2.7	3.4	0.6	0.8	2.5 – 4.1	2.2 – 5.2
IAB. Involvement of legislature in SGP procedures	6.9	6.2	6.8	7.3	2.0	2.8	4.4 – 9.3	1.3 – 9.6
II. Legislative budgetary organisational capacity	6.3	5.7	6.1	5.8	1.1	1.6	5.1 – 8.3	2.4 – 7.9

Note:
[1] The bailed-out countries comprise Cyprus, Greece, Ireland, Latvia, Portugal and Spain.

Source: Results are produced by author

As shown in Table 5.8, the average score values for the composite index are quite close and there also are not major differences at a sub-index level. On the other hand, there is less diversity in legislative budgetary power among the group of bailed-out countries, particularly for formal legislative involvement in SGP procedures and in organisational capacity. It is also notable that the minimum score for legislative involvement in the SGP is markedly higher for the bailed-out group, probably due to the relatively more prominent profile of SGP requirements in these countries.

5.4.4 Legislative budgetary power: comparison of pre- and post-crisis indices

Table 5.9 presents pre- and post-crisis indices for legislative budgetary power and its main components. Whilst, as discussed in Section 5.3.1, due to data constraints, caution should be exercised when comparing the two indices, the results do not indicate any marked changes in overall legislative budgetary power since the Great Crisis. On the other hand, there seems to have been some weakening of legislative budgetary power vis-à-vis the national budgetary process during the period under review, whereas the results indicate a slight strengthening of legislative budgetary organisational capacity[157]. Meanwhile, the extent of variation among the EA countries has remained broadly unchanged. These findings contrast with the claim made by Posner and Park (2007: 6-7) for a recent "resurgence of legislative roles and responsibilities in budgeting", albeit this was based on a small sample of OECD countries and for an earlier timeframe.

Table 5.9: Pre- and post-crisis legislative budgetary power indices – descriptive statistics

	Mean		Median		Standard deviation		Range	
	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis
Legislative budgetary power	**2.6**	**2.6**	**2.6**	**2.8**	**1.0**	**0.8**	**0.9 – 5.0**	**1.3 – 4.2**
IA. Involvement of legislature in national budgetary process	4.6	3.2	4.8	3.2	1.0	0.7	2.6 – 5.8	2.2 – 4.1
II. Legislative budgetary organisational capacity	5.5	6.0	5.4	5.8	1.6	1.4	3.3 – 9.0	3.5 – 8.3

Notes:
[1] The legislative budgetary power index and its components refer only to the 14 EA countries (AT, BE, FI, FR, DE, EL, IE, IE, LT, LU, NL, PT, SK, SI and ES) for which pre-crisis data is available. The respective descriptive statistics for the post-crisis period also cover the same 14 EA countries and hence, differ from those presented earlier.
[2] Pre-crisis data refers mostly to 2007, but some of the data for legislative involvement in the national budgetary process pertains to 2008 and 2010. Post-crisis data generally refers to 2012, but some of the data for legislative involvement in the national budgetary process pertains to 2014.
[3] Data constraints limit the comparability of the sub-indices for the pre- and post-crisis periods.

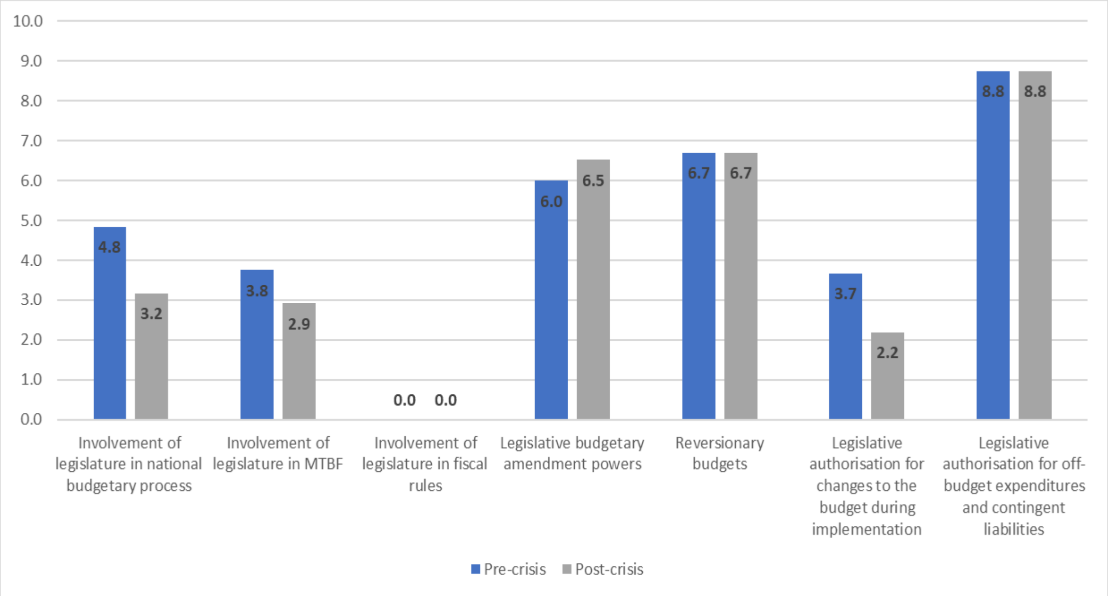
Source: Results are produced by author

The weakening of legislative power in the national budgetary process mainly reflects less control over executive flexibility during budget implementation, as shown in Figure 5.10. In addition, it is notable that despite the increased emphasis on numerical budgetary constraints since the Great Crisis, legislative involvement in MTBFs has decreased whilst that in fiscal rules has remained unchanged at a very low level. No marked changes were registered for the other aspects of formal legislative power, which is expected since

[157] It is not possible to make a similar comparison for the involvement of the legislature in the SGP since the corresponding post-crisis index largely involves primary data.

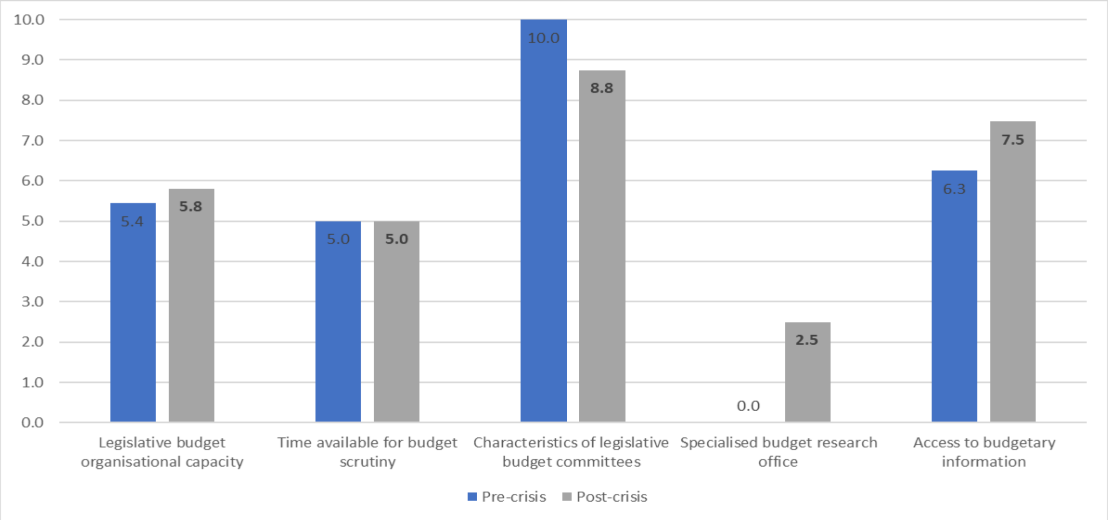
certain aspects, such as amendment powers and reversionary budgets tend to be enshrined in a country's constitution (Wehner 2010b).

Figure 5.10: Pre- and post-crisis involvement of legislature in national budgetary process sub-indices, median values



Source: Results are produced by author

Figure 5.11: Pre- and post-crisis legislative budgetary organisational capacity sub-indices, median values



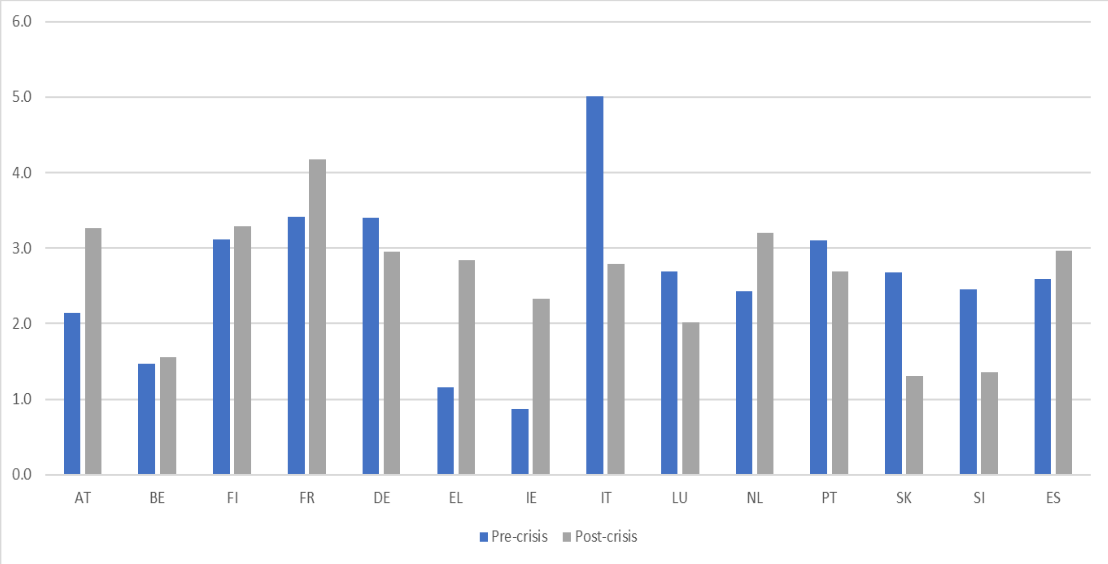
Source: Results are produced by author

On the other hand, as shown in Figure 5.11, the improvement in legislative budget organisational capacity[158] mainly reflects the set up of specialised budget research offices in four countries, which is in line with the trend found

[158] As highlighted in Section 5.3.1, the pre-crisis organisational capacity sub-index does not include the aspect relating to the relationship of legislature with IFI.

by Kim (2015) in his global sample, as well as improved access to budgetary information. On the other hand, the results show that the structure of parliamentary budget committees has become less centralised.

Figure 5.12: Pre- and post-crisis legislative budgetary power indices, by country



Source: Results are produced by author

Meanwhile, Figure 5.12 shows that, at a country level, legislative budgetary power strengthened in eight member states, whilst it worsened in the other six countries in the sample. These developments were underpinned by weaker formal legislative budgetary power in all countries, but mixed results for organisational capacity. In particular, a notable strengthening of legislative budgetary power is noted in Greece and Ireland. On the other hand, the findings indicate a considerably weaker performance in both formal powers and organisational capacity in Italy, Slovakia and Slovenia.

The results for the pre-crisis legislative budgetary power index were compared to those in previous studies where country scores are available, namely Lienert (2005), Wehner (2010b) and Kim (2015), which refer to a similar timeframe. However, adjusting the sample to have the same geographical coverage, the Spearman rank correlation coefficient with Lienert's (2005) index is around 0.6, but very close to zero with the indices by Wehner (2010b) and Kim (2015) (Table AXXV in Appendix II). These differences reflect the considerably broader scope of the constructed index which affects the comparability with these indices.

5.4.5 Legislative budgetary power and quality of budget institutions

The last part of the analysis of legislative budgetary power concerns its relationship with quality of budget institutions. Figure 5.13 suggests a positive association. However, it is relevant to note that there is some degree of overlap in the two indices (details of the areas of overlap are presented in Table AXXVI in Appendix II). The Spearman rank correlation coefficient for the two indices is positive, although not statistically significant. On the other hand, the correlation coefficient is negative but close to zero for the legislative amendment powers sub-index (Table AXXVII in Appendix II). These findings indicate that certain aspects of legislative budgeting may be complementary, rather than conflicting with fiscal discipline, as discussed in Section 3.3 of Chapter 3. However, the relationship between legislative budgetary power and the budget balance is tested more rigorously in the empirical analysis presented in the next Chapter.

Figure 5.13: Quality of budget institutions and legislative budgetary power indices (post-crisis data)

Source: Results are produced by author

5.5 Summary of results and conclusions

This Chapter presents a comprehensive composite index measuring legislative budgetary power in the 19 EA countries. The index captures the role of the legislature throughout the formulation, approval and implementation stages of the budgetary process. It also distinguishes between formal legislative budgetary powers and budgetary organisational capacity and covers both the legislature's role in the national budgetary process as well as its involvement in the implementation of SGP procedures. Moreover, the index uses unique primary data, generated through questionnaires to national authorities in the EA member states, as well as secondary data, to provide a recent measure of legislative budgetary power, including effects of the reforms to budget institutions implemented since the Great Crisis.

The results show that overall, legislatures in EA countries have relatively weak budgetary power. This applies in particular to formal legislative power vis-à-vis the national budgetary process. On the other hand, countries fare better as regards legislative involvement in the implementation of SGP procedures. Overall legislative budgetary organisational capacity is also quite good, with some EA countries performing quite strongly in this regard, possibly to maximise the use of their limited formal budgetary powers. The results also show a similar degree of legislative budgetary power in both bailed-out countries as well as the other member states.

In terms of the national budgetary process, generally, legislatures in EA countries have relatively strong amendment powers and they have comprehensive control over the budget through required legislative authorisation for off-budget expenditures and contingent liabilities. Reversionary budgets also generally contribute to strengthen legislative budgetary power. However, legislative budgetary power is weakened by a lack of legislative control during budget implementation. Furthermore, the legislature's role vis-à-vis the MTBF and fiscal rules is marginal, despite the importance of numerical budgetary constraints in the EA fiscal governance framework, especially since the Great Crisis. These characteristics diminish the democratic legitimacy of the national budgetary process.

As regards the legislature's involvement in SGP procedures, the relevant documents are generally discussed in the legislature, although its influence could be improved through more timely discussion. There is also a relatively high level of engagement of budget parliamentary committees and legislatures in EA countries are also generally kept quite well informed on the implementation of the EDP. These characteristics can contribute to increased ‘ownership’ by national parliaments of the supra-national fiscal framework.

Overall, organisational capacity does not seem to be a major constraint for strong legislative budgetary influence in the EA. In particular, budget committees are quite strong and there is good access to budgetary information. Legislatures also have a fairly close relationship with fiscal councils, which can provide information and technical support, particularly since few have specialised budget research offices in place. The time for budget scrutiny also seems to be generally adequate.

The results show limited diversity in the degree of overall legislative budgetary power among the member states and similarly for formal powers in the national budgetary process. However, there is more variation at a sub-index level, with a particularly wide range of scores for amendment powers, reversionary budgets as well as legislative authorisation of off-budget expenditures and contingent liabilities. The degree of legislative involvement in SGP procedures also varies considerably among the EA member states and there is also notable divergence in terms of their legislative budgetary organisational capacity. These findings thus indicate that, similarly to the quality of budget institutions as discussed in the previous Chapter, EA countries adopt different models of legislative budgetary power, emphasising different aspects and reflecting their specific national circumstances.

Whilst taking into account the limited comparability of the pre- and post-crisis indices, the findings indicate that overall, legislative budgetary power in the EA has remained broadly unchanged since the Great Crisis. In particular, the results show weaker formal legislative powers in the national budgetary process, particularly during the implementation stage. Furthermore, despite the increased emphasis on numerical budgetary constraints during the period under review, legislative involvement in both MTBFs and fiscal rules remains lacking. On the other hand, the results indicate some strengthening of legislative budgetary organisational capacity, mainly due to the set-up of specialised budget research offices in a few EA countries as well as improved access to budgetary information. The recent establishment of fiscal councils in various member states provides potential to improve legislative access to budgetary information and technical expertise. At a country level, the results are mixed, with a strengthening of legislative budgetary power during the period under review in eight countries, mainly reflecting strengthened organisational capacity, whereas formal powers were weaker in all the countries in the sample.

Finally, a comparison of the results for the post-crisis legislative budgetary power and quality of budget institutions indices shows complementarity between the two, suggesting that legislative budgeting could contribute to fiscal discipline. However, this relationship is examined more rigorously in the next Chapter.

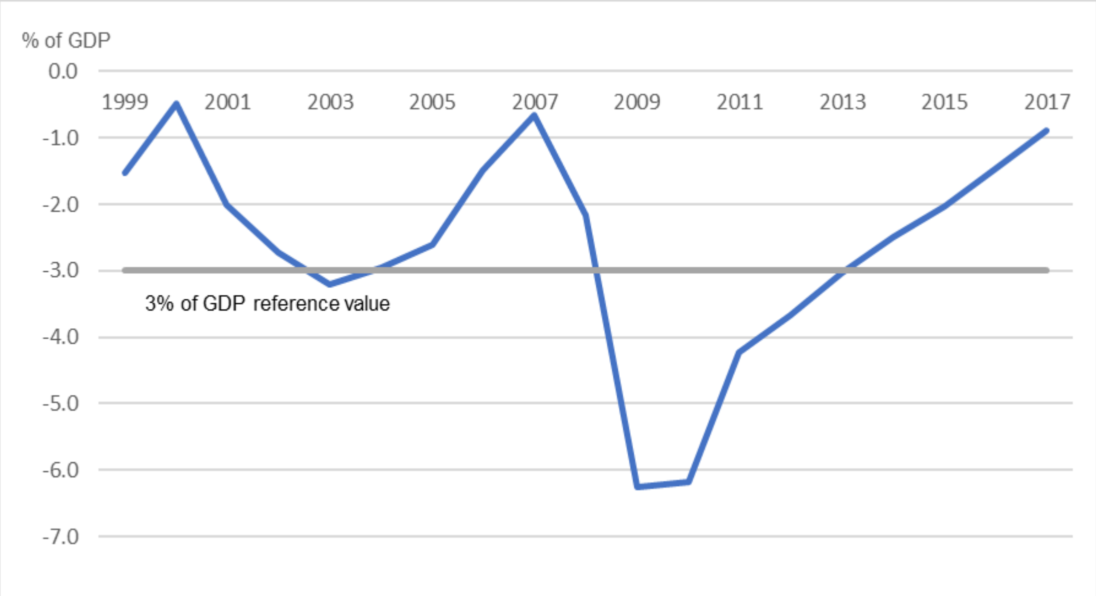
Chapter 6:

Budget Institutions and Fiscal Discipline in the Euro Area – Empirical Analysis

6.1 Introduction

The previous two Chapters presented a descriptive analysis of budget institutions in the EA. This Chapter, together with the subsequent one, examine their influence on fiscal discipline[159]. Despite the fiscal restraint that the obligations of the SGP aimed to achieve, persistent budget deficits and high levels of government debt have characterised the monetary union since its launch in 1999. As shown in Figure 6.1, whilst the Great Crisis had a huge fiscal impact, the lack of fiscal restraint was not limited to this period, with the EA average budget balance being in deficit throughout the period under review. Similarly, the government debt ratio exceeded the 60% benchmark since 1999, rising to around 90% in recent years.

Figure 6.1: General government budget balance in the EA



Source: European Commission (2018b)

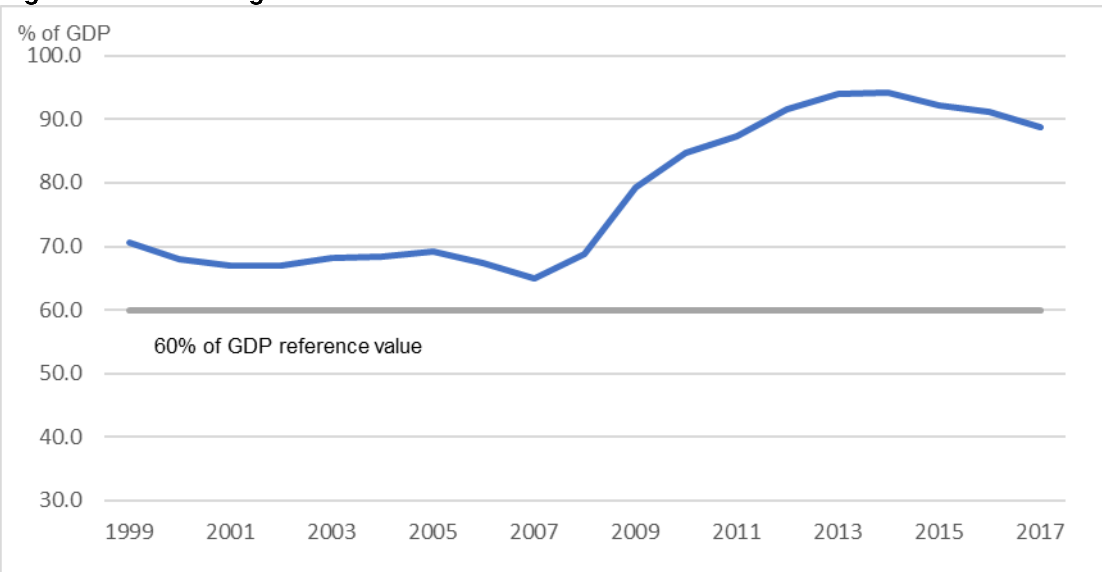
These average fiscal indicators for the EA mask considerable country differences. Drawing on Wyplosz (2012), who presents a similar analysis for 20 OECD countries during 1960-2011, Table 6.1 shows the annual budget balance for the 19 EA countries during their membership in the monetary union[160]. Several EA countries had budget deficits which exceeded the 3% of

[159] As pointed out in Chapter 1, in this study, the concept of fiscal discipline is operationalised through measures of the budget balance, with a smaller budget deficit or a larger budget surplus implying more fiscal discipline.

[160] For the recent members of the EA, data is presented from their accession to the EU in 2004, since they were aiming to adopt the Euro as soon as possible.

GDP benchmark for one-third or more of the period under review. This performance, which is neither limited to the years since the Great Crisis nor to the bailed-out countries (see, France and Italy for example) indicates that a tendency for a deficit bias, as discussed in Chapter 2, is present in at least some of the EA member states.

Figure 6.2: General government debt in the EA



Source: European Commission (2018b)

Table 6.1: General government budget balance (% of GDP) - EA countries

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AT	-2.6	-2.4	-0.7	-1.4	-1.8	-4.8	-2.5	-2.5	-1.4	-1.5	-5.3	-4.4	-2.6	-2.2	-2.0	-2.7	-1.0	-1.6	-0.7
BE	-0.6	-0.1	0.2	0.0	-1.8	-0.2	-2.8	0.2	0.1	-1.1	-5.4	-4.0	-4.1	-4.2	-3.1	-3.1	-2.5	-2.5	-1.0
FI	1.7	6.9	5.0	4.1	2.4	2.2	2.6	3.9	5.1	4.2	-2.5	-2.6	-1.0	-2.2	-2.6	-3.2	-2.8	-1.8	-0.6
FR	-1.6	-1.3	-1.4	-3.1	-4.0	-3.6	-3.3	-2.4	-2.6	-3.3	-7.2	-6.9	-5.2	-5.0	-4.1	-3.9	-3.6	-3.4	-2.6
DE	-1.7	0.9	-3.1	-3.9	-4.2	-3.7	-3.4	-1.7	0.2	-0.2	-3.2	-4.2	-1.0	0.0	-0.1	0.5	0.8	1.0	1.3
EL	-5.8	-4.1	-5.5	-6.0	-7.8	-8.8	-6.2	-5.9	-6.7	-10.2	-15.1	-11.2	-10.3	-8.9	-13.2	-3.6	-5.7	0.6	0.8
IE	2.4	4.9	1.0	-0.5	0.4	1.3	1.6	2.8	0.3	-7.0	-13.8	-32.1	-12.7	-8.0	-6.1	-3.6	-1.9	-0.5	-0.3
IT	-1.8	-2.4	-3.4	-3.0	-3.3	-3.5	-4.1	-3.5	-1.5	-2.6	-5.2	-4.2	-3.7	-2.9	-2.9	-3.0	-2.6	-2.5	-2.3
LU	3.5	5.9	5.9	2.4	0.2	-1.3	0.1	1.9	4.2	3.3	-0.7	-0.7	0.5	0.3	1.0	1.3	1.4	1.6	1.5
NL	0.3	1.9	-0.3	-2.1	-3.0	-1.7	-0.3	0.2	0.2	0.2	-5.4	-5.0	-4.3	-3.9	-2.4	-2.3	-2.1	0.4	1.1
PT	-3.0	-3.2	-4.8	-3.3	-4.4	-6.2	-6.2	-4.3	-3.0	-3.8	-9.8	-11.2	-7.4	-5.7	-4.8	-7.2	-4.4	-2.0	-3.0
ES	-1.3	-1.1	-0.5	-0.4	-0.4	0.0	1.2	2.2	1.9	-4.4	-11.0	-9.4	-9.6	-10.5	-7.0	-6.0	-5.3	-4.5	-3.1
CY						-3.7	-2.2	-1.0	3.2	0.9	-5.4	-4.7	-5.7	-5.6	-5.1	-9.0	-1.3	0.3	1.8
EE						2.4	1.1	2.9	2.7	-2.7	-2.2	0.2	1.2	-0.3	-0.2	0.7	0.1	-0.3	-0.3
LV						-0.9	-0.4	-0.5	-0.5	-4.2	-9.1	-8.7	-4.3	-1.2	-1.2	-1.5	-1.4	0.1	-0.5
LT						-1.4	-0.3	-0.3	-0.8	-3.1	-9.1	-6.9	-8.9	-3.1	-2.6	-0.6	-0.2	0.3	0.5
MT						-4.3	-2.6	-2.5	-2.1	-4.2	-3.2	-2.4	-2.4	-3.5	-2.4	-1.8	-1.1	1.0	3.9
SK						-2.3	-2.9	-3.6	-1.9	-2.4	-7.8	-7.5	-4.3	-4.3	-2.7	-2.7	-2.7	-2.2	-1.0
SI						-2.0	-1.3	-1.2	-0.1	-1.4	-5.8	-5.6	-6.7	-4.0	-14.7	-5.5	-2.9	-1.9	0.0

Notes:

indicates when the country joined the Euro Area (not indicated if the country joined in 1999)

indicates when the budget deficit exceeded 3% of GDP

Source: European Commission (2018b)

In the simple model presented in Chapter 3, it was shown that budget institutions can mitigate such a deficit bias. Thus, the first hypothesis drawn out in that Chapter postulates that an improvement in the quality of budget institutions results in smaller budget deficits (or larger budget surpluses). On the other hand, the impact of stronger legislative budgetary power on fiscal outcomes is less straightforward. The second hypothesis adopts the mainstream view in the legislature that stronger legislative budgetary power results in larger budget deficits (or smaller budget surpluses). However, whilst unrestricted amendment powers are expected to conflict with fiscal prudence, other characteristics, such as legislative involvement in numerical budgetary constraints can contribute to more fiscal restraint.

The aim of this Chapter is to test empirically these hypotheses. The quality of budget institutions and legislative budgetary power indices, developed in the previous two Chapters, are used as explanatory variables in this analysis. It is relevant to examine the influence of the quality of budget institutions on fiscal discipline in the EA in the context of the reforms to the EA's fiscal governance framework implemented since the Great Crisis, with the increased emphasis particularly on fiscal rules and fiscal councils. In terms of legislative budgeting, given the uncertainty from a theoretical point of view, the impact of legislative budgetary power on fiscal performance can only be determined empirically. Moreover, it is pertinent to assess whether democratic legitimacy to budgetary decisions, through a stronger role for the legislature, can be improved, without jeopardising fiscal discipline.

Thus, this Chapter seeks to address the following research questions:

- What is the impact of the quality of budget institutions on fiscal discipline in the EA?
- What is the impact of legislative budgetary power on fiscal discipline in the EA?

The rest of this Chapter is structured as follows: a review of the literature which analyses the impact of budget institutions on fiscal discipline is presented in the next Section; this is followed by a discussion of the methodology applied, including the empirical model, the data used and the estimation methods; the findings are then presented and the Chapter ends with a summary of the results and conclusions.

6.2 Literature Review: the impact of budget institutions on fiscal outcomes

There is a vast and established literature testing empirically the relationship between budget institutions and fiscal discipline. This Section starts by reviewing this literature, focusing on key works with a similar scope to this study, i.e. covering European countries[161], where the explanatory variable is a broad measure of the quality of budget institutions[162] and the dependent variable involves the budget balance or government debt. Subsequently, the few empirical studies, which specifically analyse the impact of legislative budgetary power on fiscal outcomes, are also reviewed.

6.2.1 The impact of the quality of budget institutions on fiscal discipline in EU countries

Following von Hagen's (1992) seminal contribution, various empirical studies have tested the impact of the quality of budget institutions on fiscal discipline in EU countries. Table 6.2 presents key features and results of these empirical works.

Given their geographical focus, most of these works cover small samples, ranging from 10 to around 15 countries, whilst the recent works by Nerlich and Reuter (2013) and Maltritz and Wüste (2015) capture the EU27. In terms of timeframes, most of the studies cover around 10-15 years, with the works focusing on the CEECs generally having even shorter timeframes. Only

[161] Examples of similar empirical studies with a different geographical scope include Stein et al. (1998) and Alesina et al. (1999) for a sample of around 20 Latin American countries; Filc and Scartascini (2004) for around 20 developing countries; Gollwitzer (2011) for 40 African countries and Dabla-Norris et al. (2010) for a broader sample of around 70 low-income countries. The results of these studies generally show that the quality of budget institutions has a positive and significant impact on the fiscal balance.
[162] However, recent studies capturing more than one institutional characteristic, which use CION fiscal governance indices, are also reviewed, since these indices are similarly used as explanatory variables in one of the extensions to the main empirical model, presented in Section 6.4.3. Other studies focusing only on individual characteristics of budget institutions in EU countries include European Commission (2006); Debrun et al. (2008); Wierts (2008) and Bergman et al. (2016) for fiscal rules and Debrun et al. (2012, 2013) for fiscal councils.

Hallerberg et al. (2007, 2009), De Haan et al. (2013), Nerlich and Reuter (2013) and Maltritz and Wüste (2015) have longer timeframes, of around twenty years.

Table 6.2: Main empirical studies on the quality of budget institutions and fiscal discipline in EU countries

Author	Date	Sample		Budget institutions variable	Dependent variable	Estimation method
von Hagen	1992	1981-1990	12 EEC countries	Composite index, referring to 1991	Gross debt, net lending, primary lending as a ratio to GDP	Bivariate static ordinary least squares (OLS) regression analysis
De Haan and Sturm	1994	1981-1989	12 EEC countries	Composite index, based on von Hagen (1992)	Change in government debt to GDP ratio	Dynamic multivariate OLS regression analysis
Hallerberg and von Hagen	1999	1981-1994	EU15	Dummy variable to indicate presence or absence of delegation and contracts approaches (based on data in von Hagen and Harden 1996)	Change in gross debt as a ratio to GDP	Dynamic multivariate OLS regression analysis
De Haan et al.	1999	1980-1992	12 EEC countries	Composite indicator, based on Alesina et al. (1996), using data from von Hagen (1992), von Hagen and Harden (1996) and survey data (1999)	Change in gross debt as a ratio to GDP	Dynamic multivariate OLS regression analysis
Gleich	2003	1994-1998	10 CEECs	Composite index and sub-indices for different aspects of budget institutions, referring to 1998	Budget balance, gross public debt as a ratio to GDP	Bivariate static OLS regression analysis
Yläoutinen	2004	1994-1998; 1999-2002	10 CEECs	Four different constructed composite indices, capturing different aspects of budget institutions, referring to 2003	Budget balance as a ratio to GDP, annual change in public expenditure-to-GDP ratio	Multivariate static OLS regression analysis
Fabrizio and Mody	2006	1997-2003	10 CEECs	Composite index, based on Gleich (2003) and Yläoutinen (2004), using primary and secondary data, referring to 1997 and 2003	Primary budget balance as a ratio to GDP	Panel data (fixed effects) static regression analysis with time dummies
Debrun and Kumar	2007	1990-2004	18 countries including most of the EU15	CION's fiscal rules index; composite fiscal councils index	Cyclically adjusted primary budget balance as a ratio to GDP	Dynamic multivariate panel-data regression analysis
Hallerberg et al.	2007	1985-2004	EU15	Composite delegation and contracts indices, referring to 1991, 2001 and 2004	Change in general government gross public debt as a ratio to GDP	Dynamic model - multivariate panel-corrected standard error regression

Table 6.2: Main empirical studies on the quality of budget institutions and fiscal discipline in EU countries (cont.)

Author	Date	Sample		Budget institutions variable	Dependent variable	Estimation method
Hallerberg et al.	2009	1985-2004	EU15	Composite indices, capturing the delegation and contracts approach, referring to 1991, 2001 and 2004	Change in gross debt, general government balance as a ratio to GDP	Dynamic multivariate OLS regression analysis
Mulas-Granados et al.	2009	1993-2004	10 CEECs, Malta and Cyprus	Three different constructed composite indices capturing different aspects of budget institutions, using secondary data, referring to 1998-2003	General government budget balance, primary budget balance as a ratio to GDP	Multivariate static OLS regression analysis
Hallerberg and Yläoutinen	2010	1998-2008	10 CEECs	Composite indices, capturing the delegation and contracts approaches, referring to 1998, 2003 - using data in Gleich (2003) and Yläoutinen (2005) - and 2007	Change in gross debt ratio to GDP, general government budget balance as a ratio to GDP	Dynamic model – multivariate panel-corrected standard error regression
De Haan, et al.	2013	1984-2003	EU15 excluding Luxembourg	Composite indices, capturing the delegation and contracts approaches in Hallerberg et al. (2009)	Cyclically adjusted primary budget balance as a ratio to GDP	Dynamic model - multivariate panel with country fixed effects
Nerlich and Reuter	2013	1990-2012	EU27	Dummy variables capturing characteristics of fiscal rules, fiscal councils and MTBF, using CION, OECD, IMF and ECB data	Primary cyclically adjusted budget balance (and other fiscal components)	Dynamic multivariate panel data model with fixed effects – using Kiviet (1995)'s bias corrected least squares dummy variable dynamic panel estimator for unbalanced panels
Maltritz and Wüste	2015	1991-2011	EU27	CION's fiscal rules index; composite fiscal councils index, using CION data	Primary budget balance as a ratio to GDP	Dynamic model - multivariate panel with time fixed effects

These studies generally use composite indices capturing the overall quality of budget institutions as their main explanatory variable[163]. As discussed in Section 4.3.1, these indices constitute a convenient way of capturing the quality of budget institutions in empirical analysis since they combine and synthesize a vast amount of qualitative information on the most relevant aspects of budget institutions into a single numerical variable. However, at the same time, this advantage also presents challenges, since they may be

[163] In fact, several of these studies are also reviewed in Section 4.2 of Chapter 4. On the other hand, Hallerberg and von Hagen (1999) and Nerlich and Reuter (2013) use dummy variables to indicate the presence of specific institutional characteristics.

offsetting elements and thus it is difficult to draw out conclusions on specific institutional features. To address this problem, Gleich (2003), Yläoutinen (2004) and Mulas-Granados et al*.* (2009) also use different sub-indices for specific budgetary characteristics. On the other hand, Debrun and Kumar (2007a), Maltritz and Wüste (2015) and Nerlich and Reuter (2013) capture a rather narrow view of budget institutions, by focusing only on fiscal rules and fiscal councils, and in the latter case also MTBFs. Meanwhile, Hallerberg and von Hagen (1999), Hallerberg et al*.* (2007, 2009), Hallerberg and Yläoutinen (2010) and De Haan et al*.* (2013) distinguish between the two different forms of fiscal governance – the delegation and contracts approaches (as described in Section 4.2.1 of Chapter 4).

The budget balance as a ratio to GDP, either in nominal terms or cyclically adjusted, is the most widely used dependent variable in these studies. The primary balance and the change in the government debt ratio are also used in some of the studies. The former is more under the direct control of current policymakers since it excludes interest payments which reflect past borrowings, whilst the latter may constitute a more comprehensive measure of fiscal activity.

The empirical models estimated in these studies range from a simple bivariate model in von Hagen (1992) and Gleich (2003) to more complex models incorporating a range of control variables. Most models are broadly based on that adopted by Roubini and Sachs (1989) and include economic and political control variables, but there are notable differences in the specific variables included as well as their measurement. The real GDP growth rate and the unemployment rate (or change thereof) are the most commonly used macro-economic control variables. Some studies also include measures of the debt servicing costs and the debt level (or its lag) as a proxy for the inter-temporal budget constraint to which the budget balance must react. In terms of political determinants, the most commonly used variables capture government durability, government fragmentation or type of government (single-party majority, coalition or minority governments), the timing of elections and partisanship (generally on a left-right spectrum). The models also differ in terms of whether they are static or dynamic in nature, with most including a lagged dependent variable to account for slow adjustment in the fiscal outcome.

Almost without exception[164], the reviewed empirical studies find that the quality of budget institutions, as measured by their respective indices, has a statistically significant positive impact on the fiscal balance (and a negative effect when the dependent variable is the change in the debt ratio). However, results are less robust for specific institutional characteristics. For instance, whilst Yläoutinen (2004) finds that all the three sub-indices relating to the different stages of the budgetary process have significant coefficients, Gleich (2003) does not find significant results for largely similar sub-indices and for the same sample of countries. In addition, confirming evidence is found for the influence of fiscal rules but not for fiscal councils in Debrun and Kumar (2007a) and Maltritz and Wüste (2015). Finally, using different indices for the delegation and contracts approach and estimating their model separately for sub-samples of countries depending on their form of fiscal governance, Hallerberg et al. (2007) and Hallerberg and Yläoutinen (2010) present some supporting findings, but De Haan et al. (2013) do not find comparable evidence. It is also pertinent to note that the problem of small sample size is exacerbated in the latter group of studies, particularly for the group of countries with a delegation approach.

A lack of time-series data for the budget institutions variables constitutes a major constraint in this branch of the literature. Indeed, a few studies only have one data reading for the institutional explanatory variable of interest and thus either use cross-sectional analysis (for example, von Hagen 1992; Gleich 2003) or combine fixed budget institutions throughout the period of analysis with time-series fiscal data (for instance, Yläoutinen 2004). Some studies have two or three data readings for their budget institutions variable, obtained from similar surveys carried out at periodic intervals or by combining survey generated data with other secondary information. On the other hand, Debrun

[164] Yläoutinen (2004) does not find a significant effect for the 10 CEECs during the period of their political and market economy transition (1994-1998). But Gleich (2003) finds confirming evidence for the same sample of countries also for this period.

and Kumar (2007a), Nerlich and Reuter (2013) and Maltritz and Wüste (2015) have time series data from the CION's fiscal governance databases, but as highlighted earlier, these do not constitute a comprehensive measure of budget institutions. Most of the studies with time-variation in their budget institutions variables exploit the panel nature of their data, with some using fixed effects to estimate separately the effect of institutional factors from other country specific effects. Fabrizio and Mody (2006) also include time dummies in their empirical model to capture effects that are common to all countries in their sample in a particular year. Some of these panel data models are also dynamic in nature, which requires the use of more complex estimation techniques (see for example, Nerlich and Reuter 2013).

This branch of empirical studies also faces the possibility of endogeneity, which is widely acknowledged in the literature itself. Debrun and Kumar (2007b) explain that incumbents may use budgetary institutions as a signal of their commitment to fiscal discipline. In this case, a change in fiscal preferences results in a simultaneous strengthening of budget institutions and an improvement in public finances. Calmfors (2012) refers to Sweden after the financial crisis in the early 1990s as an example. Nevertheless, the problem of endogeneity has not been really resolved mainly due to the scarcity of good quality instruments for budget institutions variables (Fabrizio and Mody 2006; Debrun and Kumar 2007a)[165]. Various studies carry out tests for endogeneity and generally have concluded that this does not constitute a problem in their empirical analysis. Fabrizio and Mody (2006) and Nerlich and Reuter (2013) use Arellano-Bond, Keviet-bias or Arellano-Bover/Blundell-Bond procedures, but the reliability of these tests is limited in small samples; whilst Maltritz and Wüste (2015) run a simple panel regression with fiscal rules as the dependent variable on the lagged budget balance. On the other hand, various studies basically circumvent the endogeneity problem by adopting the working assumption that budget institutions are pre-determined, at least in the short to medium term, since they are costly and complex to change. Fabrizio and Mody

[165] Only Hallerberg et al. (2007) and Debrun and Kumar (2007a) instrumentalise their budget institutions variables. The former use the institutional setting and the debt level in the first reading of their data, whilst the latter instrumentalise the fiscal rules index with exogenous political variables and their fiscal councils index.

(2006), Nerlich and Reuter (2013) and De Haan et al. (2013) explicitly explain such assumptions in their empirical analysis.

6.2.2 The impact of legislative budgetary power on fiscal outcomes

A few of the empirical studies reviewed in the previous Section attempt to disentangle the effect of legislative budgeting, mainly amendment powers, from other institutional characteristics. Using a sub-index to capture the budget approval stage, Gleich (2003), Fabrizio and Mody (2006) and Mulas-Granados et al. (2009) confirm the view that strong legislative budgetary amendment powers conflict with fiscal discipline. In contrast, using a more comprehensive measure for the role of the legislature in the budget approval process, Yläoutinen (2004) does not find comparable results. Helland (2000) also does not find confirming evidence when using a sub-index from von Hagen's (1992) budget institutions index for a slightly different sample of countries during 1978-1995.

Meanwhile, very few studies use comprehensive measures of legislative budgetary power[166] to examine the influence of legislative budgetary power on fiscal outcomes[167]. In a cross-sectional analysis of 28 OECD countries during 2001-05, Wehner (2010b) finds that an increase in legislative budgetary power results in higher levels of public spending. When testing for the separate effect of the different aspects of legislative budgeting, the amendment powers sub-index was found to have a significant effect. Moreover, the relevance of amendment powers was confirmed when this constituted the only institutional explanatory variable in a cross-sectional analysis for a larger and more diverse sample of 80 countries during 1990-98. In another study covering 57 countries during 1975-98, Wehner (2010c) further finds that restrictions on legislative

[166] The legislative budgeting indices referred to in this Section are described in Section 5.2.2 of the previous Chapter.

[167] Other studies examined the fiscal implications of specific legislative budgeting characteristics. These include Heller (1997, 2001), Bradbury and Crain (2001) and Ricciuti (2004), who find conflicting results for the impact of the size of the legislature and bicameralism on the aggregate level of government spending. From a different perspective, using a unique dataset for Sweden dating from 1921, Wehner (2013) finds evidence of an electoral cycle for parliamentary amendments to executive spending proposals.

amendment powers can moderate the impact of partisan fragmentation in the legislature on the budget deficit.

Giuriato et al. (2016) use Wehner's (2010b) index to assess the impact of legislative budgetary power on forecast errors in the budget balance for 13 EU countries during 1999-2013. Using a panel data model, with fixed (time) effects, they find that stronger legislative budgetary powers negatively influence the fiscal forecast accuracy, which they attribute to executive strategic behaviour, whereby it presents more favourable economic and fiscal forecasts when anticipating legislative amendments or possibly even the rejection of the proposed budget.

Finally, Ríos et al*.* (2018) use their legislative budgetary oversight indicator to assess simultaneously its impact on the budget balance and on budget transparency. Using a cross-sectional analysis covering 85 countries, they find a negative and significant relationship with the budget balance, but a positive effect on budget transparency.

6.2.3 Contribution to the literature

Although the impact of the quality of budget institutions on fiscal discipline in EU countries has been examined extensively, this study still makes a relevant contribution to the literature. Firstly, in contrast to existing studies, it focuses on the current 19 EA member states. Whilst this poses a constraint in terms of sample size, it results in more analytical relevance since all the countries included in the study are subject to the same EA fiscal governance framework. Secondly, this Chapter presents a recent empirical analysis which captures reforms implemented since the Crisis. In contrast, the most recent similar empirical studies for the overall quality of budget institutions - Hallerberg and Yläoutinen 2010 and De Haan et al. 2013 - refer to 2007 and 2009, respectively. Finally, using the quality of budget institutions index as an explanatory variable implies a broader institutional measure, as described in Section 4.2.2 of Chapter 4.

This Chapter also makes an important contribution to the understudied topic of the impact of legislative budgeting on fiscal outcomes. In fact, only Wehner

(2010b) and Ríos et al. (2018) analyse the influence of legislative budgetary power on the budget balance, with the former focusing only on the effect of amendment powers. Furthermore, the legislative budgetary power index constitutes a comprehensive measure of legislative budgetary influence throughout the budgetary process, as discussed in Section 5.2.3 of Chapter 5. It also constitutes a recent measure of legislative budgeting, whereas the indices used in comparable empirical studies refer to 2007 (Wehner 2010b) or 2009 (Ríos et al. 2018) data. Finally, this Chapter provides a focused geographical scope, capturing all the EA member states. This contrasts with the larger, but diverse samples in Wehner (2010b) and Ríos et al. (2018), which were mainly determined by the coverage of their data sources. These samples include the United States which can distort the analysis, since the decisive influence of its Congress over the budget is probably unique (Wehner 2010b).

It is also pertinent to note that the use of these indices permits some time-variation in the institutional explanatory variables, since two data readings are available, as explained in Sections 4.3.2 and 5.3.1 of Chapters 4 and 5, respectively.

6.3 Methodology: empirical analysis – budget institutions and fiscal discipline in the EA

Whilst the previous two Chapters involve descriptive research, this Chapter comprises explanatory research on the impact of the quality of budget institutions and legislative budgeting on fiscal discipline. Using an empirical model, the following two hypotheses, derived in Chapter 3, are tested:

Null Hypothesis I0: The overall quality of budget institutions does not have any influence on the budget balance.

Hypothesis I: An improvement (a worsening) in the overall quality of budget institutions results in smaller budget deficits or larger budget surpluses (larger budget deficits or smaller budget surpluses).

Null Hypothesis II0: Overall, legislative budgetary power does not have any influence on the budget balance.

Hypothesis II: Stronger (weaker) legislative budgetary power results in larger budget deficits or smaller budget surpluses (smaller budget deficits or larger budget surpluses).

This Section presents the empirical model as well as the estimation methods applied. But first, the philosophy underpinning the research presented in this Chapter together with the ethical issues involved are discussed.

6.3.1 Philosophy of research and ethical issues

Reflecting its quantitative approach and similarly to the research presented in the previous two Chapters, the empirical analysis presented in this Chapter is carried out from a post-positivist paradigm. The ontological position adopted in this Chapter is similarly a realist one, where our understanding of the 'true' relationship between budget institutions and fiscal discipline in the EA is tentative, with this empirical analysis contributing to the knowledge on this topic. The analysis involves the hypothetico-deductive method and applies the falsification principle in respect of the two null hypotheses presented earlier, by seeking to find statistically significant relationships between the institutional variables and the fiscal discipline indicator.

The epistemological position associated with the realist ontology adopted in this study is a post-positivist view of empiricism, where the relationship between budget institutions and fiscal discipline can only be known imperfectly and the generation of knowledge is constrained by data availability and data measurement problems. Thus, different specifications of the empirical model and estimation methods are used to test the robustness of the results.

As regards ethical implications of the research presented in this Chapter, there are no additional issues regarding the quality of budget institutions and the legislative budgetary power indices than those outlined in Sections 4.3.3 and 5.3.2 of Chapters 4 and 5, respectively. Furthermore, secondary data is used to compile the other variables used in this empirical analysis: this data is publicly available online and its use does not involve any particular ethical issues.

6.3.2 The Empirical Model

The empirical analysis involves a panel data model which, compared to a cross-sectional approach, has the advantage of a significantly larger sample size. It thus allows controlling for the effect of other determinants of fiscal outcomes. The sample covers a ten-year period from 2006 to 2015. Although not all the current EA countries were members of the monetary union throughout this period, the recent members that joined the EU in 2004 were preparing for Euro adoption during the period under review. Whilst the total number of observations in the sample is not very large, it is broadly comparable to that in other panel data studies by Debrun and Kumar (2007a), Mulas-Granados et al. (2009), Hallerberg and Yläoutinen (2010) and Giurato et al. (2016). Furthermore, the timeframe in this study matches closely that of the institutional indices[168], thus providing for more analytical relevance[169].

The use of the quality of budget institutions and legislative budgetary power indices introduces some time-variation in the institutional explanatory variables, although this is limited to two data readings: the pre- and post-crisis indices. This requires the assumption that the indices are unchanged for some years[170]. This does not constitute an ideal dataset, but De Haan et al. (1999), Fabrizio and Mody (2006), Hallerberg et al. (2007, 2009), Hallerberg and Yläoutinen (2010) and De Haan, et al. (2013) have worked with similar data constraints.

The panel data multivariate regression model takes the following general form:

$$FISCAL_{it} = \beta_0 + \beta_1 ECON_{it} + \beta_2 POL_{it} + \beta_3 PRESSURE_{it} + \beta_4 INDEX_{it} + \mu_i + v_t + \varepsilon_{it}$$

where:

$FISCAL_{it}$ refers to the fiscal indicator for $country_i$ in $year_t$;

[168] As discussed in Section 4.3.2 of Chapter 4, the post-crisis institutional indices refer to data for 2012, 2014 and 2016, whilst the data included in the pre-crisis indices pertains mainly to 2007.

[169] In contrast, Hallerberg et al. (2007, 2009) and De Haan et al. (2013) have larger samples with fiscal data from the mid-1980s, but their first institutional data readings refer to 1991.

[170] The post-crisis indices are applied from 2012 to 2015, whilst the pre-crisis indices are applied from 2006 to 2011. As explained in Section 4.3.2 of Chapter 4, due to data constraints, it was not possible to generate pre-crisis indices for Cyprus, Estonia, Latvia, Lithuania and Malta and hence the data for these countries is limited to 2012-2015.

β_0 is a common intercept term for all the countries and for all years in the sample;

$ECON_{it}$ refers to a vector of economic control variables;

POL_{it} refers to a vector of political control variables;

$PRESSURE_{it}$ refers to a vector of control variables capturing the pressure on governments to carry out fiscal consolidation;

$INDEX_{it}$ refers to the budget institutions indices for $country_i$ in $year_t$;

μ_i refers to the unobservable time-invariant country-specific error term;

v_t refers to the unobservable time effect; and

ε_{it} refers to the remaining stochastic disturbance term.

As regards the dependent variable ($FISCAL_{it}$), the budget balance as a ratio to GDP is the main indicator of fiscal discipline used in the empirical analysis. The budget balance for the general government sector[171] is used since this is the relevant concept for the EA's fiscal governance framework and provides a harmonised definition for all the EU countries. Furthermore, the general government budget balance can capture potential substitution effects across different government sectors (Hallerberg et al. 2007). Nonetheless, to check the robustness of the results, alternative models are estimated with other fiscal indicators used in the literature, namely the primary budget balance, cyclically-adjusted budget balance and the change in the government debt ratio. By excluding interest payments, the primary budget balance constitutes a better measure of the current fiscal stance and is more under the control of government than the inflexible cost of past borrowings (Alesina et al. 1999; Fabrizio and Mody 2006). Meanwhile, the cyclically-adjusted budget balance filters the impact of fluctuations in the economic cycle and thus provides a better measure of discretionary fiscal policy (Debrun and Kumar 2007a;

[171] In the European System of Accounts (ESA) 2010 (paragraph 2.111), the general government sector comprises central, state and local government and social security funds (Eurostat and European Commission 2013).

Nerlich and Reuter 2013)[172]. Finally, by capturing transactions which are off-budget, the annual change in the government debt ratio can constitute a more comprehensive measure of fiscal activity. The data for these fiscal indicators is from the CION's Directorate General for Economic and Financial Affairs' (DG Ecfin) annual macro-economic database (AMECO). A more detailed description of the fiscal indicators used in the empirical analysis and their respective data sources is provided in Table AXXVIII in Appendix III.

The choice of the control explanatory variables was guided by the empirical studies reviewed in Section 6.2 and more generally, by the literature on the political economy of budget deficits, reviewed in Chapter 2. Given the sample size involved, in order to safeguard degrees of freedom, the selected control variables constitute key economic and political determinants of fiscal outcomes together with proxies for the pressure faced by governments to implement fiscal consolidation. A description of these variables together with their relevant data sources are included in Table AXXVIII in Appendix III, whilst Tables AXXIX and AXXX present descriptive statistics for the different variables used in the empirical analysis and correlation coefficients, respectively.

The economic control variables used in the model ($ECON_{it}$) are the real GDP growth rate and the unemployment rate, being widely used macroeconomic indicators. These variables capture the effects of economic fluctuations on the fiscal balance. Economic growth improves the budget balance, through automatic stabilisers, whilst a high unemployment rate results in a worsening of the fiscal position.

Drawing on the discussion in Chapter 2, the selected political control variables (POL_{it}) aim to capture the effect of the electoral cycle, government fragmentation and government 'weakness'[173]. A simple dummy variable indicates whether legislative elections were held in the country concerned in a

[172] Since the measurement of the cyclically adjusted budget balance is subject to considerable uncertainty, two alternative measures, both estimated by the CION are used: one based on the production function (potential GDP) and one based on the Hodrick-Prescott filter method (trend GDP).

[173] Following the arguments presented in Section 2.1 of Chapter 2, a partisan variable, to capture the ideology of the government in office, is not included in the model.

particular year. Reflecting the discussion on the electoral budget cycle in Section 2.2 of Chapter 2, this is expected to have a negative effect on the budget balance. Meanwhile, rather than using a dummy variable to indicate the type of government, which as discussed in Section 2.3.1 of Chapter 2 can be problematic, two separate indicators are used to capture the effect of government fragmentation[174] and 'weakness'. The first indicator is a fractionalisation index, which measures the probability that two parliamentarians picked at random from among the government parties are from different political parties[175]. Reflecting the common pool resource problem discussed in Chapter 2, the coefficient of this index is expected to be negative. Meanwhile, government weakness is proxied by government's margin of majority in parliament. A stronger majority strengthens the executive's power vis-à-vis that of the legislature, which in the simple model on the budgetary process presented in Chapter 3, contributes to more fiscal discipline.

The third group of control variables ($PRESSURE_{it}$) aim to capture the pressure that governments face to implement fiscal consolidation. The lagged government debt ratio to GDP provides a proxy for the long-term fiscal sustainability to which the budget balance reacts. Additionally, the model includes also a dummy variable to capture whether a country was subject to a financial assistance programme in a particular year, since these included specific fiscal consolidation targets[176]. *A priori*, both the coefficients of the lagged debt ratio[177] and the bail-out dummy are expected to be positive.

As pointed out earlier, the explanatory variables of interest are the quality of budget institutions and the legislative budgetary power indices ($INDEX_{it}$). The

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[174] The indicator used captures the number of political parties within government, since data is more accessible than that for the number of spending ministers.

[175] This indicator is easier to interpret than an alternative Herfindahl index (used by Fabrizio and Mody (2006), for example) which computes the sum of squared seat shares of all parties in government.

[176] Further details on the economic adjustment programmes for the bailed-out EA countries is available at: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance/which-eu-countries-have-received-assistance_en.

[177] A high debt ratio implies increased fiscal sustainability risks, which put pressure on governments to implement fiscal consolidation (for instance, to avoid potential downgrades by sovereign credit rating agencies). This effect is assumed to offset the direct effect of increased interest payments due to a higher debt level.

model is first estimated with each index included separately and then with both indices. Whilst the use of composite indices as explanatory variables facilitates the empirical analysis, as discussed in Section 4.3.1 of Chapter 4, such aggregate measures may mask offsetting elements, making it difficult to draw conclusions on specific institutional characteristics. This is particularly relevant for the legislative budgetary power index, where legislative amendment powers are expected to lead to less fiscal discipline, whereas other aspects of legislative budgeting may have opposite effects. Thus, an alternative specification of the model, with an indicator of legislative amendment power[178], as an explanatory variable, is also estimated. On the other hand, all the different components of the quality of budget institutions index are expected to have a positive effect on the budget balance. Nevertheless, an alternative specification of the model is also estimated, with a narrower scope focusing on important aspects of budget institutions in the EA fiscal governance framework, namely MTBFs, fiscal rules and fiscal councils. The European Commission's (2017b, 2017c) fiscal rules strength and MTBF indices are used as explanatory variables, together with a simple dummy variable to indicate the presence of an IFI. Debrun and Kumar (2007a), Nerlich and Reuter (2013) and Maltritz and Wüste (2015) use similar data from the CION's fiscal governance databases, but their sample is not limited to the members of the EA. An important advantage of this alternative model specification is that it uses an almost complete timeseries dataset for the explanatory institutional variables[179]. This avoids the restrictive assumption in the main model due to only two data readings for the constructed indices.

As shown in Table 6.2, various studies adopt a dynamic specification of the empirical model, thus implying that a shock to the fiscal dependent variable persists. On the other hand, the inclusion of the lagged dependent variable

[178] This captures whether the legislature has such powers and whether any restrictions apply. In Table AXII (in Appendix II), this corresponds to the second indicator in the legislative budget amendment powers sub-index (IA3).

[179] The MTBF index is available for 2006 and annually from 2008 to 2015; in 2007 it is assumed to remain unchanged at the 2006 level. The fiscal rules strength index is available annually for 2006-2015. The IFI dummy variable was compiled annually for the 2006-15 period using data from the IMF Fiscal Councils database 2015. A similar full timeseries for legislative budgeting variables is not available.

as one of the explanatory variables increases the complexity of estimating the panel data model and can produce biased and inconsistent estimates when using the standard fixed effects especially in short panel datasets due to the so-called Nickell (1981) bias[180]. Methods using generalised methods of moments (GMM) estimators, by Arellano and Bond (1991) or Arellano and Bover (1995) and Blundell and Bond (1998), were developed for dynamic panels where the time dimension is small and the number of cross sections is large (Roodman 2006). When the number of cross-sectional units is small, these estimators can be severely biased and imprecise (Bruno 2005). Thus, given the number of observations available, the main model presented in this Chapter involves a static specification, although for completeness, results from a dynamic form are also presented.

Similarly to the approach adopted in Chapters 4 and 5, the empirical analysis is extended by distinguishing between the bailed-out countries and other EA member states. The main empirical model is estimated separately for the two geographical sub-samples to assess whether the impact of budget institutions on the fiscal balance differs between these two groups of countries. However, the results from these estimates should be considered as only providing suggestive indications, due to the very small number of countries in the bailed-out group[181].

6.3.3 Estimation methods

The first step in estimating the panel data model involved determining whether to estimate it using a pooled, fixed or random effects approach. Pooled OLS ignores the cross-section and time-series nature of the panel data, which can result in biased and inconsistent estimates of the coefficients (Baum 2006). Formal tests using the restricted F test provided in the fixed effects regression results (Baltagi 2013) show that pooled OLS is not appropriate (see Appendix

[180] For further details, see for example, Baum (2006).

[181] In contrast to some studies reviewed in Section 6.2.1, the empirical analysis presented in this Chapter does not distinguish between countries with a delegation or contracts form of fiscal governance. Firstly, very few countries in the sample are expected delegation states (i.e. with a single-party majority government) and secondly, the results presented in Section 4.4.5 of Chapter 4 show that some EA countries do not adopt one distinct form of fiscal governance.

III). In addition, random effects models assume that the country-specific effects constitute random drawings from a larger sample (Gujarati and Porter 2009). This is not a tenable assumption since the sample involves the set of EA countries. In addition, time-invariant country-specific heterogeneity, such as social and cultural factors, are likely to influence the characteristics of budget institutions and legislative budgeting, which suggests that the country-specific error term would be correlated with the regressors, further indicating a fixed effects model (Baum 2006). This was formally confirmed using the Mundlak (1978) test[182] (see Appendix III).

Whilst these tests suggest a one-way fixed effects model, the presence of cross-sectional dependence in the errors[183] (see Appendix III) can lead to misleading statistical inference (Pesaran 2006). Whilst Driscoll and Kraay corrected standard errors are robust to very general forms of cross-sectional dependence and also correct for heteroscedasticity and autocorrelation, this estimation model assumes that the common unobserved factors are uncorrelated with the regressors and furthermore this approach is robust when T is large (Hoechle 2007). Similarly, Pesaran's (2006) common correlated effects estimator for static panel data with strictly exogenous regressors applies for panel data models with medium to large N and T (Pesaran, 2006). In view of these constraints, the model is estimated using a simple two-way fixed effects model with country and time dummies. Fabrizio and Mody (2006) use a similar approach to estimate their panel data model for the 10 CEECs over a relatively short timeframe (1997-2003). This two-way fixed effects model does not solve all the problems of heteroscedasticity, auto-correlation and cross-sectional dependence. However, time dummies can account for common shocks to all countries in a given year, although cross-sectional correlations are constrained to be the same for all units (Hoechle 2007). In

[182] In contrast to the usual Hausman test, the Mundlak (1978) test is robust in the presence of heteroskedasticity and autocorrelation (Wooldridge 2010). The results of the tests for heteroskedasticity and autocorrelation are also presented in Appendix III.

[183] Although this tends to be more of an issue in macro panels on countries with long time series (Baltagi 2013), it could also result from strong interdependence between countries due to economic and financial integration (De Hoyos and Sarafidis 2006). It can thus constitute a concern for panels composed of EA countries.

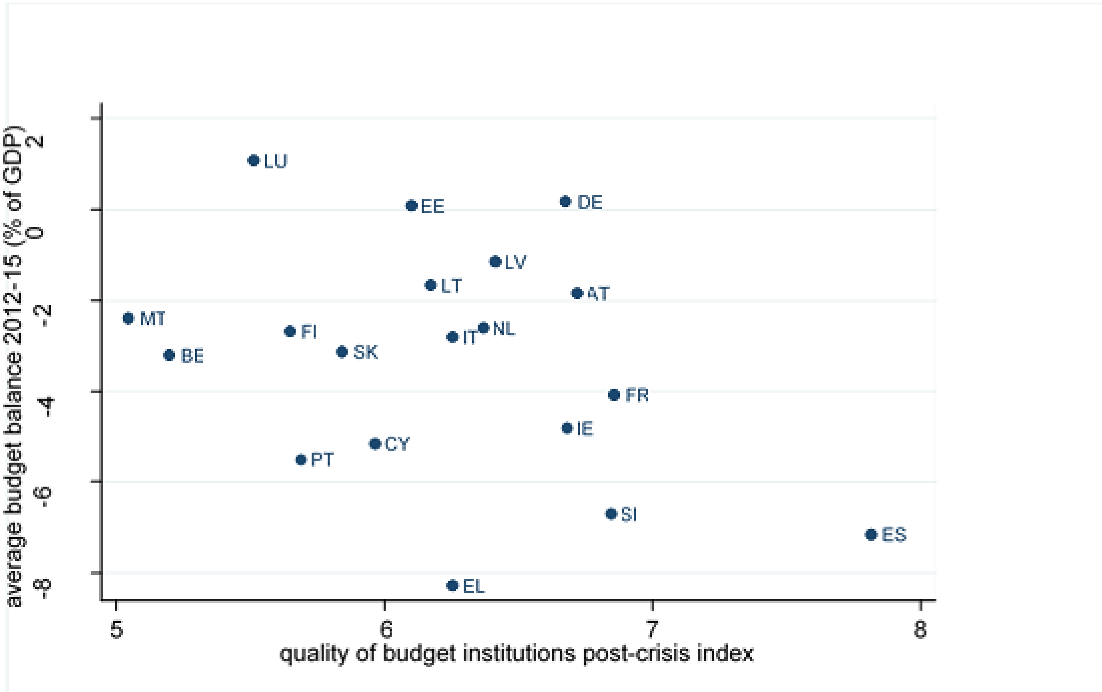
view of these limitations, results for the model estimated using alternative methods are also presented.

6.4 Results

In order to provide a general indication of the relationship between the quality of budget institutions and the budget balance, and similarly for legislative budgetary power, this Section starts by displaying scatterplots in Figures 6.3 and 6.4, respectively.

Contrary to the general findings in the literature, there does not seem to be a strong positive relationship between the overall quality of budget institutions and the budget balance during the 2012-15 period. Countries with high scores in the quality of budget institutions index (most notably, Spain as well as France, Ireland and Slovenia) perform poorly in terms of their average budget balance. On the other hand, countries such as Malta and Belgium have very weak budget institutions but fare better in terms of their fiscal position. Furthermore, the fiscal balance of countries with similar quality of budget institutions varies considerably (for example, Germany and Slovenia).

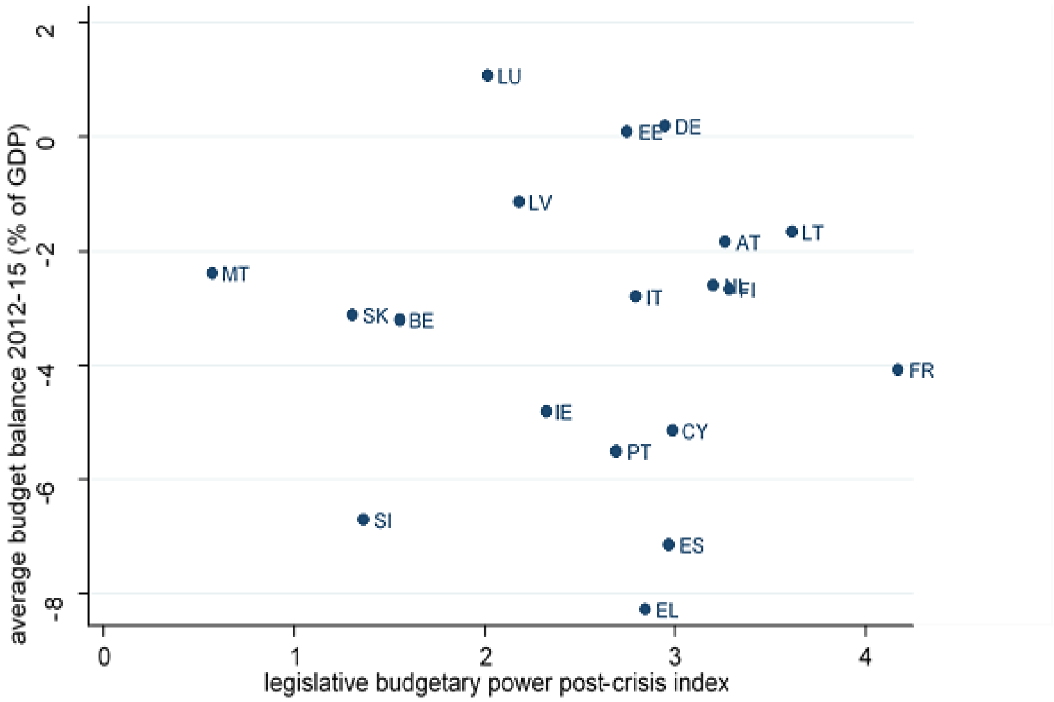
Figure 6.3: Quality of budget institutions and budget balance



Source: Average budget balance from European Commission’s (2017f) Ameco online database; quality of budget institutions index produced by author

Meanwhile, whilst the literature suggests a conflict between legislative budgetary power and fiscal discipline, Figure 6.4 shows no specific relationship between the relevant index and the budget. Indeed, there is a wide disparity in the average fiscal balance of countries with similar scores in the legislative budgetary power index (for instance, Germany and Spain). At the same time, countries with very different rankings in terms of legislative budgetary power have a similar fiscal performance (for example, Netherlands and Malta).

Figure 6.4: Legislative budgetary power and budget balance



Source: Average budget balance from European Commission's (2017f) Ameco online database; legislative budgetary power index produced by author

The relationship between budget institutions and the budget balance is analysed in a more in-depth manner through a panel data model. This Section thus proceeds by first discussing the results of the two-way fixed effects model, with the constructed indices for quality of budget institutions and legislative budgetary power as the main explanatory variables. Subsequently, the robustness of the findings is tested and finally, results from extensions of the main model are presented.

6.4.1 Results of the panel data analysis: main model

The main model includes country fixed effects, which capture time-invariant social, political and other country-specific determinants of the budget balance, as well as year dummies to control for common shocks to all EA countries. The model is estimated in a step-wise manner, starting with the economic control variables and then adding sequentially the political control variables, the variables related to the pressure to implement fiscal consolidation. Finally, the quality of budget institutions and legislative budgetary power indices are included in the model, first individually and then jointly. Table 6.3 presents the results of this model.

As expected, stronger real GDP growth is associated with an improved fiscal balance, whilst the unemployment rate exerts a negative effect. However, only the unemployment rate has a significant influence when the institutional variables are included in the model.

Turning to the political determinants of the budget balance, in contrast to the findings in the literature reviewed in Section 2.2.1 of Chapter 2, as well as most of the empirical studies reviewed in Section 6.2.1, the results do not provide any evidence of an electoral budget cycle. This could be due to the different period covered in the analysis, with electoral manoeuvring possibly being more difficult to implement during and in the aftermath of the Great Crisis. The other political variables also do not exert a significant effect on the fiscal balance. Furthermore, whilst the coefficient of the variable capturing parliamentary majority has the expected sign, the coefficient of the government fragmentation variable is positive, which contrasts with the predictions of the common pool resource theory[184]. De Haan and Sturm (1994), Hallerberg and von Hagen (1999), Debrun and Kumar (2007a) and Nerlich and Reuter (2013) have also found a lack of significance for their government fragmentation variables (using different proxies). But, as discussed in the broader literature

[184] The coefficients are similarly not significant when government fragmentation is measured by a Herfindahl index and when a simple dummy variable to indicate the type of government (single party majority or coalition/minority government) is used - both based on data from Döring and Manow (2016).

review in Section 2.3.1 of Chapter 2, there is some empirical evidence supporting the fragmented and weak government hypotheses.

Table 6.3: Results of the main model

	Dependent variable = general government budget balance % of GDP					
Explanatory variables	**(1)=ECON$_{it}$**	**(2)=(1) + POL$_{it}$**	**(3)=(2) + PRESSURE$_{it}$**	**(4)=(3) + INDEX$_{it}$ [quality of budget institutions only]**	**(5)=(3) + INDEX$_{it}$ [legislative budgetary power only]**	**(6)=(3) + INDEX$_{it}$**
% Change in real GDP	0.164*** (0.000)	0.145* (0.012)	0.089 (0.259)	0.023 (0.815)	0.043 (0.631)	0.008 (0.935)
Unemployment rate	-0.190 (0.198)	-0.217 (0.197)	-0.247 (0.117)	-0.446** (0.008)	-0.365* (0.013)	-0.447** (0.003)
Legislative election Held		-0.285 (0.193)	-0.344 (0.106)	0.010 (0.969)	0.021 (0.933)	0.028 (0.917)
Margin of majority		4.526 (0.287)	3.292 (0.357)	1.142 (0.755)	3.165 (0.488)	2.263 (0.559)
Government fractionalization index		1.127 (0.634)	0.523 (0.795)	1.095 (0.605)	0.256 (0.918)	0.547 (0.814)
Government debt ratio in year *t-1*			0.051* (0.016)	0.072** (0.002)	0.083*** (0.000)	0.066** (0.005)
Bailout dummy variable			-1.689 (0.341)	-1.279 (0.568)	-1.358 (0.566)	-1.328 (0.553)
Quality of budget institutions index				1.619 (0.125)		1.463 (0.110)
Legislative budgetary power index					0.810 (0.275)	0.646 (0.256)
Country fixed effects	yes	yes	yes	yes	yes	yes
Time dummies	yes	yes	yes	yes	yes	yes
Constant	-0.259 (0.862)	-2.866 (0.136)	-4.029* (0.021)	-10.25 (0.076)	-6.079 (0.051)	-11.22* (0.046)
R^2	0.482	0.491	0.509	0.543	0.531	0.551
F	25.55	36.28	327.8	2765.0	1399.9	56230.1
Observations	190	190	190	146	146	146

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Results are produced by author

On the other hand, consistent with the findings by Debrun and Kumar (2007a), De Haan et al. (2013), Nerlich and Reuter (2013) and Maltritz and Wüste (2015)[185], the lagged government debt ratio was found to have a significant positive effect on the budget balance, although the impact is small in magnitude. In contrast, the coefficient of the bailout dummy is neither statistically significant nor does it have the expected positive sign.

Focusing on the determinants which are of most interest, the quality of budget institutions index has the expected positive effect on the fiscal balance, but it is not statistically significant. This corroborates the analysis of the scatterplot presented in Figure 6.3, but contrasts with the findings of a robust relationship in the literature reviewed in Section 6.2.1. The different findings could reflect the broader scope of the quality of budget institutions index, as explained in Section 4.2.2 of Chapter 4, as well as the more recent time period covered (2006-15), which includes the impact of the Great Crisis and its aftermath. In particular, as discussed in Section 4.4.4, the improvement in the quality of budget institutions during the period under review largely reflected reforms to comply with the EA common requirements for fiscal rules and fiscal councils, rather than more broad-based reforms spurred by a national policy agenda. This thrust for a more homogenous rules-based form of fiscal governance at the national level, which was supra-nationally mandated, could imply less political commitment to the constraints imposed by these reforms (Kopits 2012, Wyplosz 2012). This has implications for their effectiveness to bring about fiscal discipline.

As regards legislative budgetary power, the coefficient of the relevant constructed index is also positive and not statistically significant. Its magnitude is also smaller than that for the quality of budget institutions index. Whilst confirming the analysis based on the scatterplot in Figure 6.4, this result does not support the general view in the budget institutions literature of a conflict between more democratic budgetary procedures and fiscal discipline. It also differs from the findings in the few available empirical studies using legislative

[185] However, De Haan et al. (2013) and Maltritz and Wüste (2015) use the debt level in year *t*.

budgeting indices, reviewed in Section 6.2.2, which report that legislative budgetary power is associated with higher public spending levels (Wehner 2010b), less fiscal forecast accuracy (Giuriato et al. 2016) and worse fiscal balances (Ríos et al. 2018). These divergent results could reflect differences in the dependent variables used, in the timeframe covered by the analysis and importantly, in the more comprehensive measure of legislative budgetary power used, which also includes institutional characteristics that can contribute to fiscal discipline, as discussed in Section 5.3.1 of Chapter 5.

6.4.2 Robustness tests

The first robustness test carried out involves using different fiscal indicators as dependent variables. Subsequently, the main model is also estimated by applying different econometric approaches. A dynamic specification of the model is also estimated and finally, tests for potential endogeneity bias due to reverse causality are carried out.

6.4.2.1 Different fiscal indicators as dependent variables

Table 6.4 shows the results of the main model with different fiscal indicators as dependent variables: the primary budget balance, cyclically adjusted balance and the annual change in the government debt ratio, all referring to the general government sector and measured as a ratio to GDP.

The main results are largely confirmed in the different model specifications. There is a positive relationship between the quality of budget institutions index and all the fiscal balance indicators and a corresponding negative relationship when the dependent variable is the annual change in the government debt ratio. The coefficient of the quality of budget institutions index is generally not significant, except (at the 10% level) with the cyclically adjusted budget balance (based on potential GDP). Meanwhile, the different specifications also show that similar signs for the coefficient of the legislative budgetary power index, but the relationship is not significant, except when the change in the debt ratio is used as the dependent variable. Its coefficient is also generally smaller than that for the quality of budget institutions index.

Table 6.4: Results of the main model with different fiscal dependent variables

	budget balance	**primary budget balance**	**cyclically adjusted balance (potential GDP)**	**cyclically adjusted balance (trend GDP)**	**cyclically adjusted primary balance (potential GDP)**	**cyclically adjusted primary balance (trend GDP)**	**annual change in government debt ratio**
% Change in real GDP	0.008 (0.935)	-0.018 (0.849)	-0.143 (0.115)	-0.278 (0.054)	-0.169 (0.058)	-0.304^{*} (0.024)	-0.713^{***} (0.000)
Unemployment rate	-0.447^{**} (0.003)	-0.517^{***} (0.000)	-0.168 (0.328)	-0.262 (0.174)	-0.238 (0.091)	-0.332^{*} (0.045)	0.654^{***} (0.001)
Legislative election held	0.028 (0.917)	-0.006 (0.982)	-0.002 (0.993)	-0.025 (0.923)	-0.036 (0.899)	-0.059 (0.827)	-0.538 (0.482)
Margin of majority	2.263 (0.559)	3.406 (0.381)	2.942 (0.475)	3.122 (0.407)	4.084 (0.306)	4.264 (0.226)	-12.360^{*} (0.022)
Government fractionalization index	0.547 (0.814)	0.189 (0.929)	0.095 (0.968)	0.416 (0.872)	-0.263 (0.905)	0.058 (0.980)	4.434 (0.259)
Government debt ratio in year *t-1*	0.066^{**} (0.005)	0.108^{***} (0.000)	0.072^{*} (0.012)	0.133^{***} (0.000)	0.113^{***} (0.000)	0.175^{***} (0.000)	-0.208^{**} (0.008)
Bailout dummy variable	-1.328 (0.553)	-0.804 (0.725)	-1.708 (0.450)	-2.027 (0.379)	-1.184 (0.608)	-1.504 (0.520)	6.329^{*} (0.015)
Quality of budget institutions index	1.463 (0.110)	1.322 (0.129)	1.648 (0.099)	1.464 (0.109)	1.508 (0.114)	1.324 (0.124)	-1.688 (0.302)
Legislative budgetary power index	0.646 (0.256)	0.302 (0.546)	0.770 (0.156)	0.782 (0.171)	0.426 (0.356)	0.438 (0.381)	-2.849^{*} (0.025)
Country fixed effects	yes	yes	yes	yes	yes	yes	yes
Time dummies	yes	yes	yes	yes	yes	yes	yes
Constant	-11.220^{*} (0.046)	-9.366 (0.091)	-16.320^{*} (0.010)	-18.190^{**} (0.004)	-14.460^{*} (0.018)	-16.340^{**} (0.007)	29.340^{**} (0.002)
R^2	0.551	0.569	0.419	0.544	0.468	0.601	0.723
F	56230.1	3059.7	6733.3	401.5	5570.7	442.5	353.1
Observations	146	146	146	146	146	146	146

p-values in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Results are produced by author

As regards the influence of the economic control variables, the negative effect of the unemployment rate on the fiscal position is also confirmed, though the coefficient is not always significant when using cyclically-adjusted fiscal indicators. On the other hand, the sign of the coefficient of real GDP growth is not consistent and is statistically significant only in some models. Meanwhile, the lagged debt ratio exerts a significant positive pressure on the fiscal position in all models, whilst the sign of the coefficient of the bailout dummy is contrary to *a priori* expectations in all models and is not significant, except with the change in the debt ratio. Finally, political factors are not important determinants of fiscal outcomes in any of the models. Only the margin of majority has consistently the expected sign and it obtains statistical significance when the dependent variable is the change in the debt ratio.

6.4.2.2 Alternative estimation methods

Given the limitations and difficulties to estimate the empirical model (as discussed in Section 6.3.3), Table 6.5 presents the results when the main model is estimated using pooled OLS, random effects, fixed effects, first-differencing[186] and fixed effects with Driscoll and Kraay corrected standard errors.

Overall, the positive influence of the institutional variables on the budget balance is confirmed. The quality of budget institutions is always positively associated with the budget balance and the relationship is also significant with some estimation methods. On the other hand, the coefficient of the legislative budgetary power index is positive with all estimators except first-differencing, and it is sometimes statistically significant. Its coefficients are generally smaller in magnitude than that for the quality of budget institutions index.

Meanwhile, there are some differences as regards the influence of the control variables when using alternative estimation methods. In terms of the economic control variables, whilst the unemployment rate consistently has a negative and significant impact on the budget balance, the positive influence of real GDP growth is not always significant. As regards the political control variables, the positive influence of the margin of majority is confirmed and furthermore, the effect is significant with some estimation methods. On the other hand, both the coefficients of the government fragmentation variable and the election dummy are never significant and the sign of the former is also inconsistent. Meanwhile, the coefficient of the bailout dummy is always insignificant and generally has a negative sign, whilst the lagged government debt ratio has a significant positive effect on the fiscal balance with the two-way fixed effects

[186] Estimating the model using first-differencing is more efficient than the fixed effects estimator when the error term is serially correlated (Wooldridge 2010).

and first-differencing estimators but its coefficient is very close to zero and not significant with the other estimation methods.

Table 6.5: Results of the main model using different estimation methods

Dependent variable = general government budget balance % of GDP						
Explanatory variables	**Two-way fixed effects**	**Pooled OLS**	**Random effects**	**One-way fixed effects**	**First-Differencing[1]**	**Fixed effects with Driscoll and Kraay corrected standard errors**
% Change in real GDP	0.008 (0.935)	0.244 (0.050)	0.251^{*} (0.028)	0.219 (0.100)	0.081 (0.383)	0.219 (0.070)
Unemployment rate	-0.447^{**} (0.003)	-0.274^{***} (0.001)	-0.393^{***} (0.000)	-0.586^{*} (0.012)	-0.914^{***} (0.000)	-0.586^{***} (0.000)
Legislative election held	0.028 (0.917)	0.273 (0.558)	0.273 (0.519)	0.256 (0.575)	0.277 (0.481)	0.256 (0.290)
Margin of majority	2.263 (0.559)	10.95^{**} (0.006)	10.26^{**} (0.005)	9.256^{*} (0.017)	7.449 (0.076)	9.256^{*} (0.020)
Government fractionalization index	0.547 (0.814)	1.701 (0.252)	0.376 (0.762)	-0.376 (0.838)	-1.501 (0.322)	-0.376 (0.750)
Government debt ratio in year *t-1*	0.066^{**} (0.005)	-0.014 (0.174)	-0.009 (0.343)	0.006 (0.693)	0.137^{**} (0.004)	0.006 (0.904)
Bailout dummy variable	-1.328 (0.553)	-0.564 (0.804)	-0.012 (0.995)	0.217 (0.910)	-1.165 (0.631)	0.217 (0.872)
Quality of budget institutions index	1.463 (0.110)	0.686 (0.141)	1.436^{**} (0.005)	2.063^{*} (0.015)	0.969^{**} (0.005)	2.063^{**} (0.009)
Legislative budgetary power index	0.646 (0.256)	1.063^{*} (0.029)	0.802 (0.064)	0.744 (0.185)	-0.352 (0.334)	0.744^{**} (0.003)
Country fixed effects	yes	no	no	yes	yes	yes
Time dummies	yes	no	no	no	no	no
Constant	-11.22^{*} (0.046)	-14.04^{**} (0.002)	-15.88^{***} (0.000)	-17.69^{**} (0.003)		-17.69^{**} (0.004)
R^2	0.551	0.480		0.352	0.220	
F	56230.1	77.29		87.20	39.28	193.3
Observations	146	146	146	146	127	146

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note:
[1] The model involves first-differenced variables. Although the variables in this model differ, the coefficients are presented in the same table for ease of comparison.

Source: Results are produced by author

6.4.2.3 Dynamic specification of the model

As discussed in Section 6.3.2, given the sample size involved, the estimation of a dynamic specification of the model involves considerable challenges. Nevertheless, for completeness, Table AXXXI in Appendix III shows the results of a dynamic form of the main model[187]. This model is estimated using the Arellano and Bond difference GMM, since this uses less instruments than the Arellano and Bover/Blundell and Bond system GMM[188].

The results show that the coefficient of the lagged budget balance is highly significant. However, there are some divergences from the results presented earlier. As regards the institutional variables, the quality of budget institutions remains positively associated with the budget balance in the dynamic specification, but it is not statistically significant, in contrast to some of the static versions of the model. There is a more conspicuous contrast in the influence of legislative budgetary power, with a negative, albeit still insignificant, coefficient in the dynamic specification of the model. Furthermore, the statistical significance of the economic control variables differs, whilst the coefficients of the government fragmentation and bailout dummy variables have the expected signs in the dynamic specification, although both remain insignificant. The magnitude of the coefficients also differs considerably between the static and dynamic versions of the model, with marked differences noted for the coefficient of the quality of budget institutions index.

6.4.2.4 Endogeneity bias due to reverse causality

As discussed in Section 6.2.1, potential endogeneity bias, due to possible feedback from fiscal developments onto budget institutions, can constitute a challenge when analysing the relationship between institutions and fiscal outcomes, but there are difficulties to address this problem in practice. However, this problem of reverse causality could be limited in this study since, as shown in Section 4.4.4 of Chapter 4, reforms to budget institutions during the period under review mainly reflected the introduction of new common EA

[187] This excludes the lagged government debt ratio from the explanatory variables because the dynamic specification of the main model does not satisfy the Arellano and Bond tests concerning the presence of autocorrelation. When the lagged debt ratio is excluded from the model, these tests are satisfied at the 10% level when using the two-step estimator, whilst the Sargan and Hansen tests of over-identifying restrictions are also met.
[188] For a discussion on the problems of a large number of instruments with these GMM estimators, see Roodman (2009).

requirements for fiscal rules and fiscal councils and can thus be considered as exogenous.

Nevertheless, drawing on Maltritz and Wüste (2015), a formal simple test for reverse causality is carried out by regressing the institutional indices on the lagged budget balance in a simple panel setting[189]. The results (presented in Table AXXXII in Appendix III) show there is no Granger causality from the lagged budget balance neither to the quality of budget institutions index nor to the legislative budgetary power index. This confirms that the endogeneity problem does not seem to be so important in this study[190].

6.4.3 Extensions to the main model

The first extension to the main model involves distinguishing between the bailed-out countries and the other EA member states, building on a similar comparison carried out for the quality of budget institutions and legislative budgetary power indices in Section 4.4.3 of Chapter 4 and Section 5.4.3 of Chapter 5, respectively. The main model is estimated separately for the two sub-samples. The second extension to the main model involves examining the influence of specific institutional characteristics on the budget balance.

6.4.3.1 Budget institutions and fiscal disciple in bailed-out and other EA countries

Table 6.6 presents the results for the group of bailed-out countries and the other EA member states, as well as for the whole sample. In view of the very small sample size for the bailed-out group, the discussion focuses on comparing the results for the non bailed-out countries with those for all the EA member states.

[189] Another test for potential endogeneity bias involves using dynamic panel estimators and including suitable lags of the levels of the endogenous variables as instruments (Baum 2006). However, this approach could not be applied due to the sample size (number of instruments exceeds the number of groups).

[190] For completeness, the same regressions with changed roles are also estimated. The results, presented in Table AXXXIII in Appendix III, show that both the quality of budget institutions index and the legislative budgetary power index exert a positive effect on the budget balance, but only the former is significant (at the 10% level). These results are largely similar to those obtained with the main two-way fixed effects static model.

Table 6.6: Results of the main model for the bailed-out countries and other EA member states

Dependent variable = general government budget balance % of GDP			
Explanatory variables	**all EA countries**	**Bailed-out countries**	**Other EA countries**
% Change in real GDP	0.008 (0.935)	-0.101 (0.637)	0.167 (0.114)
Unemployment rate	-0.447** (0.003)	-0.470* (0.039)	-0.308 (0.144)
Legislative election held	0.028 (0.917)	-1.101 (0.263)	0.052 (0.802)
Margin of majority	2.263 (0.559)	4.692 (0.688)	-0.020 (0.995)
Government fractionalization index	0.547 (0.814)	-1.491 (0.899)	-1.968 (0.287)
Government debt ratio in year *t-1*	0.066** (0.005)	-0.009 (0.937)	-0.007 (0.699)
Bailout dummy variable[1]	-1.328 (0.553)	-0.813 (0.794)	
Quality of budget institutions index	1.463 (0.110)	-3.044 (0.377)	0.381 (0.517)
Legislative budgetary power index	0.646 (0.256)	5.607 (0.179)	-0.098 (0.847)
Country fixed effects	yes	yes	yes
Time dummies	yes	yes	yes
Constant	-11.22* (0.046)	3.822 (0.658)	1.035 (0.865)
R^2	0.551	0.664	0.610
F	56230.1	.	.
Observations	146	44	102

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Note:
[1] The years when the bailed-out countries requested financial assistance and when they exited their respective programmes differs and hence, the bailout dummy variable is retained in the model for the sample of bailed-out countries.

Source: Results are produced by author

There are notable differences in the sign of some coefficients, as well as their significance and magnitude. In particular, both the unemployment rate and the lagged debt ratio lose significance in the sub-sample. Meanwhile, whilst remaining statistically insignificant, the coefficient of the margin of majority variable is much smaller in size, whilst the effect of government fragmentation turns negative, in line with *a priori expectations*. In this context, it is relevant to note that coalition governments are more prevalent among the non bailed-out countries[191].

Turning to the institutional variables, the coefficients of the quality of budget institutions index remains positive and insignificant in the sub-sample, but its magnitude is notably smaller. Legislative budgetary power also has an insignificant influence in the sub-sample, but whereas its influence is positive for all EA countries, the coefficient is close to zero for the group of non bailed-out member states. These results indicate that the weak relationship between budget institutions and the budget balance is not solely conditioned by the greater instability in the bailed-out EA countries during the period under review.

6.4.3.2 Specific institutional characteristics and fiscal discipline

As explained in Section 6.3.2, two alternative specifications to the main model are estimated to focus the analysis on particular institutional characteristics. The first alternative model involves replacing the institutional indices with the European Commission's (2017b, 2017c) fiscal rules strength and MTBF indices together with a simple dummy variable to capture the presence of an independent fiscal council. The second alternative model uses an indicator for legislative budget amendment powers instead of the more comprehensive legislative budgetary power index. These variants of the main empirical model are similarly estimated using two-way fixed effects, with the budget balance to GDP ratio as the dependent variable.

As shown in Table 6.7, the influence of the control variables is quite similar to that in the main model, except for the election dummy and the government fragmentation variable, which remain insignificant, but have the expected negative sign. Meanwhile, the MTBF and fiscal rules indices have a positive and significant effect (at the 5% and 10% level, respectively) on the budget balance. On the other hand, the coefficient of the IFI dummy is negative and

[191] Out of the thirteen non bailed-out countries, only Malta and Slovakia had single-party majority governments (and only during the post-crisis period in Slovakia), whereas within the bailed-out group, Greece, Portugal and Spain had this type of government particularly during the pre-crisis period.

not significant. Debrun and Kumar (2007a), Nerlich and Reuter (2013) and Maltritz and Wüste (2015), who also use the CION's fiscal governance indices as explanatory variables, find broadly similar results for fiscal rules and fiscal councils.

Table 6.7: Results of the two-way fixed effects model with the European Commission MTBF and fiscal rules strength indices and an IFI dummy variable

Dependent variable = general government budget balance % of GDP		
Explanatory variables	**Main model**	**Alternative Model 1**
% Change in real GDP	0.008 (0.935)	0.081 (0.227)
Unemployment rate	-0.447** (0.003)	-0.274* (0.035)
Legislative election held	0.028 (0.917)	-0.281 (0.214)
Margin of majority	2.263 (0.559)	5.403 (0.214)
Government fractionalization Index	0.547 (0.814)	-0.881 (0.620)
Government debt ratio in year t-1	0.066** (0.005)	0.035 (0.069)
Bailout dummy variable	-1.328 (0.553)	-2.109 (0.279)
Quality of budget institutions index	1.463 (0.110)	
Legislative budgetary power index	0.646 (0.256)	
European Commission MTBF index		3.391* (0.012)
European Commission Fiscal Rules Strength Index		0.516 (0.073)
IFI dummy variable		-0.678 (0.430)
Country fixed effects	yes	yes
Time fixed effects	yes	yes
Constant	-11.22* (0.046)	-7.072** (0.007)
R^2	0.551	0.569
F	56230.1	.
Observations	146	190

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Results are produced by author

The lack of influence by IFIs may reflect the fact that they constitute a relatively recent institutional development. In fact, the findings presented in Section 4.4.4 of Chapter 4 show that in various EA countries, they are young institutions, being established after the Great Crisis in response to the EA common requirements. Thus, they may have not yet become well-integrated in the countries' institutional framework, with implications for their influence on the budgetary process. Begg (2017) reaches similar conclusions on the effectiveness of fiscal councils, based on a qualitative analysis of their published assessments and of EA countries' compliance with SGP obligations during 2013-2016.

Table 6.8: Results of the two-way fixed effects model with legislative budgetary amendment powers

Dependent variable = general government budget balance % of GDP		
Explanatory variables	**Main Model**	**Alternative model 2**
% Change in real GDP	0.008	0.022
	(0.935)	(0.815)
Unemployment rate	-0.447^{**}	-0.475^{**}
	(0.003)	(0.002)
Legislative election held	0.028	-0.034
	(0.917)	(0.899)
Margin of majority	2.263	1.807
	(0.559)	(0.603)
Government fractionalization index	0.547	0.922
	(0.814)	(0.657)
Government debt ratio in year *t-1*	0.066^{**}	0.071^{**}
	(0.005)	(0.001)
Bailout dummy variable	-1.328	-0.879
	(0.553)	(0.712)
Quality of budget institutions index	1.463	1.946
	(0.110)	(0.086)
Legislative budgetary power index	0.646	
	(0.256)	
Legislative amendment powers indicator		-0.640
		(0.108)
Country fixed effects	yes	yes
Time dummies	yes	yes
Constant	-11.22^{*}	-7.090
	(0.046)	(0.208)
F	56230.1	5338.1
Observations	146	146

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Results are produced by author

In the second alternative model (Table 6.8), there are no major changes in the influence of the control variables, except that the coefficient of the election dummy is negative, but still insignificant. Moreover, the coefficient of the quality of budget institutions index remains positive and it is statistically significant at the 10% level. Meanwhile, as expected, the coefficient of the legislative budget amendment power indicator is negative, although it marginally fails to achieve significance at the 10% level. This shows that the negative influence of amendment powers on the budget balance can be offset by other aspects of legislative budgeting.

6.5 Summary of results and conclusions

This Chapter presents an empirical analysis of the relationship between budget institutions and the budget balance, using a two-way fixed effects panel data model. The results show a positive relationship between the quality of budget institutions and the budget balance, but the influence is not strong. These findings are largely confirmed when using alternative measures of the fiscal balance as the dependent variable and also when applying different estimation methods. Thus, the null hypothesis that changes in the quality of budget institutions do not affect the budget balance cannot be strongly refuted. Furthermore, the relationship between the quality of budget institutions and the budget balance is also weak for the group of EA countries that have not been bailed-out. These findings contrast with the evidence of a robust relationship between quality of budget institutions and fiscal discipline found in previous empirical studies. Moreover, the results from an alternative model using more specific institutional explanatory variables show that numerical budgetary constraints have a significant impact on the budget balance, but confirming evidence was not found for fiscal councils.

Different explanations can be put forward to interpret these findings. The lack of influence of fiscal councils may reflect the fact that they are a relatively recent institutional development in various EA countries and it may take time for these councils to establish credibility and influence on the budgetary process. This may also affect the influence of the overall quality of budget institutions index on the budget balance in the main model, since a novel feature of this index is that it also captures IFIs. Furthermore, another distinguishing aspect of the empirical analysis presented in this Chapter is the more recent timeframe which includes the Great Crisis and its aftermath. As discussed in Chapter 4, the wave of reforms to national budget institutions during this period was mainly triggered by the EA common requirements for fiscal rules and fiscal councils. They thus involved a ‘one-size-fits-all’ approach which was imposed supra-nationally, rather than nationally driven broad-based institutional reforms. Since this can affect the ‘ownership’ of these constraints, it may explain the finding that differences in national budget institutions were not a very important determinant of fiscal discipline in the EA countries during the 2006-2015 period.

As regards legislative budgeting, the results show that strong legislative budgetary power does not necessarily conflict with fiscal discipline, with a positive, but weak influence, in most of the models estimated. This result is also confirmed when different estimation methods are applied. On the other hand, in the group of countries that have not been bailed-out, the influence of legislative budgetary power is broadly neutral. Overall, the null hypothesis that legislative budgetary power does not influence the budget balance cannot be rejected. This contrasts with the mainstream view in the literature and also with the results of the few available empirical studies on this topic. These differences could reflect the more recent timeframe of the analysis. Moreover, the legislative budgetary power index used is more comprehensive, as discussed in Section 5.2.3 of Chapter 5. Importantly, the index also captures various institutional characteristics which can contribute to more budgetary restraint, such as legislative involvement in fiscal rules, MTBFs and SGP procedures. In fact, similar to other studies, stronger legislative budget amendment powers are associated with a worse budget balance, although the relationship is not statistically significant. These results thus show that democratic accountability in the budgetary process can be safeguarded without jeopardising fiscal discipline, by ensuring a broader involvement of the legislature in the different phases of the budgetary process, rather than focusing only on amendment powers during the approval stage.

Chapter 7:

Budget Institutions and Fiscal Discipline – A Case Study on Malta

7.1 Introduction

The results of the empirical analysis presented in the previous Chapter show an overall positive, but weak, relationship between the quality of budget institutions and fiscal discipline. This Chapter provides further examination of the relationship between budget institutions and fiscal discipline, using a different methodological approach, involving a case study on one of the EA countries - Malta. In view of their increased prominence in the EA fiscal governance framework, this analysis focuses on fiscal rules and fiscal councils.

In this case study, qualitative methods, namely interviews with key stakeholders in the budgetary process, are used, thus avoiding the decontextualization which characterises the econometric analysis that is generally adopted in this branch of the literature and which was similarly presented in the previous Chapter. Through this alternative approach, this Chapter aims to understand the causal process through which fiscal rules and fiscal councils affect fiscal discipline in Malta. These institutional characteristics have been introduced only recently in Malta, to comply with the common EA requirements introduced by the reforms to the SGP and the Fiscal Compact Treaty: thus, they can be considered as largely exogenous. At the same time, Malta's fiscal performance has been relatively strong in recent years: in contrast to other EA Mediterranean countries, it has not suffered from a sovereign debt crisis and its fiscal position has strengthened considerably, with a budget surplus being recorded since 2016 and the general government debt ratio falling to around 50% of GDP in 2018 (European Commission 2018b). In this context, Malta constitutes an interesting case to understand whether and how the introduction of fiscal rules and the establishment of an IFI can contribute to more fiscal restraint. Thus, this Chapter aims to address the following research question:

- Have the recently introduced national fiscal rules and fiscal council contributed to more fiscal discipline in Malta, and how?

The rest of the Chapter is structured as follows[192]: the next Section describes the political, economic and fiscal context for the case study on Malta; subsequently, the methodology applied for the case study is discussed, including the data sources, the approach used to analyse the data and ethical issues involved; the results of the case study are then presented and discussed and a summary of the findings concludes the Chapter.

7.2 Background on Malta and contribution to the literature

With an area of just 316 square kilometres and a population of around 475,000 (Government of Malta no date), Malta is the smallest member state of the EU. It is located at its southern periphery in the centre of the Mediterranean Sea. Malta gained independence from British rule in 1964 and became a republic ten years later. It joined the EU in 2004 and adopted the Euro as its currency in 2008 (Malta Tourism Authority no date).

A brief overview of the relevant political and economic context as well of recent fiscal developments follows. Subsequently, this Section focuses on budget institutions in Malta by presenting the results of a benchmarking exercise for the quality of budget institutions index developed in Chapter 4, complemented by a review of the very scant literature on Malta's budget institutions. This Section then closes off by outlining the contribution to the literature of the case study analysis presented in this Chapter.

7.2.1 Political and economic context and recent fiscal developments in Malta

Malta is a representative parliamentary democracy, with the prime minister as head of government[193] (European Commission 2019a). Its political system is dominated by the Nationalist and Labour parties, with only these two parties being represented in parliament since 1971 (Organisation for Security and Co-operation in Europe 2017). Partisan rivalry is high and several general

[192] The relevant literature underpinning the case study presented in this Chapter is reviewed in the context of the theoretical framework based on a simple model of the budgetary process in EA countries, presented in Chapter 3, and in the discussion on the quality of budget institutions in Chapter 5.
[193] The president, who is not elected, is the head of state, but this role is largely ceremonial.

elections were won by a small margin of votes[194]. As a result, and also reflecting the very organised popular base of these political parties, there is a near universal turnout of 90% or more for general elections (University of Malta no date), even though voting is not compulsory. In this polarised two-party majority system, the executive dominates the political system, whilst parliament, as an independent institution, is weak (Bulmer 2014). Furthermore, Malta adopts a single transferable vote electoral system which empowers voters not only to choose the political party which will govern the country but also their representatives in parliament by ranking their preferred candidates (Cini 2002). The relatively small thirteen districts used for general elections facilitate a close and often personal contact between the candidates and the voters, which encourages clientilistic competition among the political candidates (Bulmer 2014). In this scenario, short-term, electoral considerations are more likely to influence fiscal policy making, as also acknowledged by the MFIN's (2013) economic assessment for strengthening Malta's fiscal framework.

As regards Malta's economy, this is characterised by a high degree of openness[195]. It is a service-oriented[196] economy, based on tourism as well as other sectors, such as financial services and online gaming activities (Economic Policy Department 2018). Since 2013, economic growth has been robust, at around 5% per annum or higher (Eurostat 2018b), whilst unemployment has fallen to historically low levels (around 4% in 2017) (Eurostat 2018c).

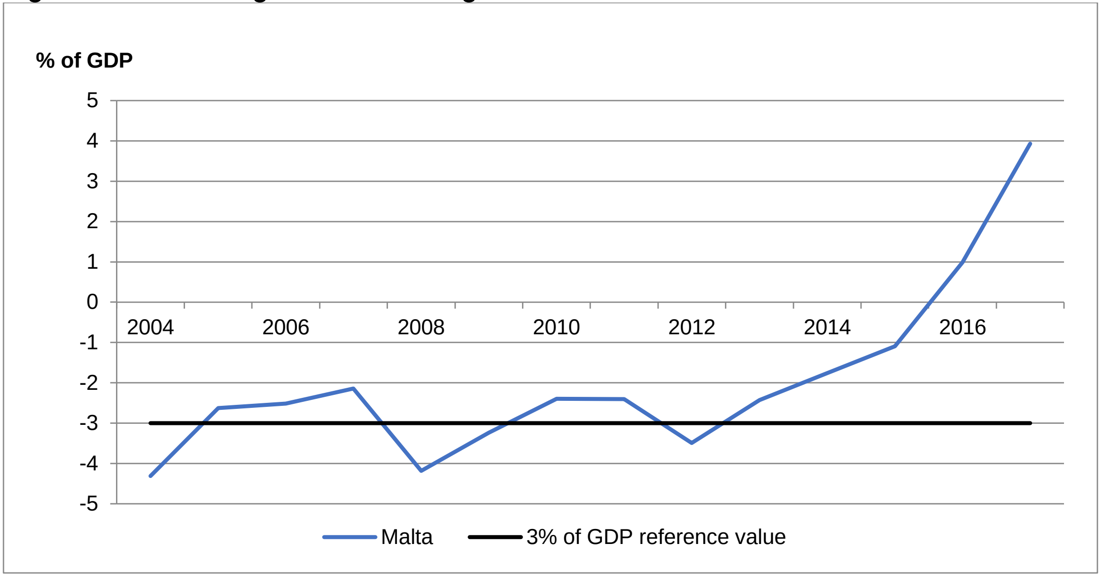
[194] Between 1971 and 2008, the difference in the share of first-count votes between the two main political parties was on average around 3 percentage points, corresponding to around 7,500 votes. The gap was narrowest in the 2008 election at just 0.5 percentage points (around 1,500 votes). In contrast, the Labour Party has won the last two general elections, in 2013 and 2017, with a historically large margin of around 11 percentage points, corresponding to around 35,000 votes (University of Malta no date).

[195] Both exports and imports of goods and services amount to over 100% of GDP (Eurostat 2018b).

[196] Service activities accounted for around 85% of gross value added in 2017 (Economic Policy Department 2018).

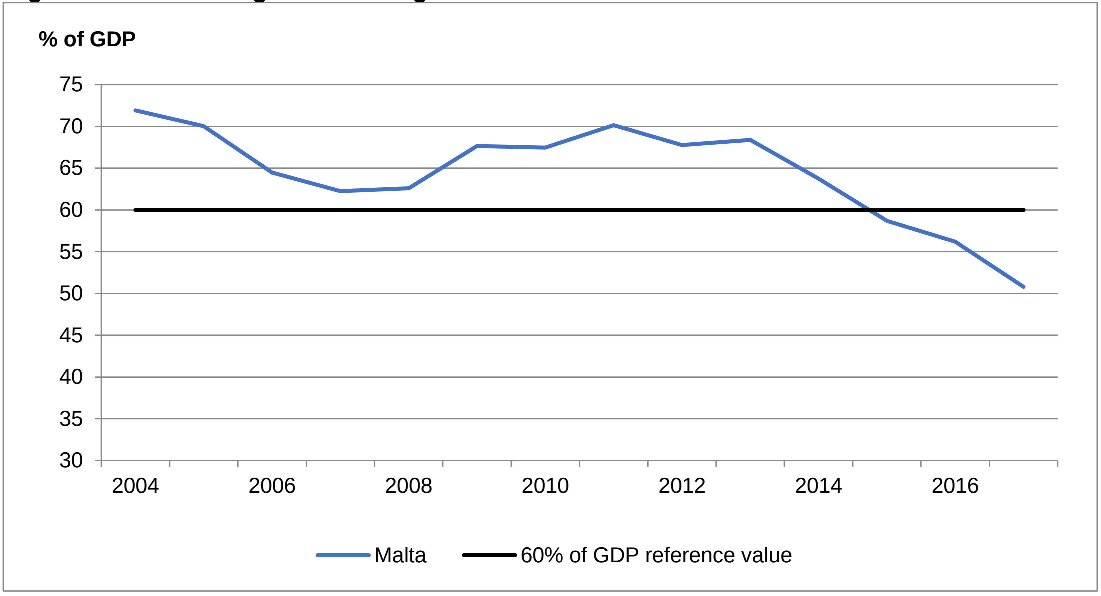
Supported by the strong economic growth as well as new non-tax revenue sources[197], Malta's fiscal balance has improved markedly in recent years (Figure 7.1).

Figure 7.1: General government budget balance - Malta



Source: European Commission (2018b)

Figure 7.2: General government gross debt - Malta



Source: European Commission (2018b)

[197] Most notably the Individual Investor Programme, which allows individuals to obtain Maltese citizenship in return for major investments in the economy: in 2017, revenues from this scheme amounted to around 2% of GDP (IMF 2018b).

Since EU accession, Malta was subject to consecutive EDPs[198], but since 2016, a budget surplus has been recorded, with the MTO of a balanced budget in structural terms[199] being over achieved (Ministry for Finance 2018a). Figure 7.2 shows similar developments in the debt trajectory: after exceeding the 60% of GDP reference value consistently during 2004-13, the general government debt ratio has followed a rapid downward trend, reaching around 50% of GDP by 2017.

7.2.2 Budget institutions in Malta

Data on the quality of budget institutions in Malta is very scarce, with most of the quality of budget institutions indices available capturing either the EU15 countries or the ten CEECs (see Section 4.2 of Chapter 4). CION's (2017e) fiscal governance databases[200], together with Horvath's (2018) fiscal councils indices, constitute recent exceptions[201].

CION's fiscal governance indices show a marked strengthening of fiscal rules in recent years, as well as some improvement in the MTBF for Malta. Among the 19 EA countries, Malta's ranking in the fiscal rules strength index increased from around 18th until 2013 to 10th as from 2015, whilst its rank in the MTBF index fluctuated between 5th and 6th in recent years, from 8th in 2008. Furthermore, Malta's fiscal council - the Malta Fiscal Advisory Council (MFAC) - ranks 4th among the EA member states in terms of the tasks carried out as measured by CION's scope of IFIs index. However, it ranks lower (16th) in Horvath's (2018) broader index which includes also the fiscal councils' organisational capacity and other characteristics.

Horvath (2018) also reports that Malta's IFI is among the eight (out of a sample of twenty) who lack widespread political support and who are not strongly

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[198] In 2004-07, 2009-12 and 2013-15 (European Commission 2019b).
[199] The structural balance corresponds to the "cyclically-adjusted budget balance net of one-off and temporary measures" (Gilles et al. 2013: 7).
[200] CION's fiscal governance indices reviewed in this Chapter refer to 2016 and are based on a new methodology, published in 2017. Hence, they are not comparable to the CION data included in the quality of budget institutions index, presented in Chapter 4 and that used in the empirical analysis, presented in Chapter 6.
[201] Schaechter et al. (2012) and Maltritz and Wüste (2015) produce indices for fiscal rules and fiscal councils, respectively, also for Malta, but the scores for these indices are not publicly available. Darvas and Kostyleva (2011) also include Malta in their sample but their budget institutions index is based on the OECD's 2007/8 survey on budget practices and procedures.

rooted in national institutions. In addition, based on a qualitative assessment of fiscal councils in EU countries, Begg (2017) uses Malta as an example to criticise fiscal councils for using qualifying language and ignoring minor deviations from fiscal rules in their assessments to give a clean bill of health to their respective governments. More generally, in their assessment of the influence of politics on public expenditure in Malta, Mullard and Pirotta (2008) emphasise the role of the clientelist perspective which characterises Maltese politics. They also highlight resource constraints within MFIN and also the personal relationships which affect the nature of budget negotiations with spending ministries. However, this research refers to 1996-2001 and is thus rather dated.

Given the scant literature on Malta's budget institutions, a more comprehensive assessment is carried out by benchmarking its performance vis-à-vis the other EA countries, using the quality of budget institutions index developed in Chapter 4.

7.2.2.1 Quality of budget institutions in Malta

Malta's overall score in the quality of budget institutions index of 5, out of a maximum of 10, is the lowest among the EA countries. As shown in Figure 7.3, Malta has the minimum score in the budget approval process, as the legislature has unrestricted formal amendment powers, it also does not first vote on the total amount of expenditure before voting on specific appropriations and furthermore, it is the only EA country without a parliamentary budget committee in place. It also has the lowest score for budget transparency: in particular, it does not require legislative authorisation for off-budget expenditures and contingent liabilities.

On the other hand, Malta has a medium score[202] in all the other sub-indices comprised in the quality of budget institutions index. It ranks 6th (together with three other countries) in the budget negotiations sub-index, showing relatively strong characteristics of the delegation form of fiscal governance, in particular

[202] In Chapter 4, EA countries were categorised into three groupings according to their scores in the quality of budget institutions index (top, medium and low score categories, corresponding to the top, second and third, and bottom quartiles, respectively).

with bilateral negotiations between MFIN and spending ministries and the imposition of budget ceilings on overall spending requests by line ministries. Whilst Malta ranks 12th (together with another country) in the budget implementation sub-index, this reflects its poor performance in the supplementary budget indicator. On the other hand, the finance minister has a relatively strong position during budget execution, with medium scores for executive authority to cut or cancel spending, but also to increase it, and a top score for the possibility of line ministers to re-allocate funds within their own budget envelopes.

Figure 7.3: Quality of budget institutions sub-indices – Malta benchmarking exercise

Source: Results are produced by author

Furthermore, in the aspects of budget institutions involving common EA requirements, namely the MTBF, fiscal rules and IFI sub-indices, Malta ranks between 11th and 13th, respectively. Strong aspects of the national MTBF include its broad coverage and the monitoring and enforcement of the multi-annual budgetary targets. On the other hand, the MTBF is not discussed or voted upon by parliament and the connectedness between the SP and the annual budget can be improved. Meanwhile, fiscal rules have a broad coverage, there is lack of flexibility for revising the objectives and they are monitored and enforced by an independent body (the fiscal council). But the fiscal rules fare weakly in terms of enforcement and correction mechanisms and they have been only recently introduced (in 2014). Turning to Malta's fiscal council, this also constitutes a recent development, being established in 2015. Particularly weak features concern the small size of its staff and the fact that it does not generate its own forecasts. On the other hand, it performs quite well in terms of its independence and also regarding access to information and the number and variety of published reports.

Overall, this analysis shows that Malta has characteristics of the delegation approach in the budget formulation and implementation stages. At the same time, it fares broadly on par with the average for the EA in terms of the recently introduced fiscal rules and fiscal council.

7.2.3 Contribution to the literature

The case study on Malta presented in this Chapter contributes to the literature on budget institutions in two important manners: firstly, through its methodological approach and secondly through its focus on Malta.

As discussed in Chapter 6, the literature on budget institutions is based on a quantitative approach, with numerical composite indices to measure the quality of budget institutions and regression analysis to assess its influence on fiscal discipline. The case study presented in this Chapter provides an alternative qualitative methodological approach, which enables a more in-depth and contextual analysis of how budget institutions affect fiscal discipline.

Moreover, this Chapter also provides a contribution to the literature on budget institutions through its geographical focus. As noted earlier, the literature on Malta's budget institutions is very sparse and some of the few available studies are quite dated. Thus, this case study adds to the knowledge on budget institutions in the EA, by providing an in-depth analysis on one of the member states which has been largely ignored in this branch of the literature. Finally, the case study also involves unique data generated from detailed interviews to a broad range of key stakeholders in Malta's budget process.

7.3 Methodology: case study on Malta's budget institutions and fiscal discipline

Like the empirical analysis presented in the previous Chapter, this Chapter also involves explanatory research analysing the relationship between budget institutions and fiscal discipline. However, it is based on a different methodological approach involving a qualitative case study. The research presented in these two Chapters complement each other and together they provide a more thorough analysis of the phenomenon of interest. Thus, whilst the previous Chapter provides estimates of the causal effect of budget institutions on the budget balance for the EA, the case study analysis is focused on Malta and aims to understand the causal mechanisms involved, taking into account the broader political and institutional context within which the budgetary process takes place.

This Section starts by presenting the case study approach, justifying the focus on Malta and discussing the philosophy underpinning this research component. Subsequently, the research methods used to compile the case study are explained, namely interviews and documentary evidence. This is followed by a discussion on the thematic coding approach used to analyse the data, whilst a review of the ethical issues involved closes off the Section.

7.3.1 Research design: case study on Malta and philosophy of research

Robson (2011: 136) defines a case study as

> "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence".

Case studies are appropriate when the research aims to explain how or why some phenomenon works (Yin 2009). Hence this research design is applied to address the aim of this Chapter, which is to understand how budget institutions affect fiscal discipline.

Although case studies do not constitute the prevalent approach in the literature on budget institutions, their relevance has been noted by, amongst others, Alesina and Perotti (1999), Poterba and von Hagen (1999) and more recently, Horvath (2018) for fiscal councils. Examples of recent case studies on budget institutions in EA countries include Stienlet (2000) and Lebrun (2009) for Belgium, with the latter focusing on the role of IFIs, whilst Hauptmeier et al. (2007) and Wanna et al. (2010) present case studies on budgetary reforms in Ireland, Finland, Belgium, the Netherlands and Spain, amongst others.

Through case study research, it is possible to acquire a holistic view of the phenomenon being studied (Noor 2008) and multiple sources of evidence can be used. This enables a process of triangulation and corroboration (Yin 2009). The methodological rigour of case study analysis can be assessed on the basis of its construct, internal and external validity and its reliability (Yin 2009). Table 7.1 shows a similar analysis for the case study presented in this Chapter, drawing on the frameworks used by Riege (2003) and Gibbert et al. (2008).

A single case study presents certain analytical disadvantages compared to a multi-case design, since it precludes comparative analysis and the replication logic cannot be applied (Yin 2009). However, depending on the selection of the case, a single case study can still make a significant contribution to knowledge and theory (Flyvbjerg 2006). The focus on Malta for this case study was motivated by the introduction of national fiscal rules and the establishment of an independent fiscal institution in 2014 and 2015, respectively[203] and the recent positive turnaround in the public finance situation, as shown in Section 7.2.1. Furthermore, these institutional reforms involve characteristics of the contracts approach, whilst Malta has a predominantly delegation form of fiscal governance (see Figure 4.13 in Chapter 5). In this context, it is relevant to analyse whether and how fiscal rules and the fiscal council are affecting fiscal discipline in Malta. Finally, these institutional developments were largely triggered by the common EA requirements introduced after the Great Crisis and thus can be considered as largely exogenous. As pointed out by Alesina

[203] Furthermore, being Maltese, the author is familiar with and has a personal interest in these institutional developments.

and Passalacqua (2015: 58), such historical case studies characterised by a "natural experiment" of exogenous reform constitute a particularly useful avenue for research on budget institutions.

Table 7.1: Assessing methodological rigour in the case study on Malta's budget institutions

Criteria	Aim	Measures adopted
Construct validity	Correct operational variables for the theoretical concepts being researched	Multiple sources of evidence, including interviews with different stakeholders in Malta's budgetary process, and documentary evidence Clear chain of evidence – detailed explanation of data collection process and procedures applied to analyse the data; ample citations used to support the analysis[1]
Internal validity	Robust causal relationships	Comparison of observed patterns in the collected evidence to theoretical predictions based on the model developed in Chapter 3 Use of diagrams to assist explanation building Seeking rival explanations by taking into account other factors that could potentially affect fiscal discipline as well as mitigating factors
External validity	Results account not only for phenomena in the setting of the case studied but in other settings as well Analytical generalisation - from empirical observations to theory, instead of statistical generalisation - to population (Yin 2009: 15)	Focus on Malta explained and relevant context for case study provided As suggested by Hays (2004), the data analysis seeks to uncover new and unusual interactions between budget institutions and fiscal discipline, which could be relevant to other EA countries
Reliability	Absence of random error; subsequent researchers can reach the same insights if they repeat the study and follow the same steps	Transparency – careful documentation of evidence and clear research procedures

Note:
[1] It was not possible to enhance construct validity by having the transcripts reviewed and the findings validated by academic peers or key participants, due to constraints in the availability of academics in Malta with relevant expertise and the busy schedules of interviewees. These constraints also hindered the possibility to carry out piloting of the interviews.

Source: Compiled by author, drawing on Yin (2009), Riege (2003) and Gibbert et al. (2008)

7.3.1.1 Philosophy of research

Whilst the research presented in the previous three Chapters involves a quantitative approach based on post-positivism, the qualitative case study research presented in this Chapter adopts a different epistemological position based on a realist perspective. Drawing on Sayer (1992), a qualitative causal and structural analysis of budget institutions is carried out to identify underlying mechanisms and understand their influence on fiscal discipline, within Malta's economic, political and institutional context. This research design is inductive in nature and aims to discover and build theory rather than to test theory through analytical generalisations (Riege 2003).

Moreover, the case study presented in this Chapter constitutes a departure from objectivism, which characterised the previous components of this study. Whilst not going as far as constructionism, where researchers assign meaning and present their own account of reality (Bryman 2016), the ontological position behind the case study emphasises the multiple perspectives of the different stakeholders in the budgetary process.

7.3.2 Research methods: data sources and analysis

This case study uses two main data sources: interviews, which are discussed in more detail below, and documentary evidence. Regarding the latter, various secondary sources are used, namely fiscal reports and documents published by Malta's MFIN, the MFAC and EU institutions, as well as legislative acts and transcripts and minutes of relevant parliamentary sittings[204]. These documents refer to the period from 2013 until the cut-off date for the case study of 30 June 2018, thus capturing the introduction of the budgetary reforms and the first few years of their implementation. A list of all the secondary sources used in the case study is provided in Table AXXXIV in Appendix IV.

7.3.2.1 Interviews

Interviews constitute one of the most important source of case study information (Yin 2009). This case study uses interviews with key high-ranking officials and politicians involved in the budgetary process in Malta. The participants were selected by purposive sampling, based on their expertise and experience on the budgetary process in Malta. Gaining access to such elite interviewees[205] can be difficult (Mikecz 2012), but this was facilitated by the author's previous career at MFIN[206]. Furthermore, snowballing techniques helped to ensure that the sample is comprehensive. In all, 28 potential

[204] Since both Maltese and English are official languages in Malta, most of these documents are available in English; quotes from the few documents which are available only in Maltese were translated into English by the author.
[205] The interview participants are senior and professional officials and current or former members of parliament and hence exhibit characteristics of elite interviewees as defined by Harvey (2011) and Mikecz (2012), such as power and ability to exert influence, professionalism and high level of skills.
[206] During 1994-2010, the author worked at the Economic Policy Department (EPD), within MFIN.

participants were invited to participate in the research and the participation rate was of around 85%.

As shown in Table 7.2, the participants involve officials directly involved in the budgetary process, namely from MFIN, parliament and the MFAC as well as from external stakeholders, namely the Central Bank of Malta (CBM) and the CION. At least two participants from each institution were interviewed. These participants are senior officials (having at least a grade of Manager or Director) or professionals with five or more years working experience. In addition, interviews were also held with current or previous members of parliament, selected on the basis of their expertise and experience in budgetary matters, with equal representation from the two main political parties. This sample of 24 participants enabled confirmatory data to be obtained for most of the issues of interest from more than one participant and resulted in a unique and comprehensive dataset. Moreover, the multiple sources used reduce the risk of bias, thus improving the validity of the data generated. The interviews were held by the author between August and December 2016. All but one interview were held face-to-face with the participants in Malta[207]. As indicated in Table 7.2, three interviews were held jointly with other participants from the same institution on their request: although this could have led to less disclosure, given the limited number of potential participants, this option was preferred to excluding them from the sample.

The interviews were semi-structured, thus offering flexibility which was important given the diverse background of the participants. At the same time, having established general topics for discussion enabled more control during the interviews, which can be particularly useful when interviewing elites (Odendahl and Shaw 2002). The use of open-ended questions contributed to the richness of the data. They are also more appropriate when interviewing elites who generally like to articulate their views (Aberbach and Rockman 2002). The interview questions were derived from the theoretical model of the budgetary process developed in Chapter 3 and the literature on budget institutions reviewed in Chapter 4. The questions largely concern the role of

[207] A telephone interview was held with one participant who is not based in Malta and who was not planning to be in Malta in the foreseeable future.

fiscal rules and the fiscal council during the three stages of the budgetary process, namely budget preparation, approval and implementation. A copy of the interview guide is included in Appendix IV.

Table 7.2: Interview Participants

<table>
<tr><th>Institution</th><th>Number of participants</th><th>Identifying code for interviews[1]</th></tr>
<tr><td>Ministry of Finance
- Budget Office
- Economic Policy Department
- Permanent Secretary’s Office</td><td>6</td><td>MFIN1, MFIN2, MFIN3, MFIN17[2], MFIN19</td></tr>
<tr><td>Parliament officials
- Office of the Speaker
- Office of the Clerk of the House</td><td>6</td><td>PARL9, PARL10, PARL12[3], PARL22</td></tr>
<tr><td>Malta Fiscal Advisory Council</td><td>2</td><td>MFAC4, MFAC6</td></tr>
<tr><td>Central Bank of Malta[4]
- Economics and Research Department</td><td>2</td><td rowspan="2">EXT5, EXT7, EXT13[5], EXT14, EXT16</td></tr>
<tr><td>European Commission
- European Representation in Malta
- Directorate General for Economic and Financial Affairs</td><td>4</td></tr>
<tr><td>Politicians
- Two ex-members of parliament
- Two current members of parliament
(two from the Labour Party, currently in office, and two from the Nationalist Party, currently in opposition)</td><td>4</td><td>POL8, POL11, POL15, POL21</td></tr>
<tr><td>Total</td><td>24</td><td></td></tr>
</table>

Notes:
[1] Participants are identified on the basis of their institution. The number in the code refers to the order in which participants were contacted.
[2] Joint interview with two participants.
[3] Joint interview with three participants.
[4] The participants from the CBM requested that their responses are not identified as originating from the Bank and hence they were grouped with the participants from CION and identified as external stakeholders.
[5] Joint interview with two participants.

Source: Produced by author

Most of the interviews were conducted in Maltese[208], but they were translated and transcribed by the author into the English language. All interviews were transcribed from audio-recordings, except two, where the transcripts are based on the notes taken during the interviews since the participants involved did not grant consent to audio-record the interviews.

[208] Only four interviews were held in English, three of which involved non-Maltese participants from the CION.

7.3.2.2 Data analysis: thematic coding

A thematic coding approach was used to analyse the data compiled for the case study. The coding of the data was inductive, emerging from the data, with no predefined set of coding categories, and was carried out manually and using Microsoft Word. This was manageable given the amount of data involved and was preferred since it provided an opportunity for deeper engagement with the data, whilst also avoiding the time required to become familiar with the software in a specialist computer package.

The first step in the data analysis process involved disassembling the data through “open coding” (Ezzy 2002: 86). The text was analysed line by line, meaningful chunks of text were identified and given “descriptive codes” (King and Horrocks 2010: 152). Subsequently, “interpretative coding” (Hesse-Biber and Leavy 2010: 311) was carried out: this involved an iterative process of systematically grouping the data with the same or similar descriptive codes and redefining and merging codes under core thematic headings, which have general analytical relevance, also outside the setting of the text itself. During the coding process, memos were used to record thoughts on the interpretation and relationships of the data. Table AXXXV in Appendix IV shows examples of how the descriptive codes and the analytical categories were derived from the interview data. Finally, the analysed data was re-assembled, with quotes from different texts relating to the same analytical category grouped together. Patterns in the full dataset were noted, by making comparisons across participants, whilst also noting the frequency of occurrences and identifying linkages across the themes. Particular attention was applied to ensure that the data is internally consistent and to identify any possible negative instances, whilst also adopting a critical approach to identify any other potential determinants of fiscal discipline. From this data analysis, thematic maps were drawn up to develop the research narrative from the identified themes (see Figures 7.4, 7.5 and 7.6 in Section 7.4).

Being more subjective, qualitative research requires “reflexive practice”, whereby the researcher carries out self-examination on how the findings are produced (Mason 1996: 164). The author’s past work experience at the MFIN contributed to an environment of trust and respect during the interviews. At the same time, similarly to the experience of Mikecz (2012) when interviewing elites in Estonia, the author, being a member of the academic staff of the University of Malta since 2010, was considered as an outsider by participants, which facilitated a frank and open discussion.

7.3.3 Ethical issues

This Section discusses ethical issues concerning the data generated from the interviews. The secondary sources used in the case study involve publicly available documents and thus do not involve any particular ethical concerns.

Approval to carry out the interviews was granted by the Chair of the Humanities, Social and Health Science Research Ethics Panel at the University of Bradford on 17th June 2016[209]. The procedures specified in the ethics application form were followed to carry out the interviews and to generate and store the primary data.

Participants were invited to participate in the research through an email, to which the participation information sheet was attached (a copy is provided in Appendix IV). Since written consent could have made the interviews more official and potentially discouraged participation, instead, verbal informal consent was obtained from the participants at the beginning of the interview. Before the start of the interview, participants were also asked permission to audio-record the interview.

The participants in the interviews do not constitute particularly vulnerable individuals and the data produced does not involve private information. However, since the participants involve high-ranking officials and politicians, the interviews were held on a confidential basis. It was not possible to gather the data through completely coded data collection techniques. Nevertheless, the names and official positions of the participants are not revealed and they are not otherwise identified, also when disseminating the research results and in future publications. Instead, participants were allocated a code, based on

[209] This also covered the carrying out of questionnaires to national authorities in the 19 EA countries, as discussed in Section 5.3.2 of Chapter 5. A copy of the ethics application form is included in Appendix II.

their institution (see Table 7.2) and the data generated from the interviews is stored securely and separately from the participants' details. Having at least two participants from each institution further reduces the risk that statements are attributed to specific individuals. Furthermore, to guarantee confidentiality, no reference is made to any potential personal, contextual identifiers and for this reason, the transcripts of the interviews are not being included in the Appendices. The interviewees were informed about these confidentiality issues through the participant information sheet.

Most interviews took between 45 and 55 minutes, but participants were free to speak for longer if they wished, whilst interviews with participants with more limited involvement in the budgetary process generally took less time. The length of the interviews varied from a minimum of 20 minutes to a maximum of one hour and 45 minutes. Given the busy schedules of the participants, the time required to participate in the interviews may have constituted an inconvenience. Thus, participants were offered flexibility to choose a date and time for the interview and also where to hold the interview, with most of them preferring to be interviewed at their work office[210].

Finally, although the author had previous working relationships with several interviewees, there was no longer any power relationship with the participants when the interviewees were held.

7.4 Results of the case study analysis

This Section first provides an overview of the Fiscal Responsibility Act (FRA) (Cap.534), which introduced fiscal rules and provided for the establishment of the fiscal council. Subsequently, the findings on how fiscal rules and the fiscal council affect fiscal discipline are presented and discussed. This discussion identifies the main transmission mechanisms involved as well as any mitigating and other relevant factors during the budget preparation, approval and implementation stages.

[210] One interview was held at the author's office at the University of Malta upon the participant's request. Three participants who worked abroad were interviewed during their work-related visits to Malta, with the interviews being held in public places.

7.4.1 The Fiscal Responsibility Act

The enactment of the FRA in 2014 implemented the requirements of the 'Six-Pack' and 'Two-Pack' legislations and of the Fiscal Compact Treaty. It introduced national fiscal rules targeting the budget balance and the government debt ratio. The FRA also provided for the establishment of the MFAC, with responsibility, amongst other tasks, to assess the macroeconomic and fiscal forecasts prepared by the MFIN and to assess whether the fiscal stance is compliant with the fiscal rules and the obligations emanating from the SGP[211]. The members of the MFAC are appointed by the Minister for Finance (Article 48(4)), but the FRA includes other provisions to ensure its independence, such as requiring a parliamentary resolution for removing members of the council from office (Article 50) and through a budgetary safeguard (Article 55).

The Act also provided for the formal establishment of a medium-term fiscal plan and a DBP to comply with the relevant SGP provisions. At the same time, the FRA also includes other nationally-driven provisions involving more power to MFIN during budget negotiations with spending ministries and more control over public expenditures during budget implementation; the introduction of a contingency reserve as well as improved in-year monitoring and the preparation and publication of half-yearly and annual reports by the MFIN, which are also required to be assessed by the fiscal council. Table AXXXVI in Appendix IV shows the main budgetary reforms introduced by the FRA together with the relevant EA requirements, where applicable.

Subsequently, minor amendments to the FRA were enacted in March 2018[212], to ensure the full transposition of Council Directive 2011/85/EU (MFIN 2018a). Moreover, the enactment of the Government Borrowing and Management of Public Debt Act (Cap. 575) in 2017, amongst other provisions, limits government's borrowing to the debt burden implied by the fiscal rules (Article

[211] The MFAC was formally set up in January 2015 (Malta Government Gazette 2015, Notice no.33).
[212] Act No. VII of 2018, An Act to implement Budget measures for the financial year 2018 and other administrative measures.

11) and also introduces a legal framework for government guarantees (Articles 40-52), although the latter has not yet come into effect[213].

7.4.2 The influence of fiscal rules and the fiscal council during budget preparation

The budget formulation stage comprises two important processes: the generation of the budgetary forecasts and the setting of the budgetary targets. The latter involves negotiations between the MFIN and the spending ministers over their budgetary allocations.

7.4.2.1 Generation of budgetary forecasts

Overly-optimistic forecasts can delay the implementation of the necessary fiscal consolidation measures (Frankel and Schreger 2013), which highlights the importance of prudent and realistic budgetary forecasts. The MFIN produces two main rounds of forecasts, in Spring – for the SP[214] – and in Autumn – for the DBP and the annual budget. Whilst the macroeconomic forecasts underpinning the fiscal projections are produced by the EPD based on their econometric models, the Budget Finance Directorate is responsible for the generation of the fiscal forecasts (MFAC 2015a, 2015b).

The FRA (Article 13(3)(a)) requires that MFIN's macroeconomic and fiscal forecasts are assessed by the MFAC. In this respect, Malta is one of the few EA countries that goes beyond the EA obligations which only require that the macroeconomic forecasts are endorsed by an independent institution[215] (EXT16 2016, pers. comm., 20 October: 4-5). Reflecting this legal requirement, one participant highlighted that: "we cannot afford that our forecasts are not endorsed" (MFIN2 2016, pers. comm., 2 September: 9) and another interviewee explained that:

> "there were instances where we changed our forecasts after a discussion with the fiscal council" (MFIN3 2016, pers. comm., 6 September: 23).

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[213] Legal Notice 216 of 2017.

[214] As from 2016, the cover page of the Update of the SP clearly indicates that this constitutes the medium-term fiscal strategy for Malta, which is required by Article 15 of the FRA.

[215] Article 4(4), Regulation (EU) No 473/2013.

Up to now, the MFAC has always endorsed both the macroeconomic and fiscal forecasts produced by MFIN[216].

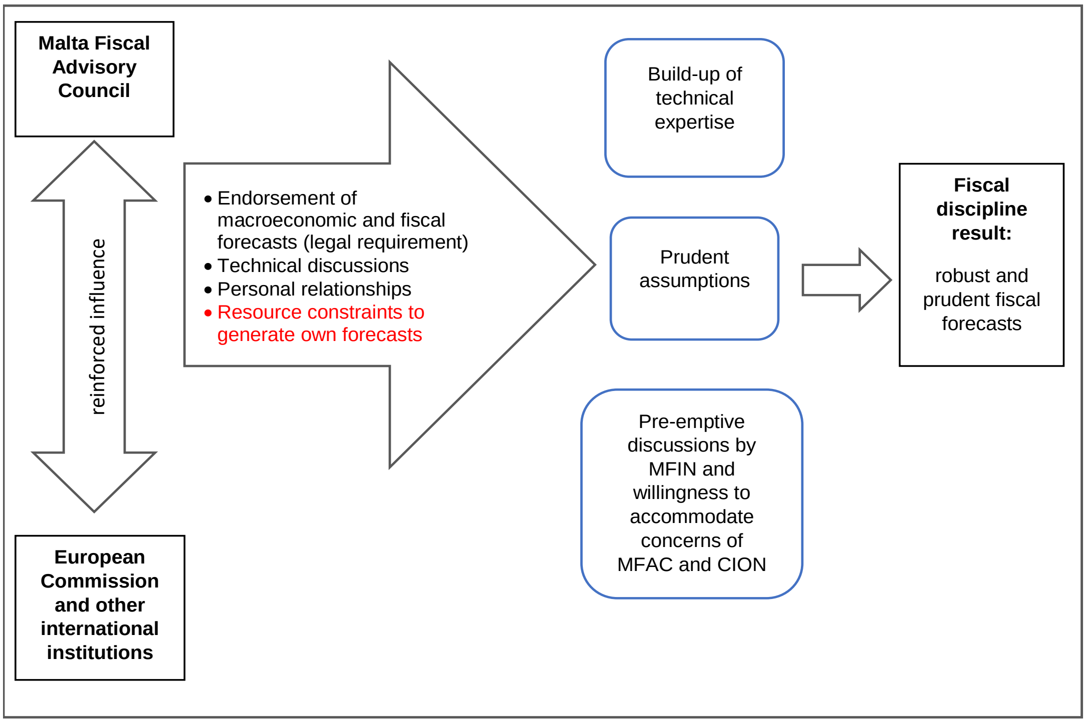
The MFAC assesses the forecasts qualitatively, by reviewing the forecasting methodologies applied, analysing the assumptions underpinning the forecasts and comparing them with forecasts by other institutions (MFAC 2018a, 2018b). Some participants argued that the influence of the MFAC would be stronger if it generated its own forecasts, but this is not possible with the available resources[217] (MFAC4 2016, pers. comm., 7 September: 14; EXT7 2016, pers. comm., 26 September: 10). As a young institution, the MFAC's influence is also limited due to its low media visibility (MFAC6 2016, pers. comm., 20 September: 14). Nevertheless, despite these challenges, overall the participants judged positively the work of the fiscal council (for example, EXT5 2016, pers. comm., 9 September: 5).

As shown in Figure 7.4[218], the fiscal council's influence on the budgetary forecasts is enhanced through interaction with other stakeholders, in particular the CION which produces forecasts for all EU countries bi-annually[219]. As with the fiscal council, MFIN adopts a pre-emptive strategy with the CION, discussing its forecasts before they are published and trying to avoid any major differences between them (MFIN1 2016, pers. comm., 25 August: 11). Furthermore, the CION notes the forecast assessments and other reports published by the fiscal council and also holds meetings with them during their forecast missions to Malta (MFAC4 2016, pers. comm., 7 September: 8) and this strengthens the influence of the MFAC. Similar effects result from

[216] The MFAC's assessments of the macroeconomic and fiscal forecasts prepared by the MFIN during 2015-18 are available at: https://mfac.org.mt/en/publications/Pages/Publications.aspx.
[217] In particular, due to the small size of the council: the MFAC consists of a chairperson and two council members and employs three economists and an administrative secretary (MFAC 2018c).
[218] In Figures 7.4, 7.5 and 7.6, the arrows indicate the relevant characteristics of budget institutions which affect fiscal discipline, whilst the rounded blue text books indicate the underlying transmission mechanisms through which these characteristics affect fiscal discipline. Text in red denotes mitigating characteristics/transmission mechanisms.
[219] Further details on the CION's forecasts are available at: https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts_en.

interactions between the MFAC and other international institutions, namely the IMF during its annual Article IV missions[220], and credit rating agencies[221].

Figure 7.4: The influence of the fiscal council – generation of budgetary forecasts



Source: Figure drawn by author

The additional scrutiny on the forecasts has increased the pressure on MFIN to ensure that its forecasts are technically robust: for instance, referring to officials from the EPD, a participant noted that "they are also always improving their econometric model" (MFAC4 2016, pers. comm., 7 September: 4). Personal relationships between officials from MFIN and the MFAC may have exacerbated this effect, with one participant stating that the Ministry officials want to ensure that their forecasts are endorsed by the MFAC also "for their pride" (MFAC6 2016, pers. comm., 20 September: 8). As discussed in Section 4.4.5 of Chapter 4, personal relationships are a typical characteristic of small public administrations. In the local context, this characteristic was also noted by Mullard and Pirotta (2008) during budget negotiations between the MFIN and spending ministries.

[220] During the Article IV missions, an IMF team of economists visits a country to assess economic and financial developments. Further information is available at: https://www.imf.org/external/about/econsurv.htm.
[221] Details of the MFAC's meetings with officials from the CION and other international institutions are available in its Annual Reports (see, for example, MFAC 2017:17).

Furthermore, various participants argued that the MFAC's assessments have resulted in more prudent assumptions being adopted to generate the forecasts (for example, EXT7 2016, pers. comm., 26 September: 14; EXT13 2016, pers. comm., 14 October: 5). Participants from MFIN also acknowledged this:

> "when you are being scrutinised, you are more cautious, ensure that the assumptions are realistic" (MFIN2 2016, pers. comm., 2 September: 7)

and it was pointed out that the Ministry is being

> "cautious on two aspects – both on the side of the macro and also in terms of elasticities" (MFIN3 2016, pers. comm., 6 September: 26).

Indeed, a comparison of the MFIN's and the CION's forecasts (see Table AXXXVII in Appendix IV) shows that these forecasts were very close to each other in recent years.

7.4.2.2 Setting the budgetary targets

As shown in the timeline presented in Appendix IV, MFIN presents its budgetary targets in April in the SP and in Autumn in the DBP and the annual budget. Although the annual budget is prepared in a medium-term context and there are only minor, if any differences in the fiscal targets (MFIN1 2016, pers. comm., 25 August: 4; EXT5 2016, pers. comm., 9 September: 1), as clearly stated by one of the participants:

> "the budget exercise is the one that sets the tone for the Stability Programme, not the other way round" (EXT5 2016, pers. comm., 9 September: 2)[222].

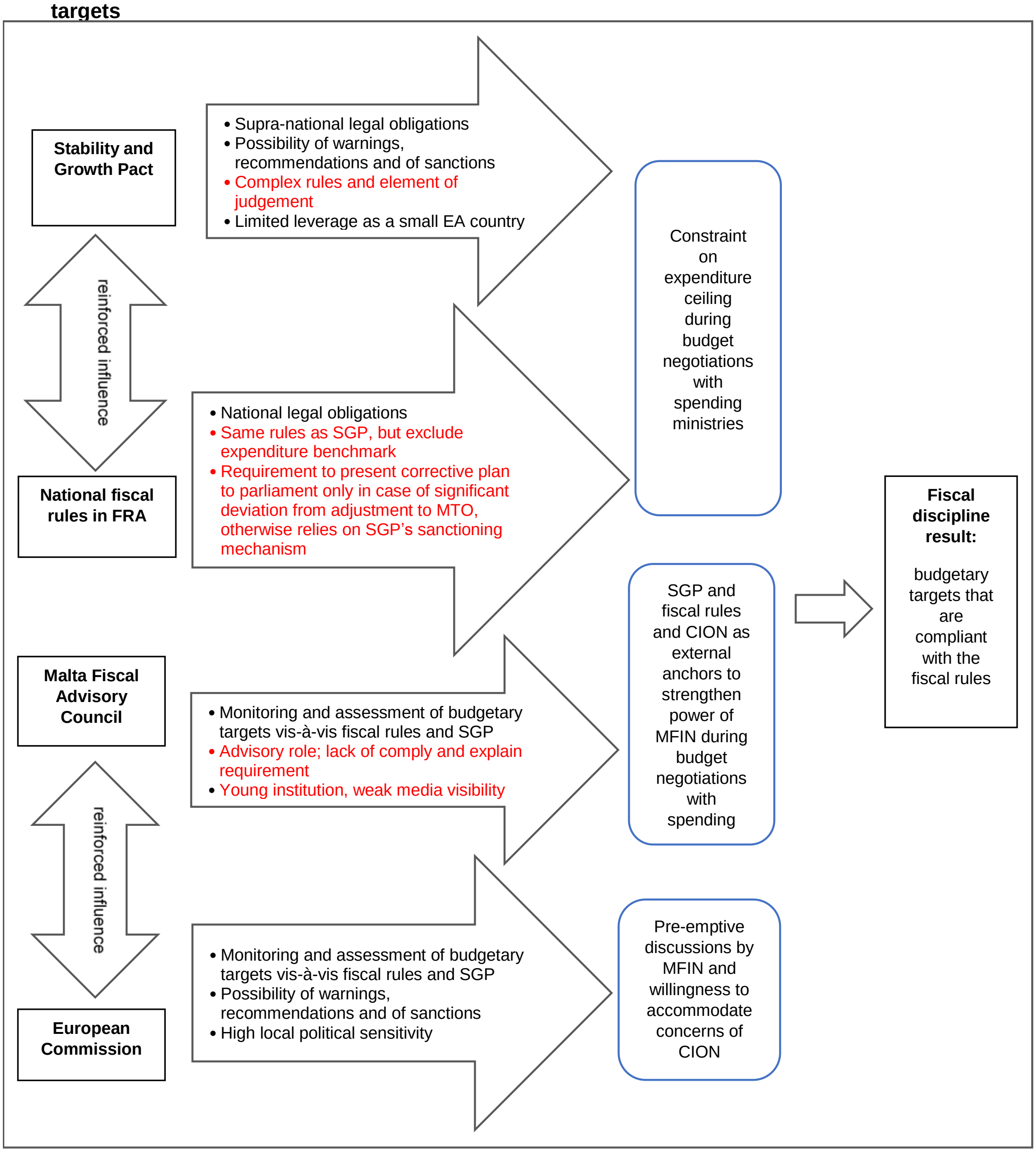
As shown in Figure 7.5, the process of setting the fiscal targets is influenced by both the supra-national (SGP) and national (FRA) fiscal rules as well as by the MFAC and the CION, through their assessments of whether the budgetary targets comply with the fiscal rules.

[222] The FRA only requires that the annual budget is based on the medium-term fiscal plan (Article 16(1)). Furthermore, whilst Article 15(1) requires that the medium-term fiscal strategy is submitted to parliament, this is neither discussed nor voted upon, with parliament only voting on the appropriations for the subsequent year during the budget approval stage (EXT14 2016, pers. comm., 19 October: 9-10).

A few participants argued that the introduction of fiscal rules in national legislation was an important development, with one interviewee commenting that:

> "probably the political cost of breaking both the domestic and the EU rules would be higher" (EXT5 2016, pers. comm., 9 September: 5).

Figure 7.5: The influence of fiscal rules and the fiscal council – setting the budgetary targets



Source: Figure drawn by author

In this context, it is notable that Article 17(1) of the FRA requires a declaration by the Prime Minister and the Minister of Finance that the annual budget presented in parliament is in line with the fiscal rules. However, most participants disagreed and highlighted that the fiscal rules in the FRA merely copy the SGP rules, to which Malta had already been subject to (for instance, EXT13 2016, pers. comm., 14 October: 4; POL8 2016, pers. comm., 30 September: 6). Various interviewees further argued that the fiscal rules provisions in the FRA are less constraining since they do not include the expenditure benchmark even though this is included in the SGP[223] (for example, MFAC6 2016, pers. comm., 20 September: 5). During the parliamentary debates on the FRA (Parliament of Malta 2014a: 639), the Minister for Finance had justified this by emphasising that the expenditure benchmark:

> "is not a rule but a benchmark which guides and helps to achieve the deficit and debt objective".

In fact, the MFIN has been resisting pressure by MFAC to have more focus on the expenditure benchmark (see Recommendation 6 in Table AXXXVIII in Appendix IV, which presents the main MFAC recommendations together with the respective response by the MFIN).

Various participants criticised the complexity of the fiscal rules. In particular, the difficulties relating to measuring *ex-ante* the cyclically-adjusted budget balance were pointed out, with one participant referring to the lack of structural adjustment for 2015 which only became apparent in the first few months of the following year, when it was too late to address it (MFIN3 2016, pers. comm., 6 September: 11). The application of the expenditure benchmark further complicates matters (MFAC6 2016, pers. comm., 20 September: 5). Given this complexity, the CION applies an element of judgement in its interpretation of the rules (MFIN3 2016, pers. comm., 6 September: 12). For example, in its assessment of Malta's 2016 Update of the SP, CION (2016c: 20-21) considered the structural adjustment for 2015 and 2016 together, thereby avoiding the conclusion of a significant deviation from the adjustment path towards the MTO[224]. This flexible approach adopted by the CION not only

[223] Article 5 of Council Regulation (EC) No 1466/97 specifies that the assessment of progress towards the MTO involves an analysis of the growth path of government expenditure compared to medium-term potential GDP growth, taking into account discretionary revenue measures.
[224] A significant deviation from the adjustment to the MTO would have triggered a warning and a recommendation by CION (Article 6(2) of Council Regulation (EC) No 1466/97), which in

creates uncertainty but also allows the possibility of political pressure from national governments, thus weakening the effectiveness of the supra-national fiscal rules. Another example of such flexibility is evident in the decision in 2016 not to impose fines on Spain and Portugal despite failing to meet their budgetary targets under their respective EDPs[225]. This lack of enforcement of EU fiscal discipline has been described as a “Kafkaesque outcome” by Begg (2017: R5).

Nevertheless, the SGP obligations, as also reflected in the national fiscal rules, constitute the main consideration for setting the budgetary targets in Malta. Thus, one interviewee described these rules as: “very important obligations on which we cannot default” (POL21 2016, pers. comm., 28 November: 10). In fact, the MFIN adopts a ‘top-bottom’ approach, with the total expenditure ceiling derived from the revenue projections (conditional on the macroeconomic forecasts) and the budget balance target, which in turn reflects the fiscal adjustment that needs to be done to comply with the rules (MFIN1 2016, pers. comm., 25 August: 10). The resulting envelope for aggregate expenditure constitutes the basis for the budgetary negotiations between the MFIN and the line ministries.

The description of these negotiation by participants with spending ministries pushing for higher spending and only the MFIN being concerned about fiscal discipline implications, show a typical delegation approach scenario. In fact, one participant emphasised that: “it was always like this that the Ministry for Finance is one against all” (PARL12 2016, pers. comm., 13 October: 44). These pressures also reflect the strong electoral competition and personal contacts which characterise Malta’s political system, as noted in Section 7.2.1. In this context, for the MFIN the fiscal rules are an important form of ‘external anchor’ which strengthens its position vis-à-vis spending ministries during the budget formulation stage. This is evident when one participant joked that without such obligations “the budget deficit would reach 6% year in year out” (MFIN1 2016, pers. comm., 25 August: 6). On a similar note, some participants

turn would have required the Maltese government to present a corrective plan to parliament (Article 13, FRA).

[225] Council Implementing Decisions (EU) 2017/2350 and 2017/2351 in respect of the EDP for Portugal and Spain, respectively.

argued that the prudent budgetary forecasts are a deliberate strategy by the MFIN to reinforce the expenditure ceiling during budget negotiations with the spending ministries, with one interviewee explicitly stating that these are "serving as a capping on the expenditure side" (MFAC4 2016, pers. comm., 7 September: 9).

Meanwhile, the influence of the fiscal rules is strengthened by the assessments carried out by the MFAC and CION to determine whether the budgetary targets are compliant with the rules. However, in this respect the MFAC only has an advisory role, with Article 13(6) of the FRA only requiring that the government takes into account its opinions and recommendations when preparing its medium-term fiscal strategy and annual budget. Government is required to submit a corrective plan to parliament within two months if it does not accept an assessment of the fiscal council, only in the case of a significant deviation from the adjustment path towards the MTO (Article 13(7), FRA). In all other cases, there is no legal comply and explain requirement as clearly pointed out by the Minister for Finance during the discussion of the MFAC's first annual report in parliament's Public Accounts Committee (PAC) (Parliament of Malta 2016a: 12):

> "the recommendations are made, but then it is up to the government to decide whether to implement them or not".

In fact, one participant from the MFAC commented that during meetings held with the MFIN to discuss their recommendations: "very often they listen without commenting" (MFAC4 2016, pers. comm., 7 September: 8). Although in March 2018 (after the interviews were carried out), MFIN provided its first official response to the MFAC recommendations, only around 30% of the recommendations had been fully addressed (see Table AXXXVIII in Appendix IV). This lack of influence reflects the fact that the MFAC is a young institution, which is not well established in the national institutional framework, as noted also by Horvath (2018). A few participants have also highlighted the rather conciliatory stance adopted by the fiscal council (for instance, EXT16 2016, pers. comm., 20 October: 4) and indeed, as pointed out by Begg (2017), the MFAC tends to use appeasing language, like "broadly compliant" and "appears to meet the fiscal targets" (for example, MFAC 2015c: 22).

Interviewees further argued that given the very favourable economic scenario since the set-up of the MFAC in 2015, with the government meeting (and even over-achieving) its budgetary targets, the influence of the MFAC still has to be tested (EXT13 2016, pers. comm., 14 October: 5; POL11 2016, pers. comm., 4 October: 11).

On the other hand, the CION has a stronger influence, as shown by the pre-emptive strategy adopted by MFIN whereby it discusses the fiscal targets bilaterally with the CION before the presentation of the annual budget (MFIN17 2016, pers. comm., 27 October: 9; PARL22 2016, pers. comm., 9 December: 2) and by showing willingness to accommodate any concerns by CION:

> "if there are problems, we [the Finance Ministry] would discuss with them [CION] and we would see that the budget is made in a way." (MFIN3 2016, pers. comm., 6 September: 4).

The CION's influence on the budgetary targets is reinforced through the possibility of warnings, recommendations to undertake the necessary actions as well as the possibility of sanctions. Although up to now, sanctions have not been imposed on any EA member state[226], enforcement of the rules can also come from softer means, such as the public assessments by the CION, which have high media visibility in Malta. In this regard, one participant emphasised the "learning experience" during the 2009-2012 EDP, when, following a letter from the CION regarding risks to the attainment of the 2012 budgetary target, the government had announced additional expenditure cuts in parliament (EXT14 2016, pers. comm., 19 October: 26). The opposition had heavily criticised this as an imposition by the CION (POL11 2016, pers. comm., 4 October: 5), thus impinging on national sovereignty in budgetary matters.

It is also relevant to note, that similarly to the role of fiscal rules, the CION's assessments, together with those by other international institutions, are considered as 'external anchors' by the MFIN, as clearly stated by the Minister of Finance during the discussion of the MFAC's annual report in the PAC:

[226] The decision in 2016 not to impose sanctions on Spain and Portugal (referred to earlier) provides a recent example of the difficulty to implement enforcement of the SGP in the EA.

> "these are all friends of the Finance Ministry because they are all helping it to reach its target to reduce the deficit and debt and to have more responsible spending. The more help it gets, the better it is because the pressure from within government itself and from the citizens is to spend more and collect less taxes" (Parliament of Malta 2016a: 11).

7.4.3 The budget approval stage

Following the process of budget negotiations within the executive and the approval of the draft budget by cabinet, the Minister for Finance presents the draft budget in parliament in mid-October[227]. Subsequently, parliament debates the financial estimates for each Ministry and Vote. This discussion takes place in plenary[228], since as noted in Section 7.2.2, Malta is the only EA country without a parliamentary budget committee[229]. The last stage of this parliamentary process[230] is the adoption of the budget law – the Appropriation Act – which sets maximum ceilings for aggregate expenditure from the Consolidated Fund and also for each Ministry and Vote item (PARL9 2016, pers. comm., 3 October: 4). The budgetary measures announced in the Budget Speech are implemented through another legislation (Act to implement the budgetary measures), which is generally debated and voted upon in the first few months of the following year. As an example, Table AXXXIX in Appendix IV shows the timeline for the process of the presentation, debate and approval of the Budget for 2017.

Although there are no legal restrictions on parliament's budget amendment powers (PARL10 2016, pers. comm., 3 October: 9; PARL12 2016, pers.

[227] To comply with the common EA budgetary timeline (Article 4, Regulation (EU) No 473/2013), since 2016, the presentation of the budget has been anticipated by around three weeks (MFIN2 2016, pers. comm., 2 September: 3) to around mid-October.
[228] Specifically, as explained by one of the participants, the budgetary debates take place in the Committee of Supply which involves all the members of parliament (PARL10 2016, pers. comm., 3 October: 7-8).
[229] The budget is not discussed in other relevant parliamentary committees: the PAC is an audit committee with an oversight (*ex-post*) function (Article 120E of the Standing Orders of the House of Representatives); and since its set-up in 2013, the Economic and Financial Affairs Committee has not shown interest to discuss budgetary matters (POL15 2016, pers. comm., 19 October: 10).
[230] This stage takes place after the presentation of CION's opinion on the DBPs in the Eurogroup (generally in early December). This creates some disjointedness in the parliamentary process because the debates on the Ministry votes are completed by early November.

comm., 13 October: 2), by convention, a vote on the budget, like all money bills, is considered as a vote of confidence in the government (PARL10 2016, pers. comm., 3 October: 8). Given these implications and the strong partisanship in Malta's two-party political system, members of parliament vote strictly along party lines, especially on the budget[231], with the draft budget proposed by the executive approved without any amendments. As highlighted by one interviewee:

> "what the government decides in the budget, it will pass through without any problems." (POL11 2016, pers. comm., 4 October: 8).

Consequently, the fiscal rules and the fiscal council do not have any direct relevance during the budget approval process in parliament. However, there is potential for strengthening the fiscal council's influence in the budgetary process through increased interaction with parliament[232]. In particular, Article 57 of the FRA provides for hearings of the MFAC by PAC. But these are subject to the discretion of the committee's chair[233] and to date only two such meetings were held[234].

7.4.4 The influence of fiscal rules and the fiscal council during budget implementation

The fiscal rules and the fiscal council reassume a more direct influence during the budget implementation stage (see Figure 7.6). However, there was a broad recognition among the participants that the strong economic growth registered in recent years has been a key determinant of the improvement in the fiscal position (for example, EXT7 2016, pers. comm., 26 September: 6; and EXT13 2016, pers. comm., 14 October: 3).

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[231] The only recent exception was when a member of parliament from the government side voted against the motion that the House of Representatives resolves into a Committee of Supply to consider the financial estimates for 2013. Since the government had only a one-seat majority in parliament, this motion was not adopted (Plenary sitting No. 536, 10 December 2012) and subsequently, parliament was dissolved and general elections were held in March 2013.

[232] As discussed in Section 5.4.1 of Chapter 5, interaction between the fiscal council and parliament can also contribute to strengthen the latter's budgetary organisational capacity.

[233] Article 57 merely provides that the Chairperson of the MFAC should appear before the PAC whenever requested to do so.

[234] Meetings Nos. 96 and 101 of 28 June 2016 and 30 January 2017, respectively.

During budget execution, the MFIN resumes a key role, to ensure that the targets in the approved budget are met. In this regard, one participant felt that the political commitment towards the budgetary targets has increased following the change in government in 2013 (EXT5 2016, pers. comm., 9 September: 3). Nonetheless, as in the budget formulation stage, the implementation phase is characterised by a typical delegation scenario[235], with one participant admitting that:

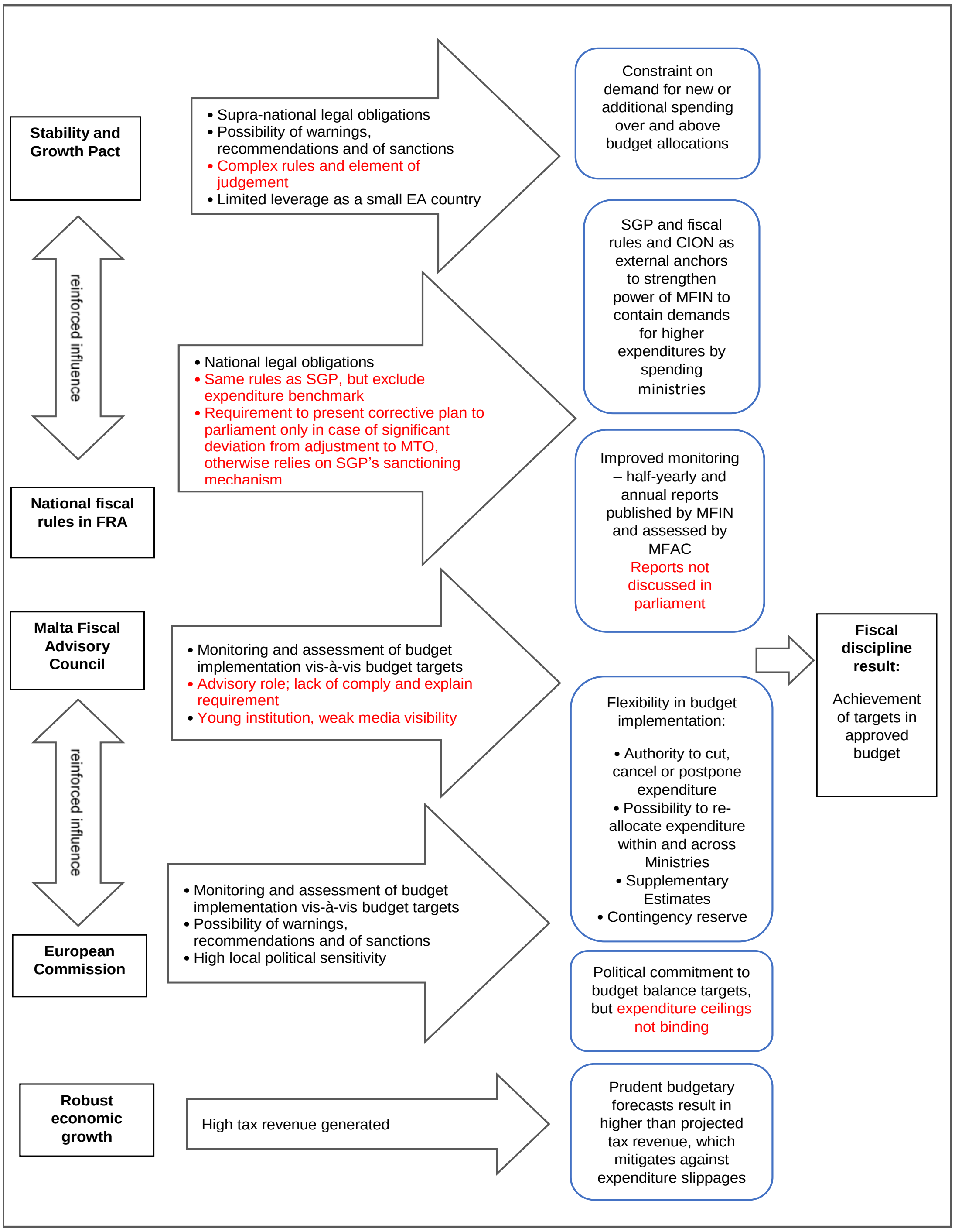
> “the Ministry for Finance always receives requests for new expenditure measures” (MFIN1 2016, pers. comm., 25 August: 5).

And similarly, the fiscal rules in the FRA and the SGP constitute ‘external anchors’ to reinforce the MFIN’s position vis-à-vis the spending ministries also during budget execution. The influence of fiscal rules during budget implementation is enhanced by the monitoring carried out by the CION vis-à-vis compliance with the SGP provisions and from the responsibilities assigned to the MFAC by the FRA to monitor fiscal rules (Article 13).

The FRA introduced provisions which aim to facilitate monitoring of fiscal developments, namely the half-yearly report (Article 39) and the annual report (Article 41) and the fiscal council is required to assess these reports and issue an opinion on them as well as recommendations as necessary (Article 13). A participant explicitly stated that the aim of the half-yearly report was to have a “good tool that would help us” by putting more pressure on Ministries that are over-spending (MFIN17 2016, pers. comm., 27 October: 14-15). Again, this shows that the MFIN looks for ‘external anchors’ to strengthen its power over spending ministries. But this has been achieved only to a limited extent. Article 39 of the FRA requires that the half-yearly report is submitted to parliament, but this report and the annual report have not been discussed in parliament, neither in plenary nor committee level. Parliamentary discussion of these reports and of their assessment by the MFAC would also contribute to strengthen the influence of the fiscal council.

[235] Articles 22-26 of the FRA aim to strengthen MFIN’s control over spending ministries during budget execution, but these provisions have not yet been fully implemented (MFIN1 2016, pers. comm., 25 August: 13).

Figure 7.6: The influence of fiscal rules and the fiscal council – budget implementation



Source: Figure drawn by author

During budget execution, the CION again has a stronger influence than the MFAC. In this context, various participants argued that as a small country, Malta has limited leverage in conflicts with CION on budgetary matters, as explained very clearly by one of the interviewees:

> "we know that whilst this – the equal treatment – is an important principle, it starts to be implemented only when the small [countries] are affected, when it

> is a large one, then, when it comes to large countries, the equal treatment takes on a somewhat different definition" (POL11 2016, pers. comm., 4 October: 16).

Acceptance of this reality, as also acknowledged by De Grauwe (2010) for example, is evident in the decision by the Maltese authorities to include additional consolidation measures in the 2016 SP (beyond those included in the budget), even though there was uncertainty as to whether the CION would decide that there was a significant deviation from the adjustment path to the MTO. This is a clear example of the pre-emptive and precautionary approach adopted by Malta, as discussed earlier in the context of setting of budgetary targets during the budget formulation stage.

MFIN is thus caught up between the realisation that it must comply with the fiscal rules, whilst at the same time facing considerable pressure for increased spending by line ministries. In this context, participants emphasised that flexibility in budget execution is a critical mechanism for the MFIN to achieve its budgetary targets. Thus, one interviewee from the Ministry explained that:

> "it is the budget balance which the Ministry for Finance tries to stick to but not the components underpinning the budget balance" (MFIN1 2016, pers. comm., 25 August: 6).

Similarly, another participant pointed out that:

> "as regards individual items, especially from the expenditure side, they [MFIN] revise a lot" (EXT7 2016, pers. comm., 26 September: 14).

These variations at a budgetary component level are confirmed by the data presented in Table XXXX in Appendix IV. Indeed, there were large expenditure overruns in 2014 and 2015. On the other hand, tax revenue was consistently higher than projected, reflecting the strategy of adopting prudent forecasts, which mitigated against the expenditure slippages, as argued by one of the participants (EXT7 2016, pers. comm., 26 September: 14).

The benchmarking exercise presented in Section 7.2.2 also showed that Malta has considerable executive flexibility during budget implementation, with a medium to high score in the relevant sub-indices. This is provided for in the budgetary legal framework. Firstly, the Appropriation Act involves a maximum ceiling for expenditure, rather than committed expenditure and thus MFIN can cut, cancel or postpone spending without requiring parliamentary approval (PARL10 2016, pers. comm., 3 October: 16). Furthermore, Article 24 of the Financial Administration and Audit Act (Cap. 174) allows the Minister of Finance (or his delegate) to carry out virements between line items within Votes. Articles 23 and 24 of the FRA reinforce such flexibility by requiring that new or additional expenditures made during the budget year are financed through re-allocation of expenditure either within or across Ministries, whilst a contingency reserve was also introduced (Articles 31-38)[236].

Moreover, Article 103 of the Constitution of Malta and Article 25 of the Financial Administration and Audit Act (Cap.174) provide for Supplementary Estimates, which allow the MFIN to exceed the appropriations approved by parliament, both at a Ministry vote level as well at an aggregate level. This involves the approval by parliament of a Second Appropriation Act, which provides for the excess that has been spent for every Vote, over and above the first Appropriation Act. The provisions concerning the reasons for such additional expenditures are very broad and during 2014-17, the Supplementary Estimates involved between 5% and 13% of the original amount in the Appropriation Act for the same year[237], with a large number of budgetary votes being affected[238]. Moreover, although the Supplementary Estimates are approved by parliament, this takes place immediately after the long process of voting and approval of the budget for the following year (PARL10 2016, pers. comm., 3 October: 20) and there is no discussion on them[239]. One political participant made a particularly forceful criticism of this process:

[236] Whilst foreseen to be used only in exceptional circumstances and subject to the approval of the Prime Minister and parliament, the small contingency reserve (between 0.1-0.5% of GDP in any one year) was used up in its initial year (Parliament of Malta 2015). The contingency reserve has become less relevant with the budget surpluses recorded since 2016.
[237] However, as explained by the Minister for Finance during the second meeting of the MFAC with the PAC (Parliament of Malta 2017: 10), these amounts do not necessarily correspond to total expenditure overruns of the same magnitude as they may be offset by savings in expenditure in other Votes.
[238] For example, the Second Appropriation Act for 2016 provided for additional appropriations for around one-half of the votes, with increases of over 10% for around a third of them.
[239] As shown in Table AXXXIX in Appendix IV, in 2016, the motions and voting relating to the Second Appropriation Act took only around 10 minutes.

> "If there is one document which in our legislation should really be assigned more importance effectively it is the Supplementary Estimates, because there is the admission by government of where it went off target" (POL11 2016, pers. comm, 4 October: 6).

Interviewees from MFIN were similarly critical of the Supplementary Estimates and pointed out that they weaken the binding nature of the fiscal targets (MFIN2 2016, pers. comm., 2 September: 11; MFIN19 2016, pers. comm., 4 November: 6). However, during the parliamentary debate on the FRA (Parliament of Malta 2014b: 10), the Minister for Finance was cautious on eliminating this flexibility. Indeed, the FRA did not bring any specific changes in this regard and thus, in practice the expenditure ceilings are not binding. The need for such flexibility can also explain why the expenditure benchmark was not incorporated in the FRA, as pointed out earlier.

7.5 Summary of results and conclusions

This Chapter analyses the influence of budget institutions on fiscal discipline in Malta, by focusing on fiscal rules and the fiscal council, which were recently introduced through the FRA. This is carried out through a qualitative case study, using interviews to a broad range of stakeholders, complemented by documentary evidence.

Malta has a predominantly delegation form of fiscal governance, with relatively centralised budget negotiations within the executive and a good degree of executive flexibility during budget implementation. Nevertheless, the institutional features of the recently introduced fiscal rules and fiscal council compare well to the EA average. The findings of the case study analysis show that these institutional developments are contributing to fiscal discipline but in a limited manner. The remarkable improvement in the budgetary situation registered during the past few years is strongly attributable to the robust economic growth.

As regards fiscal rules, the provisions in the FRA replicate the SGP and Fiscal Compact Treaty obligations and largely rely on the corrective and sanctioning mechanisms of the SGP. Moreover, the expenditure benchmark is not included. Thus, the inclusion of the SGP obligations in national legislation seems to have had limited influence.

Nevertheless, overall participants acknowledged that the MFIN is committed to the supra-national fiscal rules, reflecting also its context of a small country with limited leverage vis-à-vis the CION. The budgetary targets are thus set to comply with these obligations and in turn, these determine the expenditure ceiling which is the basis for budget negotiations with spending ministries. These negotiations are carried out in a typical delegation approach scenario, with commitment to fiscal discipline being limited to the MFIN, whilst line ministries pressure for larger budget allocations. A similar situation also characterises the budget implementation stage, where line ministries demand new and additional spending, whilst the MFIN faces pressure to achieve the budgetary targets. Importantly, during both the budget preparation and implementation stages, the fiscal rules act as an 'external anchor' to strengthen the position of the MFIN vis-à-vis spending ministries.

Given these spending pressures from line ministries, during budget implementation, the MFIN adopts considerable flexibility, with notable variation between the projected and actual outcomes at a budgetary component level. The legal framework provides significant room for manoeuvre for the MFIN to reallocate spending both within and also across Ministries and through the Supplementary Estimates also to increase spending beyond that in the approved budget, both at line item as well as aggregate levels, with hardly any parliamentary oversight. Such flexibility has been retained with the FRA and consequently, the expenditure ceilings are not binding.

As regards the fiscal council, its strongest influence on the budgetary process is through its assessment of the macroeconomic and fiscal forecasts. Although due to resource constraints, the MFAC does not generate its own forecasts, being a legal obligation, the endorsement of the forecasts is considered as critical by the MFIN. As a result, the relevant technical expertise is being improved and importantly, more prudent assumptions are being adopted, particularly for tax revenue projections. At the same time, this seems to also constitute a deliberate strategy by the MFIN to contain demands by spending ministers and to mitigate against expenditure slippages during budget execution. The influence of the fiscal council is further reinforced through other institutions, who follow its reports and assessments such as the IMF, credit rating agencies and most notably the CION, which regularly generates its own forecasts for Malta. The MFIN adopts a pre-emptive and accommodative stance with both the MFAC and CION discussing its forecasts before they are published and showing willingness to revise them if there are any strong concerns.

On the other hand, the MFAC has weaker influence when assessing whether government's fiscal stance complies with the fiscal rules' obligations. Here, the MFAC has an advisory role and whilst it has issued several recommendations, a large part of them remain unaddressed. The influence of the fiscal council is constrained since it is a young institution with weak media visibility and interaction with parliament is also very limited. A conciliatory tone is noted in its assessments and reports and its influence still needs to be tested, when the economic and fiscal context is less favourable. In contrast, the CION's assessments vis-à-vis the SGP obligations have a stronger influence, with the MFIN adopting a cautious stance and a preventive approach, by discussing the budgetary targets before these are published and by adjusting them to accommodate concerns by the CION. Furthermore, as for fiscal rules, the MFIN considers the assessments carried out by CION, and other international organisations, as a help to instil fiscal discipline on spending ministries. Being only recently established, the fiscal council does not yet fulfil such a role.

Summing up, the case study results have revealed different mechanisms how fiscal rules and the fiscal council contribute to more fiscal restraint. At the same time, these institutional reforms were implemented to comply with the common EA requirements and limitations to their influence have also been identified. Finally, the findings also show that elements of a rule-based system can be complementary to the delegation approach, which contrasts with their portrayal in the literature as alternative forms of fiscal governance.

Chapter 8:

General Summary and Conclusions

The EA sovereign debt crises have clearly shown the grave externalities and contagion effects of a lack of fiscal discipline in the member states. Indeed, subsequently, the SGP has been considerably tightened. At the same time, whilst supra-national fiscal rules have remained at the core of the EA fiscal governance framework, this has been complemented with an alternative decentralised fiscal discipline mechanism, which recognises the unique architecture of Europe's monetary union, where fiscal policy remains a national prerogative. This involved the introduction of common requirements for budget institutions in EA countries, mainly involving national fiscal rules and the set-up of IFIs.

At the same time, the SGP reforms have further constrained the role and relevance of the legislature in the budgetary process, which as the representative body of the citizens, has a key role to ensure democratic legitimacy of budgetary decisions. Notwithstanding, enhancing democratic accountability is a key aspect of the CION's (2017) roadmap for completing EMU. But, at the same time, strong legislative budgetary power is generally associated with larger budget deficits.

Within this context, this thesis assesses the quality of budget institutions and legislative budgetary power in the EA and examines their implications on fiscal discipline.

8.1 Summary of key results

The literature on the political economy of budget deficits shows the tendency for governments to run excessive budget deficits and provides explanations for this deficit bias. This study focuses on two main branches of this literature, that involving opportunistic incumbents who manipulate fiscal policy to increase their chances of remaining in office and that based on distributive conflicts within government over a common pool of fiscal resources. These motivations underpin the budgetary decisions taken by the executive and the legislature in the simple model of the budgetary process in EA countries, presented in Chapter 3. Graphical representation is used to show the tendency to run budget deficits during the budget formulation, approval and implementation stages and how this can be mitigated through budget institutions. This can involve a hierarchical (Alesina and Perotti 1999) or delegation (Hallerberg and von Hagen 1999) approach, where the finance minister is assigned strong decision-making powers vis-à-vis spending ministers during budget negotiations and execution and legislative budget amendment powers during the approval stage are restricted. Another approach is a rules-based, contract approach (von Hagen and Harden 1995), where fiscal discipline is achieved through strong commitment by all stakeholders to numerical budgetary constraints, namely fiscal rules or medium-term budgetary targets. Hallerberg and von Hagen (1999) postulate that the delegation approach is more appropriate with a single-party majority government, whilst a rules-based approach is more suitable with a coalition government. Two other categories of budget institutions are budget transparency, which mainly involves better availability of budgetary information; and IFIs, with roles, amongst others, to produce or endorse the budgetary forecasts and to monitor compliance with the fiscal rules.

Whilst the legislature is an important decision-maker in the budgetary process, it has largely been captured in the literature on budget institutions through its role during the approval stage, with a particular focus on its amendment powers. But unrestricted amendment powers can be undermined if the vote on the budget is considered as a vote of confidence in the government or if the reversionary budget involves a reversal to the executive’s proposal (Wehner 2010b). Strong legislative budgetary power during budget approval can also be weakened by executive authority to modify the budget during implementation (Alesina et al. 1999). At the same time, reflecting the fiscal commons problem among legislators, strong legislative amendment powers are associated with larger budget deficits (von Hagen 2002). However, this can be mitigated by having the legislature first voting on fiscal aggregates and then on specific appropriations and through a centralised budget committee structure. Furthermore, during budget formulation, legislative involvement in numerical budgetary constraints, including SGP provisions, can improve their ownership and credibility (Lienert 2010), whilst during budget implementation, stronger legislative budgetary power, for instance, by limiting the use of supplementary budgets and requiring legislative authorisation for off-budget expenditures and contingent liabilities, can also contribute to more fiscal restraint. Thus, different aspects of legislative budgeting can have a diverse impact on fiscal discipline.

The analysis presented in Chapters 4 to 7 of this thesis draws on the model presented in Chapter 3. It involves four different, but inter-related research components. The first two components involve the construction of composite indices to measure the quality of budget institutions and legislative budgetary power in the EA. To construct these indices, an extensive dataset has been created which captures detailed institutional characteristics of the 19 EA member states. This dataset uses data from the OECD, the CION and the IMF, as well as primary data generated through questionnaires to national authorities. The constructed indices are then used as explanatory variables in a two-way fixed effects panel data model to assess their effect on the budget balance. This constitutes the third research component. Finally, the fourth research component comprises a qualitative case study on one of the EA member states – Malta – to analyse in more depth whether and how the recently established national fiscal rules and the fiscal council affect fiscal discipline. This case study uses unique data generated from detailed interviews to a broad range of key stakeholders in Malta's budgetary process.

Chapter 4 presents a composite index which is used to measure the quality of budget institutions in the EA and to examine differences across the member states. Key changes following the Great Crisis are also identified by producing another index for the pre-crisis period. Various indices have been compiled to measure the overall quality of budget institutions in the EA, with key recent contributions by Hallerberg et al. (2007, 2009) for the EU15 and by Gleich (2003) and Yläoutinen (2004) for the 10 CEECs. Nevertheless, this index still makes a relevant contribution to the literature by providing a comparable measure for all the present 19 member states and by capturing reforms implemented following the Great Crisis. Furthermore, compared to existing indices, the index provides a more comprehensive coverage of the quality of budget institutions in EA countries, most notably by capturing also the formal and organisational capacity of fiscal councils, whilst the scope of MTBFs, budget implementation and budget transparency is also broader.

The results show that, overall, budget institutions in the EA are of medium quality, with broadly similar results for the group of bailed-out countries and also for the other EA member states. In particular, the MTBFs are relatively strong and the budget negotiations process is quite centralised. On the other hand, the budget approval stage as well as fiscal councils constitute weaker institutional elements. Whilst data constraints limit the comparability of the pre- and post-crisis indices, there are indications of a general improvement in the quality of budget institutions in EA countries during the period under review. More marked improvements are generally noted for bailed-out countries, as institutional reforms constituted part of the conditions imposed by their financial assistance programmes. Moreover, this general improvement largely reflected a notable strengthening in fiscal rules and fiscal councils, as a response to the common EA requirements introduced after the Crisis, rather than more broad-based reforms driven by a national policy agenda.

The findings also show that whereas the variation in the overall scores for the quality of budget institutions index is quite limited, there is more diversity among the EA countries in the different institutional characteristics. It is also notable that there is considerable diversity also in the institutional aspects which are subject to common EA requirements, that is MTBFs, fiscal rules and IFIs. Moreover, countries with high overall scores in the index perform strongly in different aspects of budget institutions. These results indicate that there can be different models of good quality budget institutions, rather than a 'one-size-fits-all' approach. This contrasts with the recent thrust for more homogenous fiscal governance frameworks in the EA. Furthermore, despite the emphasis of a rules-based approach in the EA's fiscal governance system, some EA countries have budget institutions where the finance minister continues to have a strong role to instil fiscal discipline. Contrary to the literature, the size of the country seems to be a more relevant determinant of the form of fiscal governance adopted than its type of government.

In Chapter 5, a similar approach, using a composite index, is adopted to assess legislative budgetary power in the EA and identify main differences across the member states as well as changes since the Great Crisis. This index makes an important contribution to the scant literature on legislative budgeting in the EA. Indeed, legislative budgetary power indices have only been developed by Lienert (2005), Wehner (2006, 2010b) and Ríos et al. (2018), covering a diverse sample of countries, but not all the EA countries. On the other hand, the constructed index provides a recent, comprehensive and comparable measure of legislative budgetary power for all the member states. As in Wehner (2006, 2010b), it distinguishes between the legislature's formal budgetary powers and its organisational budgetary capacity. But its scope is broader as it covers the legislature's involvement throughout the national budgetary process, including the formulation, approval and implementation stages, as well as in relation to the SGP procedures. It also captures the legislature's involvement in numerical budgetary constraints and its relationship with the fiscal council.

The results show that overall, legislative budgetary power is quite weak in the EA. As for the quality of budget institutions, there are not marked differences between the bailed-out countries and the other EA member states. Democratic legitimacy is particularly weak in the national budgetary process. Whilst formal legislative budget amendment powers are quite strong, these are undermined by the fact that the vote on the budget constitutes a vote of confidence in the government in several EA countries and also by a lack of legislative control during budget implementation. Furthermore, despite the increasing importance of numerical budgetary constraints in the EA, legislatures have a marginal role in this regard. On the other hand, there is generally good legislative engagement in the SGP procedures, though its influence could be strengthened through more timely discussion. Moreover, overall in the EA, legislative budgetary organisational capacity is quite adequate, with relatively strong budget committees and also good access to budgetary information. Close links with IFIs, which have been recently established in various EA countries, can contribute to strengthen legislative budgetary organisational capacity.

Legislative budgetary power has remained broadly unchanged at low levels since the Great Crisis. There has been some strengthening of organisational budgetary capacity in some EA countries, reflecting the set up of specialised budget research offices and improved access to budgetary information. But formal legislative budgetary powers in the national budgetary process have generally weakened, mainly due to less control during budget execution.

As for the quality of budget institutions index, there is more variation among the EA countries in the different components of legislative budgetary power than in the overall scores for the composite index. In particular, there is considerable diversity as regards amendment powers, reversionary budgets and legislative authorisation of off-budget expenditures and contingent liabilities. There is also notable variation in the degree of legislative involvement in SGP procedures and in legislative budgetary organisational capacity. These findings show that there are different models of legislative budgeting in the EA, reflecting the countries' specific political and institutional context.

The quality of budget institutions and the legislative budgetary power indices are the main explanatory variables in the empirical analysis presented in Chapter 6. This analysis, which covers all the 19 EA countries during 2006-2015, uses a two-way fixed effects model to test two hypotheses derived from the model developed in Chapter 3. The first hypothesis postulates that an improvement in the overall quality of budget institutions results in smaller budget deficits (or larger budget surpluses); the second hypothesis states that stronger legislative budgetary power results in larger budget deficits (or smaller budget surpluses).

There is a vast and established literature testing empirically the relationship between the overall quality of budget institutions and fiscal discipline, with Hallerberg et al. (2007, 2009) and De Haan et al. (2013) being among the more recent studies for EU countries. The role of the quality of budget institutions as an important determinant of the fiscal balance is well established in this literature. On the other hand, the literature assessing the relationship of legislative budgetary power on fiscal discipline is scarcer, with Wehner (2010b) and Ríos et al. (2018) being among the few studies on this topic. Both find that legislative budgetary power contributes to less fiscal restraint.

The empirical analysis presented in Chapter 6 constitutes new, recent evidence on the effects of the quality of budget institutions and legislative budgetary power on fiscal discipline. Whilst focusing on the 19 EA member states constrains the sample size, it provides for more analytical relevance since they are all subject to the same supra-national fiscal governance framework. Furthermore, by using the composite indices, developed in Chapters 4 and 5, the analysis uses broad measures of the institutional explanatory variables. The use of these indices also permits some time-variation in the explanatory variables, since two data readings are available, for the pre- and post-crisis periods, respectively.

The results show the expected positive relationship between the quality of budget institutions and the budget balance, but, in contrast to the findings in the literature, there is not a strong influence. This finding is largely confirmed when using alternative fiscal indicators for the dependent variable and when using different estimation methods. Similar results are also found when the model is estimated for the group of EA countries that have not been bailed-out. Furthermore, in an alternative model, using as explanatory variables the CION's (2017) fiscal rules strength and MTBF indices together with a simple dummy to capture the presence of an IFI, a significant influence was found for the numerical budgetary constraints but not for fiscal councils. These results could reflect the fact that in various EA countries, IFIs are a recent institutional development and more time may be needed for them to establish credibility and influence over the budgetary process. Furthermore, the recent reforms to budget institutions were largely triggered by the common EA requirements. In contrast to nationally-driven reforms, supra-nationally mandated reforms typically lack national ownership and political commitment, which impinges on their effectiveness to instil fiscal discipline in the budgetary process (Kopits 2012; Wyplosz 2012).

The empirical results also indicate that, contrary to the mainstream view in the literature on budget institutions and also to the findings in the few available legislative budgeting studies, legislative budgetary power does not necessarily conflict with fiscal discipline. Whilst, a negative, albeit weak, relationship was found between legislative amendment powers and the budget balance, overall the null hypothesis that legislative budgetary power does not influence the budget balance cannot be rejected. This result can be attributed to the broader scope of the legislative budgetary power index used in this study, which also captures institutional characteristics that can contribute to more budgetary restraint. This suggests that a broad involvement of the legislature in the budgetary process, beyond amendment powers during the budget approval stage, could promote democratic accountability without jeopardising fiscal discipline. For instance, the comparative analysis carried out in Chapter 5 shows that there is scope for more legislative involvement in fiscal rules and MTBFs, which have become more important constraints on the national budget. A top-down voting approach during the budget approval process and a centralised parliamentary committee dealing with the budget can similarly contribute to more fiscal restraint.

Finally, in Chapter 7, the relationship between budget institutions and fiscal discipline is examined further, using a different methodological approach involving a qualitative case study on Malta. This analysis focuses on fiscal rules and fiscal councils, which were introduced in 2014 and 2015, respectively. Being mainly triggered by the need to comply with the EA common requirements, these reforms can be considered as largely exogenous, thus providing a valuable opportunity for research on budget institutions. The case study uses documentary evidence and interviews with 24 participants, coming from the MFIN, parliament, the fiscal council, the CBM and the CION as well as representatives of the two main political parties. This case study contributes to the literature through its alternative qualitative approach, which enables an in-depth analysis of how budget institutions affect fiscal discipline whilst taking into account Malta's political and institutional context. It also adds to the knowledge on budget institutions in the EA through its geographical focus, since Malta hardly features in this branch of the literature.

The findings of the case study clearly show how the supra-nationally mandated budget institutions reforms were adapted to country-specific circumstances, thus highlighting the importance of context-dependent research. The results also provide insight into how fiscal rules and fiscal councils instil more discipline in the budgetary process and also show limitations to their influence, with the notable turnaround in Malta's public finances registered in recent years being largely attributed to the robust economic growth registered.

The national fiscal rules replicate the SGP obligations, but exclude the expenditure benchmark, which can constitute a harder budget constraint. Furthermore, they largely rely on the SGP's corrective and sanctioning mechanisms. Thus, the introduction of fiscal rules in national legislation was not considered as a very important development by most participants. Nevertheless, the SGP obligations are the main consideration when setting the budgetary targets. This reflects the widely-shared recognition among key decision-makers in the budgetary process that, as a small member state, Malta has limited leverage vis-à-vis these supra-national rules. For this same reason, the CION's assessments have strong influence on government's fiscal stance.

Despite the introduction of national fiscal rules, Malta retains strong elements of the delegation form of fiscal governance, with the responsibility for fiscal discipline mainly lying with the MFIN. On the other hand, spending ministers do not share this political commitment to fiscal restraint and, reflecting the strong partisanship and rivalry in Malta's political system, they put strong pressures during both budget negotiations and implementation for larger budgetary allocations. The MFIN has adapted to this pressure through considerable flexibility on the expenditure side of the budget during budget implementation. Indeed, unlike the budget balance targets, the expenditure ceilings are not considered as binding.

Meanwhile, the most evident influence of the fiscal council on the budgetary process has been through its assessment of the macroeconomic and fiscal forecasts, since their endorsement by the council is a legal requirement. This has resulted in the adoption of more prudent forecasts by the MFIN, which also serve to cap requests for higher spending during budget negotiations and to mitigate against expenditure slippages during budget implementation. The fiscal council's influence is also being reinforced through interaction with other international institutions, in particular the CION. On the other hand, reflecting its advisory role as well as its low media visibility and weak interaction with parliament, the fiscal council's influence when assessing government's fiscal stance is quite limited.

Interestingly, the findings from the case study show that, rather than constituting alternative forms of fiscal governance depending on a country's type of government, in Malta, the fiscal rules constitute an 'external anchor' which reinforces the power of the MFIN during the budgetary process. This constitutes another example of how the EA common requirements are adapted to the specific institutional context of the country concerned. Pronouncements by international institutions, in particular the CION, also fulfil a similar role, but as a young institution, this is not yet the case for the fiscal council.

8.2 General conclusions

Whilst the reforms to the EA fiscal governance framework introduced following the Great Crisis recognise the importance of national budget institutions to achieve fiscal discipline, they also involve a thrust towards more homogeneity in national budgetary frameworks with emphasis on a rules-based approach. This contrasts with the emphasis, by Kopits (2012) and Wyplosz (2012), amongst others, on the need for budget institutions to be well-adapted to a country's political and social system in order to be effective to achieve fiscal discipline. This argument is also reflected, at a more general level, in the association between the form of fiscal governance (delegation or contracts approach) with a country's type of government (single-party majority or coalition government) (Hallerberg and von Hagen 1999).

The results of this research have indicated that since the Great Crisis, there have been notable reforms involving fiscal rules and fiscal councils in various member states and this has resulted in a general improvement in the overall quality of budget institutions in the EA. However, there remains considerable diversity in the specific characteristics of budget institutions among the member states and there is significant variation also in the strength of fiscal rules and IFIs. The findings also show that there can be different models for achieving good quality budget institutions, with varying emphasis on different institutional characteristics. Furthermore, the finance minister continues to have a key role to instil fiscal discipline in various EA countries, especially in the small member states. The case study on Malta has further shown that the rules-based and delegation approaches are not necessarily alternative forms of fiscal governance but can also be complementary to each other. Thus, in Malta, the fiscal rules and assessments of government's fiscal stance by international institutions (most notably by the CION) strengthen the MFIN's authority to instil fiscal discipline in the budgetary process. These findings thus show that despite the push towards a 'one-size-fits-all' approach, there remains considerable diversity in the specific composition of national budget institutions in EA countries.

Another key characteristic of the recent reforms to the EA fiscal governance framework is that they involved supra-nationally imposed changes to national budget institutions. In this regard, Kopits (2012) argues that political commitment tends to be lacking when institutional reforms are imported from a supra-national authority or international organisation, especially if they are seen as an imposition. Wyplosz (2012) similarly points out that political commitment to fiscal discipline is more likely when institutional reforms are self-imposed by the very politicians that they are designed to constrain. Effective fiscal frameworks are those supported by broad-based political ownership (Kopits 2012). Fiscal rules are credible if politicians show willingness to abide by their constraints, rather than seeking to circumvent the rules when they become too limiting. Similarly, fiscal councils can make a tangible contribution to fiscal discipline, if politicians are willing to listen to them. The results of this study indicate an improvement in the quality of budget institutions in the EA since the Great Crisis, but this largely reflects reforms to comply with the common supra-national obligations and conditions imposed in the financial assistance programmes of bailed-out countries. This centrally-mandated nature of these institutional reforms has implications for their national 'ownership', thus affecting their effectiveness to achieve fiscal discipline.

In fact, in contrast to the findings in previous studies, the empirical results presented in Chapter 6 show a weak, albeit still positive, relationship between the quality of budget institutions and the budget balance in the EA during 2006-

2015. This may reflect the fact that fiscal council have been only recently established in various EA countries and it may take time for them to establish influence on the budgetary process. Furthermore, the timeframe of this study is more recent and captures the recent reforms to national budget institutions. Being triggered by supra-national obligations rather than by a national reform agenda, this may have affected the influence of budget institutions on the budget balance. The case study on Malta provides further insight into the limitations of centrally-mandated institutional reforms. The introduction of fiscal rules in national legislation is not considered as a major development in the fiscal governance framework by key stakeholders in the budgetary process, since Malta was already subject to the same provisions through the SGP. Moreover, whilst the MFIN is committed to abide by the fiscal rules in terms of the overall budget balance, it adopts flexibility in respect of the different budgetary components and in particular, the expenditure ceilings are not binding. Furthermore, the legislative changes have not brought about a broad political commitment to fiscal discipline beyond the MFIN, with significant pressure from spending ministers for larger budgetary allocations during both budget negotiations as well as during implementation. Finally, whilst the fiscal council has left a mark on the process of generating the budgetary forecasts through more prudent assumptions, as a young institution, it is not yet well embedded in national institutional arrangements and its influence has been more limited when assessing government's fiscal stance. These findings show that imposing the introduction of fiscal rules and the establishment of fiscal councils through supra-national requirements is not a panacea for achieving fiscal discipline in the EA.

Besides contributing to more fiscal restraint, budget institutions must also be democratic legitimate, since budgetary decisions involve important redistribution effects. The shift towards a decentralised fiscal discipline mechanism in the EA constitutes a positive step in this direction: in particular, the relevant legislations introducing fiscal rules and setting up IFIs were introduced through national parliamentary procedures. Nonetheless, achieving democratic accountability for budgetary decisions in the EA is complex because whilst EA member states retain a certain degree of autonomy on fiscal policy, at the same time national budgetary sovereignty is increasingly constrained at the supra-national level by the SGP. This has not brought about an increase in relevant parliamentary activity at the European level, except for provisions for economic dialogues with national parliaments. The European Parliament does not have effective powers to influence national budgets and national parliaments remain the main source for democratic legitimacy of budgetary decisions in the EA. However, the findings from this study show that overall legislatures in the EA have weak powers over the national budgetary process. The results also demonstrate that there are alternative models for legislative budgeting among the EA member states. Thus, whilst taking into account the national political and institutional context, based on the results from this study, there is scope for improving the democratic legitimacy of budgetary decisions. This can be achieved without jeopardising fiscal discipline, for instance, through more legislative involvement in fiscal rules and MTBFs, which would also contribute to improve ownership of these important constraints on the national budget. More centralised voting procedures during the budget approval process as well as in the parliamentary committee structure dealing with the budget can similarly contribute to more fiscal restraint. As regards the supra-national budgetary constraints, the findings show that overall EA legislatures are quite well involved in the SGP procedures, but their engagement could be more effective if its involvement was more timely.

The CION's (2017a) proposals for completing EMU involve ambitious plans for a financial, economic and fiscal union and to have more democratic accountability through, *inter alia* a European Minister of Economy and Finance. However, achieving progress with these plans is difficult in the prevailing political context, with the rise of Eurosceptic parties in various European countries and the looming Brexit. There is neither public support nor political will for further transfers of national sovereignty to the supra-national level. The recent experience with the enforcement of the SGP rules, particularly vis-à-vis Spain and Portugal in 2016, also shows that despite the strengthening of the Pact, its enforcement on sovereign states remains challenging. In this context, a decentralised fiscal governance mechanism constitutes a more realistic and pragmatic approach to achieve fiscal discipline in the EA. It is also somewhat less complex to improve democratic legitimacy of budgetary decisions through interventions at the national level. However, this research has shown that there are limitations to achieve fiscal discipline through supra-nationally mandated changes to national budget institutions, unless there is political commitment to the relevant budgetary constraints. One would expect that the experience of the sovereign debt crises would have strengthened political commitment to fiscal discipline. But as a result of the prolonged period of austerity and the magnitude of the measures involved, popular support for fiscal restraint is lacking. This political environment thus constitutes a challenge for both supra-national and national fiscal governance frameworks, which implies that the outlook for achieving fiscal discipline in the EA is currently quite pessimistic.

8.3 Areas for further research

Finally, this thesis concludes by identifying key areas where the research hereby presented can be taken further.

The first area concerns data issues. In particular, a single, comprehensive database providing detailed information on budget institutions for all the EA countries is lacking. To construct the quality of budget institutions and legislative budgetary power indices, different secondary sources as well as primary data generated from questionnaires to national authorities had to be used. The available data sources are limited either in terms of geographical coverage or in terms of scope, covering only specific institutional characteristics. Furthermore, only the CION and IMF datasets are updated annually, whilst three OECD surveys on budget practices and procedures have been conducted to date (2003, 2007 and 2012). It is recognised that the generation of frequent and comprehensive data for all the EA countries requires significant time and resources. However, the availability of comprehensive timeseries data would contribute to improve the econometric estimation of the influence of budget institutions and legislative budgeting on fiscal discipline. Data constraints also implied that the empirical estimations covered only a relatively short time span (2006-2015), which restricted the possibility of using certain econometric techniques. Furthermore, this timeframe covers only the first few years of experience with the reformed budget institutions. In particular, fiscal councils constitute a new development in various EA countries and thus, the results may not have captured their long-term impact. This could be addressed if a longer time series becomes available. This would also make it possible to carry out single-country econometric empirical analysis, which would avoid the complexities inherent in panel data models and also side-step difficulties due to different political, social and institutional aspects that are faced in cross-country studies.

From this study, specific areas where more in-depth research can be carried out can also be identified. In particular, this concerns the role of fiscal councils. In the panel data estimations, IFIs have been captured as part of the composite index for the quality of budget institutions and through a simple dummy variable. As they become a more established component of budget institutions, it is relevant to examine more specifically their role to achieve fiscal discipline, as well as potential interaction effects with fiscal rules and other institutional characteristics.

Similarly, the relationship between legislative budgeting and fiscal discipline constitutes an area for further research, especially given the scant literature available on this topic. In this thesis, this relationship has been assessed empirically using the composite legislative budgetary power index and by using an indicator for legislative amendment powers. But there is scope for a more disaggregated assessment focusing on specific dimensions of legislative budgeting, especially those that can contribute towards more fiscal restraint.

Another area which merits further study concerns the choice of the form of fiscal governance by different countries. In contrast to the literature's emphasis on the type of government as the main determinant, the results in Chapter 4 suggest that country size may be a more important factor, with the delegation approach being more prevalent among small EA countries. The small sample size presents challenges to arrive at robust conclusions in this regard, since few member states have a single-party majority government, where the delegation approach would be the expected form of fiscal governance. Nevertheless, this is a topic which merits further investigation.

Finally, there is scope for further research on budget institutions by using qualitative case studies. The case study on Malta has provided useful and relevant insights on the role of fiscal rules and fiscal councils to instil fiscal discipline, as well as their limitations. This alternative methodological approach can be pursued further, through case studies for other EA countries, thus providing also the possibility of comparative analysis. It can also constitute a particularly promising avenue for further research in the areas identified earlier, namely fiscal councils, legislative budgeting and forms of fiscal governance.

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Appendix I

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources

Dimensions of budget institutions (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
Sub-index 1: Medium-term budgetary frameworks/targets			
National medium-term budgetary framework	• Years since MTBF has been in place	- Score equal to or greater than 1.0 in CION MTBF index since 2006 (10) - Score equal to or greater than 1.0 in CION MTBF index after 2006 but before 2010 (5) - Score equal to or greater than 1.0 in CION MTBF index after 2010 (0)	European Commission's MTBF index
	• Scope of MTBF	- MTBF covers the whole of general government or a large part of it (e.g. central government and social security) (10) - MTBF covers only central government (5) - There is no national MTBF (0)	European Commission's MTBF index (dimension 1)
	• Existence of co-ordination mechanisms prior to setting the medium-term budgetary targets	- There is a proper ex-ante co-ordination mechanism between all levels of general government (10) - There are co-ordination mechanisms only for some general government sub-sectors (5) - There are no co-ordination mechanisms (0)	European Commission's MTBF index (dimension 4)
	• Connectedness between the multi-annual budgetary targets and the preparation of the annual budget	- Fixed framework (articulated around a pre-defined path for government expenditure, generally not revised over time) (10) - The medium-term budgetary targets form the basis upon which the budget is prepared, but there can be deviation (5) - Flexible framework in which medium-term targets are only indicative (no clear link with the annual budget) (0)	European Commission's MTBF index (dimension 2)
	• Involvement of the national parliament in the preparation of the medium-term budgetary plan	- Vote of parliament on the main medium-term objectives (10) - No vote but formal presentation of the objectives to the national parliament (5) - No formal presentation of the objectives to the national parliament (0)	European Commission's MTBF index (dimension 3)
	• Monitoring and enforcement of the multi-annual budgetary targets	- There are well defined actions in case of deviations from plans and a regular monitoring of targets (reports, etc) (10) - Some monitoring and enforcement procedures in place (5) - No clearly defined monitoring and enforcement procedures (0)	European Commission's MTBF index (dimension 5)
Connectedness of Stability Programme to national MTBF	• Connection of SCP to the medium-term budget plans in accordance with the medium-term budgetary framework	- The SP is the medium-term budget plan established according to the MTBF (10) - The SP and the medium-term plans contain references to each other and explain any difference or revision (5) - The SP is produced independently and/or not linked to the medium-term plans (0)	European Commission's MTBF database (question 1.6a)
	• Connection between the fiscal objectives specified in the SP and the fiscal targets established according to the medium-term budgetary framework	- The SP constitutes the official medium-term budget plan or there is a legal obligation that the targets must be the same (10) - There is no obligation specified in law, but targets are the same (6.7) - Targets are usually the same, but differ sometimes (3.3) - Targets usually differ (0)	European Commission's MTBF database (question 1.6b)

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
Connectedness of Stability Programme to annual budget	• The SP (preliminary or final), or a document including the main medium-term macroeconomic and budgetary projections (that will be the basis for the preparation used for the SP) is annexed to the budget law	- Yes, such a document is annexed to the budget (10) - No, such a document is not annexed to the budget (0)	European Commission's MTBF database (question 7.2)
	• Connection between the budgetary targets in the budget law and those in the SP	- There is a legal obligation that the targets must be the same (10) - There is no obligation specified in law, but targets are the same (6.7) - Targets are usually the same, but differ sometimes (3.3) - Targets usually differ (0)	European Commission's MTBF database (question 7.3)
Sub-index 2: Fiscal rules			
Fiscal rule with the largest coverage of the general government sector	• Government sector covered by the fiscal rule • Coverage of general government finances	*Score is summation of the following two components:* - General government sector (5) - Central government (2.5) - Other (regional, local government, social security) (0) - 90% or more (5) - Less than 90% but more than 50% (2.5) - Less than 50% (0)	European Commission's Fiscal rules database (sector and coverage of general government finances)
	• Accounting system of the fiscal rule • Exclusions from the fiscal rule	*Score is summation of the following two components:* - ESA (European system of national and regional accounts) (5) - Budgetary accounting system or other (0) - No, there are no exclusions from the rule (5) - Yes, there are exclusions from the fiscal rule (0)	European Commission's Fiscal rules database (accounting system and exclusions)
	• Years since fiscal rule has been in place	- At least one fiscal rule with 50% or more coverage of the general government sector in place before 2005 (10) - At least one fiscal rule with 50% or more coverage of the general government sector in place after 2005 but before 2010 (6.7) - At least one rule with 50% or more coverage of the general government sector in place after 2010 but before 2013 (3.3) - Fiscal rule with 50% or more coverage of the general government sector in place after 2013/fiscal rules in place before 2013 but with less than 50% coverage of the general government sector (0)	European Commission's Fiscal rules database (rule in force since [year])

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
<u>Fiscal rule with the largest coverage of the general government sector (cont.)</u>	• Statutory/legal base of the rule	- Constitutional base (10) - The rule is based on a legal act (Public Finance Act, Fiscal Responsibility Law) (7.5) - The rule is based on a coalition agreement or an agreement reached by different general government tiers (and not enshrined in a legal act) (5) - Political commitment by a given authority (central/local government, minister of finance) (2.5) - No fiscal rule is in place (0)	European Commission's Fiscal rules database (statutory/legal base of the rule)
	• Room for setting or revising objectives of the fiscal rule	- There is no margin for adjusting objectives (they are encapsulated in the document underpinning the rule) (10) - There is some, but constrained, margin in setting or adjusting objectives (5) - There is complete freedom in setting objectives (the statutory base of the rule contains broad principles or the obligation for the government or the relevant authority to set targets) (0)	European Commission's Fiscal rules database (room for setting or revising objectives)
	• Nature of the body in charge of monitoring the rule • Nature of the body in charge of enforcement of the rule	*Score is summation of the following two components:* - Monitoring by an independent authority (fiscal council, court of auditors or any other court or the national parliament) (5) - Monitoring by the ministry of finance or any other government body (2.5) - No regular public monitoring of the rule (there is no report systematically assessing compliance) (0) - Enforcement by an independent authority (fiscal council or any court) or the national parliament (5) - Enforcement by the ministry of finance or any other government body (2.5) - No specific body in charge of enforcement (0)	European Commission's Fiscal rules database (the body in charge of monitoring and enforcement)
	• Enforcement and correction mechanisms	- Automatic correction and sanction mechanisms in case of non-compliance (10) - There is an automatic correction mechanism in case of non-compliance and the possibility of imposing sanctions (6.7) - The authority responsible is obliged to take corrective measures in case of non-compliance or is obliged to present corrective proposals to parliament or the relevant authority (3.3) - There is no ex-ante defined action in case of non-compliance (0)	European Commission's Fiscal rules database (enforcement mechanisms, correction mechanisms)
	• Monitoring of the rule • Escape clauses	*Score is summation of the following two components:* - There is real time monitoring of compliance with the rule, i.e. if alert mechanisms of risk of non-respect exist (5) - There is no real time monitoring of compliance with the rule, i.e. alert mechanisms of risk of non-respect do not exist (0) - Escape clauses are foreseen and clearly specified (5) - Escape clauses are not foreseen and clearly specified (0)	European Commission's Fiscal rules database (enforcement mechanisms, correction mechanisms)

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)			
Dimensions of budget institutions (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
Fiscal rule with the largest coverage of the general government sector (cont.)	• Media visibility of the rule	• Observance of the rule is closely monitored by the media, non-compliance is likely to trigger public debate (10) • High media interest in rule compliance, but non-compliance is unlikely to invoke public debate (5) • No or modest interest of the media (0)	European Commission's Fiscal rules database (media visibility of the rule)
Other fiscal rules in place[240]	• Other balanced budget rules in place	- Other balanced budget rules in place, covering at least 50% of general government finances (10) - Other balanced budget rules in place, covering less than 50% of general government finances (5) - No other balanced budget rules in place (0)	European Commission's Fiscal rules database (type, coverage of general government finances)
	• Debt rules in place	- Debt rules in place, covering at least 90% of general government finances (10) - Debt rules in place, covering less than 90% but more than 50% of general government finances (6.7) - Debt rules in place, covering less than 50% of general government finances (3.3) - No debt rules in place (0)	
	• Expenditure or revenue rules in place	- Expenditure/revenue rules in place, covering at least 90% of general government finances (10) - Expenditure/revenue rules in place, covering less than 90% but more than 50% of general government finances (6.7) - Expenditure/revenue rules in place, covering less than 50% of general government finances (3.3) - No expenditure/revenue rules in place (0)	
Sub-index 3: Structure of budget negotiations within the executive	• Place where negotiations take place	- Bilaterally between the finance minister and spending ministers (10) - Full cabinet participates in the negotiations (5) - Outside cabinet between the political parties (2.5) - Other (0)	Author's questionnaire to all EA countries
	• Imposition of budget ceilings on the initial spending requests of each line ministry	- Budget ceilings are imposed for total/overall expenditure of the line ministry (10) - Budget ceilings are imposed for other aggregate levels (e.g. by programme or sector) (6.7) - Budget ceilings are imposed for agency levels or other organisational level (3.3) - No such limits are imposed (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 31) Author's questionnaire to non-OECD EA countries

[240] Since most of the fiscal rules with the largest coverage of general government finances are balanced budget rules, the full score is assigned if other rules covering more than 50% of general government finances are in place, whereas for other types of rules, the full score is assigned if there are rules covering 90% or more of the general government sector.

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
Sub-index 3: Structure of budget negotiations within the executive (cont.)	• Final/ultimate decision-making power to resolve/settle disputes during the budget negotiation process	• President/Prime Minister/Minister of Finance (10) • Combination of chief executive, cabinet, finance minister (7.5) • Cabinet (5) • Ministerial committee (2.5)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 33) Author's questionnaire to non-OECD EA countries
Sub-index 4: Structure of parliamentary process leading to the approval of the budget law	• Formal powers of the legislature to amend the budget proposed by the executive	- The legislature may not make any changes, it can only approve or reject the budget as a whole (10) - The legislature may only decrease existing expenditures/revenues (i.e. the legislature cannot increase existing items or create new ones) (7.5) - The legislature may make amendments but only if it does not change the total deficit/surplus proposed by the executive (5) - The legislature has unrestricted powers to amend the budget (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 64) Author's questionnaire to non-OECD EA countries
	• Sequence of voting procedure	- The legislature first votes on the total amount of expenditure before it votes on specific appropriations (10) - The legislature does not first vote on the total amount of expenditure before it votes on specific appropriations (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 63) Author's questionnaire to non-OECD EA countries
	• Type of committee structures for dealing with the budget	*Where both the upper and lower chambers of the legislature are involved in the budgetary process, the score reflects the average for the two chambers.* - A single budget/finance committee co-ordinates a process in which sectoral committees make recommendations to the budget/finance committee. The budget/finance committee then reviews and accepts or rejects these recommendations and formally considers all budget-related matters (10) - A single budget/finance committee formally considers the budget, but members from sectoral committees attend meetings of the budget/finance committee when expenditures in their specific areas are discussed (7.5) - A single budget/finance committee formally considers budget aggregates (total level of revenue and spending and their allocation to each sector) and sectoral committees formally consider spending for sector specific appropriations (5) - Sectoral committees formally consider appropriations for each respective sector/no budget/finance committee is in place or it provides technical assistance only/no formal committee involvement, but committees may choose to consider aspects of the budget (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 59) Author's questionnaire to non-OECD EA countries

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
Sub-index 5: Flexibility of budget execution			
Executive authority to cut/cancel/rescind spending	• Whether executive can cut/cancel/rescind spending once the budget has been approved by the legislature • Whether executive has authority to cut/cancel/rescind all types of spending[241]	- Yes (*score is the average of the scope of executive authority to cut/cancel/rescind spending and thresholds and approval that apply)* - No (0) - Authority applies to all types of spending (10) - Authority applies to three types of spending only (7.5) - Authority applies to two types of spending only (5) - Authority applies to one type of spending only (2.5) - Executive does not have authority to cut spending (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 72-84) Author's questionnaire to non-OECD EA countries
Executive authority to cut/cancel/rescind spending (cont.)	• Whether there are any thresholds that apply to the executive's authority to cut/cancel/rescind spending • Whether approval is required for the executive to cut/cancel/rescind spending	*Score is summation of the following two components* - No (5) - Yes (0) - No (5) - Yes (*calculated as the sum of the following elements)* - Approval by Ministry of Finance/Economy required (1.25) - Approval by legislature required (0) - Ex-post approval required (1.25) - Ex-ante approval required (0)	
Power of line ministries to re-allocate funds within their budget envelope	• Whether line ministers can re-allocate funds within their own budget envelope • Whether there are any thresholds that apply to line ministers' re-allocation of funds within their own budget envelope • Whether approval is required for line ministers to re-allocate funds within their own budget envelope	- Yes (*score is summation of the following elements)* - No (0) - No (5) - Yes (0) - No (5) - Yes (*calculated as the sum of the following elements)* - Approval by Ministry of Finance/Economy required (2.5) - Approval by legislature required (0) - Ex-post approval required (1.25) - Ex-ante approval required (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 72-84) Author's questionnaire to non-OECD EA countries

[241] The following types of spending are identified in the OECD Budget Practices and Procedures Survey: mandatory, operational, discretionary and investment. This categorisation also applies to executive authority to increase spending.

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
Restrictions on executive authority to increase spending	• Whether executive can increase spending once the budget has been approved by the legislature • Whether executive has authority to increase all types of spending	- Yes (*score is the average of the scope of executive authority to cut/cancel/rescind spending and thresholds and approval that apply)* - No (10) - Authority applies to all types of spending (0) - Authority applies to three types of spending only (2.5) - Authority applies to two types of spending only (5) - Authority applies to one type of spending only (7.5) - Executive does not have authority to cut spending (10) *Score is summation of the following two components* - Yes (5) - No (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 72-84) Author's questionnaire to non-OECD EA countries
Restrictions on executive authority to increase spending (cont.)	• Whether there are any thresholds that apply to the executive's authority to increase spending • Whether approval is required for the executive to increase spending	- No (5) - Yes (*calculated as the sum of the following elements)* - Approval by legislature required (2.5) - Approval by Ministry of Finance/Economy required (1.25) - Ex-ante approval required (2.5) - Ex-ante approval required (1.25)	
Supplementary budgets	• Top reason(s) why the supplementary budget/s were necessary[242]	- No supplementary budgets/recession or cancellation of planned spending/formal approval of appropriations carried forward from one fiscal year to the next/transfer of funds from one appropriation to another (no net increase) (10) - Ad hoc emergency needs (e.g. natural disaster) (7.5) - Changing economic forecasts resulting in lower/higher expenditure/increase of estimates of mandatory spending or stimulus measures (5) - New policy initiatives (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (question 86) Author's questionnaire to non-OECD EA countries
Sub-index 6: Budget transparency			
Comprehensiveness of budget documentation	• Distinction of new expenditure and revenue measures in budget documentation	*Score is summation of the following two components:* - Expenditures under current commitments in law and policy are always distinguished from new policies in the annual budget documentation presented to the legislature (5) - Expenditures under current commitments in law and policy are sometimes distinguished from new policies in the annual budget documentation presented to the legislature (3)	

[242] Data on the amounts of supplementary budgets was not available for several countries in the OECD Budget Practices and Procedures database and comparable data for all EA countries is not available from other sources. Hence, the top reason why the supplementary budget/s were necessary is used as a proxy.

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
Comprehensiveness of budget documentation (cont.)	• Distinction of new expenditure and revenue measures in budget documentation (cont.) • Inclusion in the budget documentation approved by the legislature of: financial liabilities, financial assets, state transfers/guarantees, municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	- Expenditures under current commitments in law and policy are rarely distinguished from new policies in the annual budget documentation presented to the legislature (1) - Expenditures under current commitments in law and policy are never distinguished from new policies in the annual budget documentation presented to the legislature (0) - New revenue-raising measures are always distinguished in the annual budget documentation presented to the legislature (5) - New revenue-raising measures are sometimes distinguished in the annual budget documentation presented to the legislature (3) - New revenue-raising measures are rarely distinguished in the annual budget documentation presented to the legislature (1) - New revenue-raising measures are never distinguished in the annual budget documentation presented to the legislature (0) - All or almost all items included (10) - Most items included (7.5) - Some items included (5) - Only few items included (2.5) - None of the items included (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 48, 49, 38b, 39b, 50b) Author's questionnaire to non-OECD EA countries
Public availability of budgetary information, assumption and methodologies	• Public availability of: methodology and assumption for establishing fiscal projections used in the budget, sensitivity analyses of fiscal and/or macroeconomic models, independent reviews/analysis of macroeconomic and/or fiscal assumptions, budget circular, pre-budget report to the legislature, executive budget proposal submitted to the legislature, fiscal policy objectives for the medium term, comprehensive annual financial plan encompassing all revenues and expenditures including off-budget expenditures and extra-budgetary funds,	- Most of the listed items are made publicly available (10) - Some of the listed items are made publicly available (6.7) - Few of the listed items are made publicly available (3.3) - None of the listed items are made publicly available (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (question 51a) Author's questionnaire to non-OECD EA countries

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
Public availability of budgetary information, assumption and methodologies (cont.)	comprehensive annual financial plan encompassing all revenues and expenditures for all levels of government (including regional and local), medium-term perspective on total revenue and expenditure (possibly in the form of a medium-term expenditure framework), long-term perspective on total revenue and expenditure, citizens' budget, citizens' budget guide (explaining the budget process and actors involved), budget approved by the legislature.		
Comprehensiveness of budget approval process	• Legislative authorisation of off-budget expenditures and contingent liabilities	- Legislative authorisation is required for all off-budget expenditures and contingent liabilities (or these items do not exist) (10) - Legislative authorisation is required for most off-budget expenditures and contingent liabilities (7.5) - Legislative authorisation is required for some off-budget expenditures and contingent liabilities (5) - Legislative authorisation is required for few off-budget expenditures and contingent liabilities (2.5) - Legislative authorisation is not required for any off-budget expenditures and contingent liabilities (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (question 39) Author's questionnaire to non-OECD EA countries
Sub-index 7: Independent fiscal institutions (IFIs)[243]			
Formal powers of IFIs			
Independence	• Legal independence • Operational independence • Safeguards on budget • Right to select, employ and pay staff	*Score is summation of the following elements:* - Yes (2.5) - No (0) - Yes (2.5) - No (0) - Yes (2.5) - No (0) - Yes (2.5) - No (0)	IMF Fiscal Councils database (independence)

[243] Only Belgium, Germany and Slovenia have two fiscal councils. Unless otherwise specified, for these countries, the scores are computed as the average for the two institutions.

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
Independence (cont.)	Characteristics of governing/high-level management members	*Score is summation of the following elements:* - Re-appointment is not possible (5) - There is the possibility of re-appointment (0) - Members can be non-citizens (5) - Members have to be citizens of the country concerned (0)	IMF Fiscal Councils database (resources)
	• Composition of governing/high-level management members	- Members include only academics and/or policy experts (10) - Members include academics and/or policy experts as well as civil servants but not politicians (6.7) - Members include civil servants only (3.3) - Members include politicians (0)	IMF Fiscal Councils database (resources)
	• Appointment and dismissal of governing/high-level management members	*Score is summation of the following elements:* - Appointment by parliament (5) - Appointment by other (not government) institution (2.5) - Appointment by government (0) - Dismissal by parliament (5) - Dismissal by other (not government) institution (2.5) - Dismissal by government (0)	IMF Fiscal Councils database (resources)
Mandate/tasks	• Forecasts used in the budget • Binding forecasts • Comply or explain requirement • Formal consultation or hearings • Fiscal council can stall the budget process	*Score is summation of the following elements:* - Yes (2) - No (0) - Yes (2) - No (0) - Yes (2) - No (0) - Yes (2) - No (0) - Yes (2) - No (0)	IMF Fiscal Councils database (tasks and information)
	• Positive and/or normative analysis	- Positive and normative analysis (10) - Positive analysis only (0)	IMF Fiscal Councils database (remit)

Table AI: The quality of budget institutions index - indicators, scoring scheme and data sources (cont.)

Dimensions of budget institutions (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
Mandate/tasks (cont.)	• Forecast preparation and assessment	- Forecast preparation with or without forecast assessment (10) - Forecast assessment only (0)	IMF Fiscal Councils database (remit)
	- Whether fiscal council/s carry out the following tasks: recommendations; long-term sustainability; optimality (the assessment of government budgetary and fiscal performance in relation to fiscal objectives and strategic priorities); costing of measures; monitoring of fiscal rules; ex-post analysis; fiscal policy co-ordination; mandate beyond fiscal policy	- Fiscal council/s carries out all the indicated tasks (10) - Fiscal council/s carry out most of the indicated tasks (7.5) - Fiscal council/s carry out some of the indicated tasks (5) - Fiscal council/s carry out few of the indicated tasks (2.5) - Fiscal council/s carry out none of the indicated tasks (0)	IMF Fiscal Councils database (remit – other tasks)
Organisational capacity of the IFIs	• Years since IFI has been in place[244]	Date of start of activity: - before 2005 for all or most fiscal councils in place and no major changes to mandate/institutional set-up since 2010 (10) - before 2005 for all or most fiscal councils in place but major changes to mandate/institutional set-up since 2010 (7.5) - after 2005 but before 2010 for all or most fiscal councils in place (5) - between 2010 and 2013 for all or most fiscal councils in place (2.5) - after 2013 for all or most fiscal councils in place (0)	IMF Fiscal Councils database (start of activity – year, year of major changes to mandate/institutional set-up)
	• Number of staff[245]	- More than fifty (10) - More than twenty but less than fifty (6.7) - More than ten but less than twenty (3.3) - Less than ten (0)	IMF Fiscal Councils database (resources)
	• Legal obligation to share information essential for the fiscal council's activity)	- Yes (10) - No (0)	IMF Fiscal Councils database (independence)
	• Annual number and diversity of public reports	*Score is summation of the following elements:* - More than ten publications (6) - Less than ten but more than five publications (4) - Less than five but more than one publication (2) - Only one publication (0) - More than five different publications (4) - Less than five but more than one different publications (2) - Only one publication (0)	IMF Fiscal Councils database (tasks and instruments)

[244] For the countries with two fiscal councils: in the case of Belgium, both IFIs were established before 2005. In the case of Germany, one of the fiscal councils was established before 2005 but another was established in 2010. In the case of Slovenia, one fiscal council, having a narrow remit, was established in 1991 whilst the other fiscal council was not yet operational. Scores were assigned accordingly.

[245] For those countries with two fiscal councils, the total number of staff of both institutions was considered for scoring purposes.

Table AII: Secondary data sources for the quality of budget institutions and legislative budgetary power indices	
Main Data Sources	European Commission (2016) medium-term budgetary frameworks database - old methodology. https://ec.europa.eu/info/publications/medium-term-budgetary-frameworks-database_en
	European Commission (2016) fiscal rules database - old methodology https://ec.europa.eu/info/publications/fiscal-rules-database_en
	European Commission fiscal governance databases - data not available online, obtained upon request from European Commission services, DG Ecfin
	IMF fiscal councils dataset, 2015 (data online replaced with 2016 vintage) http://www.imf.org/external/np/fad/council/
	OECD 2012 international database of budget practices and procedures. https://qdd.oecd.org/subject.aspx?Subject=7F309CE7-61D3-4423-A9E3-3F39424B8BCA
	OECD 2007 international database of budget practices and procedures. http://www.oecd.org/governance/budgeting/internationalbudgetpracticesandproceduresdatabase.htm
Other secondary data sources for all EA countries	European University Institute, Department of Law (2015) Constitutional change through Euro crisis law, a multi-level legal analysis of economic and monetary union. http://www.eurocrisislaw.eui.eu
	Update of Stability Programmes 2015. https://ec.europa.eu/info/publications/2015-european-semester-national-plans_en (updates of previous years were also referred to where relevant)
Other secondary data sources by country:	
Austria	Austrian Federal Ministry of Finance – budget and economic policy. https://english.bmf.gv.at/
	Fiskalrat, Austrian Fiscal Advisory Council. https://www.fiskalrat.at/en/
	Ministry of Finance, Austria (2011) Presentation on Reforming Fiscal Frameworks - The Austrian case. In Economic Policy Committee meeting, Brussels 16 November 2011. https://www.bmf.gv.at/budget/haushaltsrechtsreform/2011-11-16_Reforming_Fiscal_Frameworks_The_Austrian_case.pdf?67ruil
	Schilhan, C. (2011) Presentation on Budgeting in Austria. In Course on Macroeconomic Implications of Fiscal Issues, Joint Vienna Institute April 2011. https://english.bmf.gv.at/budget-economic-policy/BMF-Budgeting_in_Austrian.ppt?67rqbo
Belgium	Belgian House of Representatives (2014) The House of Representatives, the Budget.http://www.dekamer.be/kvvcr/pdf_sections/pri/fiche/en_11_01.pdf
	Belgium Service public federal Stratégie et Appui, Notion de Budget. http://www.begroting.be/FR/Pages/budgetDefinition.aspx); Forme et structure. http://www.begroting.be/FR/Pages/budgetShape.aspx); Le cycle budgétaire. http://www.begroting.be/FR/Pages/budgetCycle.aspx); Monitoring. http://www.begroting.be/FR/Pages/budgetMonitor.aspx) [translated from French]
Cyprus	Cyprus House of Representatives. http://www.parliament.cy/
	Pantelli, G. (2013) A New PFM Reform Strategy for Cyprus. In IMF Public Finance Management blog, 3 July 2013, https://blog-pfm.imf.org/pfmblog/2013/07/a-new-pfm-reform-strategy-for-cyprus.html
	The Constitution of the Republic of Cyprus. http://www.presidency.gov.cy/presidency/presidency.nsf/all/1003AEDD83EED9C7C225756F0023C6AD/$file/CY_Constitution.pdf
Estonia	Estonia Ministry of Finance, Rahandusministeerium, State Budget and Economy. https://www.rahandusministeerium.ee/en/state-budget-and-economy
Finland	Finland Ministry of Finance, Economic Policy – Budget, the EU. http://vm.fi/en/economic-policy
France	French Ministry of Finance, Ministère de l'Action et des comptes publiques, Direction du Budget. https://www.performance-publique.budget.gouv.fr/) [translated from French]
Germany	German Parliament, Deutscher Bundestag, Committees, Budget. http://www.bundestag.de/en/committees/a08); Adoption of the federal budget. http://www.bundestag.de/en/parliament/adoption/245712); Federal budget. http://www.bundestag.de/en/parliament/function/budget
	OECD (2014) Budget Review: Germany. *OECD Journal on Budgeting* 14(2). https://www.oecd-ilibrary.org/governance/oecd-journal-on-budgeting-volume-14-issue-2_budget-v14-2-en
Greece	Kaplanoglou, G. and Rapanos, V.T. (2011) The Greek Fiscal Crisis and the Role of Fiscal Governance. Hellenic Observatory Papers on Greece and Southeast Europe 48. http://www.lse.ac.uk/europeanInstitute/research/hellenicObservatory/pdf/GreeSE/GreeSE48.pdf

Table AII: Secondary data sources for the quality of budget institutions and legislative budgetary power indices (cont.)	
Ireland	Houses of the Oriechtas (2015) *Budget Process and Documents*. Oriechtas Library and Research Service, 24 September 2015.
	Ireland Fiscal Responsibility Act 2012. https://www.fiscalcouncil.ie/wp-content/uploads/2013/02/FRA.pdf
	OECD (2015) *Review of Budget Oversight by Parliament: Ireland*. https://webarchive.oireachtas.ie/parliament/media/housesoftheoireachtas/ireland-parliamentary-budget-review-preliminary-draft.pdf
Italy	Italy Ministero dell'Economia e delle Finanze, Ragioneria Generale dello Stato (2015) Presentation on Reforming the Italian budget process: strengthening the allocation function and integrating the spending review. In *36th Annual meeting of the OECD Senior Budget Officials*, Rome, Italy 11-12 June 2015. https://www.slideshare.net/OECD-GOV/d1-pms2-aline-pennisi-italy
	Proença, M. (2015) Budgeting in Italy, Portugal Peer review. In *36th Annual Meeting of OECD Senior Budget Officials*, Rome, Italy 11-12 June 2015.https://www.slideshare.net/OECD-GOV/d1-pms2-manuela-proenca-portugal
Latvia	Latvia Ministry of Finance. http://www.fm.gov.lv/en
	Republic of Latvia, Regulations Regarding Utilisation of the State Budget Appropriation Reserve, Cabinet Regulation No. 594 Adopted 28 August 2007. https://likumi.lv/ta/en/id/162749-regulations-regarding-utilisation-of-the-state-budget-appropriation-reserve
	The Constitution of the Republic of Latvia. http://www.saeima.lv/en/legislation/constitution
Lithuania	Ministry of Finance of the Republic of Lithuania, Budget. http://finmin.lrv.lt/en/competence-areas/budget
	Republic of Lithuania, Law on the Budget Structure, 30 July 1990, No I-430 (as last amended on 6 November 2012 – No XI-2318). https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.440733?jfwid=cxhrny4f3
	The Constitution of the Republic of Lithuania. http://www3.lrs.lt/home/Konstitucija/Constitution.htm
Luxembourg	Bausch, R. (2012) Presentation on Budget Reform in Luxembourg Overview of the Preparations. In *33rd Annual Meeting of OECD Senior Budget Officials*, Reykjavik, Iceland 8 June 2012. http://www.oecd.org/gov/budgeting/D2-PM%20-%20Luxembourg%20-%20R.%20BAUSCH%20-%20Luxembourg.pdf
Malta	Constitution of Malta. http://justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8566
	Financial Administration and Audit Act, Chapter 174. http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8692&l=1
	Financial Estimates 2017, Budget Speech 2017. https://mfin.gov.mt/en/The-Budget/Pages/The-Budget-2017.aspx
	Fiscal Responsibility Act, Chapter 314. http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=26047&l=1
	Malta Fiscal Advisory Council. https://mfac.org.mt/en/Pages/default.aspx
Netherlands	Government of the Netherlands, Budget. https://www.government.nl/topics/budget-day
	Tweede Kamer der Staten-Generaal (2009) Presentation on The Dutch Parliament and the Budget Process. In *OECD parliamentary budget officials: first annual meeting*, Rome, Italy 26 February 2009. http://www.oecd.org/gov/budgeting/42466069.pdf
Portugal	Assembly of the Republic, Law No. 52/2011 of 13 October Budget Framework Law. http://www.cfp.pt/wp-content/uploads/2012/10/1351707749.pdf
	Conselho das Financas Públicas. http://www.cfp.pt/?lang=en
	Statutes of the Portuguese Public Finance Council, Approved by Law No. 54/2011 of 19 October, as amended by article 187 of the Law No. 82-B/2014 of 31 December. http://www.cfp.pt/wp-content/uploads/2015/01/Statutes-2014.pdf

Table AII: Secondary data sources for the quality of budget institutions and legislative budgetary power indices (cont.)

Slovakia	Act of 23rd September 2004 of Budget Rules of the Public Service and of Change and Amendment of some Acts. http://www.finance.gov.sk/en/Components/CategoryDocuments/s_LoadDocument.aspx?categoryId=495&documentId=242
	Act of 23rd September 2004 of Budgetary Rules of the Regional Self-Administration and of Change and Amendment of Particular Acts. http://www.finance.gov.sk/en/Components/CategoryDocuments/s_LoadDocument.aspx?categoryId=495&documentId=244
Slovenia	Voljč, M. (2011) Presentation on Budget System and Budget Preparation Procedures in Slovenia. In *Study tour for officials from the Ministry of Finance of Uzbekistan*, Ljubljana, Slovenia October 2011. https://www.pempal.org/sites/pempal/files/event/attachments/3a_volj-_budget-system-and-budget-preparation-procedures-in-slovenia_eng.pdf
	Slovenian Ministry of Finance. http://www.mf.gov.si
Spain	Gutiérrez, C. (2010) Presentation on Spanish Parliamentary Budget Institutions. In *Second Annual Meeting of the OECD Parliamentary Budget Officials*, Bern, Germany, 11-12 February 2010. http://www.oecd.org/gov/budgeting/44694100.pdf
	Spain Ministero de Hacienda y Function Publica, Secretaria de Estado de Presupuestos y Gastos, Administración Presupuestaria. http://www.sepg.pap.minhafp.gob.es/sitios/sepg/en-GB/Presupuestos/PGE2017Prorroga/Paginas/PGE2017Prorroga.aspx

Table AIII: Quality of budget institutions index – results (post-crisis data)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
Quality of budget institutions		**6.7**	**5.2**	**6.0**	**6.1**	**5.6**	**6.9**	**6.7**	**6.3**	**6.7**	**6.3**	**6.4**	**6.2**	**5.5**	**5.0**	**6.4**	**5.7**	**5.8**	**6.8**	**7.8**
1	***Medium-term budgetary framework/targets***	***9.2***	***6.7***	***7.5***	***5.0***	***7.1***	***7.7***	***7.1***	***6.9***	***5.8***	***7.9***	***5.0***	***5.2***	***4.8***	***6.3***	***7.5***	***7.1***	***6.0***	***8.3***	***8.3***
1a	*National medium-term budgetary framework (MTBF)*	*8.3*	*7.5*	*6.7*	*7.5*	*7.5*	*10.0*	*7.5*	*9.2*	*5.0*	*9.2*	*8.3*	*5.8*	*6.7*	*8.3*	*10.0*	*6.7*	*8.3*	*8.3*	*10.0*
1a(i)	Existence and coverage of national MTBF	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
1a(ii)	History of national MTBF	10.0	10.0	0.0	10.0	10.0	10.0	10.0	5.0	0.0	10.0	5.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0	10.0
1a(iii)	Existence of coordination mechanisms prior to setting the medium-term budgetary targets	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	5.0	10.0	10.0
1a(iv)	Connectedness between the multi-annual budgetary targets and the preparation of the annual budget	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	10.0	10.0	10.0	10.0	10.0
1a(v)	Involvement of the national parliament in the preparation of the medium-term budgetary plan	10.0	5.0	5.0	5.0	5.0	10.0	0.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0
1a(vi)	Monitoring and enforcement of multiannual budgetary targets	10.0	5.0	10.0	5.0	5.0	10.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	5.0	5.0	10.0
1b	*Connectedness between SP and national MTBF and annual budget*	*10.0*	*5.8*	*8.3*	*2.5*	*6.7*	*5.4*	*6.7*	*4.6*	*6.7*	*6.7*	*1.7*	*4.6*	*2.9*	*4.2*	*5.0*	*7.5*	*3.8*	*8.3*	*6.7*
1b(i)	Connectedness between national MTBF and Stability Programme (SP)	10.0	8.3	8.3	1.7	10.0	4.2	10.0	5.8	6.7	10.0	1.7	5.8	5.8	6.7	6.7	10.0	4.2	8.3	10.0
	Connectedness between SP and medium-term budget plans in MTBF	10.0	10.0	10.0	0.0	10.0	5.0	10.0	5.0	10.0	10.0	0.0	5.0	5.0	10.0	10.0	10.0	5.0	10.0	10.0
	Relation between fiscal objectives in SP and targets in MTBF (if SP is not the official medium-term budget plan)	10.0	6.7	6.7	3.3	10.0	3.3	10.0	6.7	3.3	10.0	3.3	6.7	6.7	3.3	3.3	10.0	3.3	6.7	10.0
1b(ii)	Connectedness between SP and annual budget	10.0	3.3	8.3	3.3	3.3	6.7	3.3	3.3	6.7	3.3	1.7	3.3	0.0	1.7	3.3	5.0	3.3	8.3	3.3
	SP (preliminary or final), or a document including the main medium-term macroeconomic and budgetary projections (that will be the basis for the preparation used for the SP) annexed to the budget law	10.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0

Table AIII: Quality of Budget Institutions Index – results (post-crisis data) (cont.)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
1b(ii) (cont.)	Relation between the budgetary targets for the year t (the ongoing budget year at the time of the preparation of the budget and the SP for the year t+1) in the budget law and the SP	10.0	6.7	6.7	6.7	6.7	3.3	6.7	6.7	3.3	6.7	3.3	6.7	0.0	3.3	6.7	10.0	6.7	6.7	6.7
2	***Fiscal rules***	***6.1***	***5.4***	***4.2***	***4.4***	***4.6***	***7.9***	***6.8***	***5.4***	***8.0***	***8.0***	***6.8***	***5.5***	***6.9***	***5.7***	***7.5***	***5.7***	***6.7***	***3.3***	***8.6***
2a	*Fiscal rule with largest coverage of general government sector*	*8.6*	*5.9*	*6.3*	*6.1*	*4.4*	*8.8*	*8.5*	*8.1*	*7.8*	*6.9*	*6.9*	*6.3*	*6.4*	*6.8*	*8.7*	*6.8*	*7.0*	*4.9*	*9.6*
2a(i)	Coverage, definitions and years since rule is in place	8.8	7.5	7.5	10.0	3.8	9.2	10.0	7.1	6.3	5.0	7.5	1.3	10.0	7.5	10.0	10.0	8.3	1.7	10.0
	Government sector and coverage	7.5	10.0	10.0	10.0	0.0	10.0	10.0	10.0	10.0	10.0	10.0	2.5	10.0	10.0	10.0	10.0	10.0	0.0	10.0
	Accounting system and exclusions	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	5.0	0.0	10.0	0.0	10.0	10.0	10.0	10.0	10.0	0.0	10.0
	Years since fiscal rules in place	10.0	0.0	0.0	10.0	10.0	6.7	10.0	3.3	0.0	0.0	0.0	0.0	10.0	0.0	10.0	10.0	3.3	6.7	10.0
2a(ii)	Legal basis and flexibility of objectives	8.8	5.0	8.8	5.0	6.3	10.0	8.8	8.8	8.8	7.5	8.8	8.8	6.3	8.8	8.8	8.8	8.8	8.8	10.0
	Statutory legal basis of the rule	7.5	5.0	7.5	5.0	7.5	10.0	7.5	7.5	7.5	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	10.0
	Room for setting or revising objectives	10.0	5.0	10.0	5.0	5.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
2a(iii)	Enforcement mechanisms	6.9	6.1	8.9	4.4	2.8	6.1	5.3	6.4	6.1	5.3	6.4	5.3	4.4	6.1	6.1	3.6	6.1	4.2	8.3
	Nature of body in charge of monitoring and enforcement	7.5	10.0	10.0	5.0	5.0	10.0	7.5	7.5	10.0	7.5	7.5	7.5	10.0	10.0	10.0	7.5	10.0	7.5	5.0
	Correction mechanisms	3.3	3.3	6.7	3.3	3.3	3.3	3.3	6.7	3.3	3.3	6.7	3.3	3.3	3.3	3.3	3.3	3.3	0.0	10.0
	Real-time monitoring and well-defined escape clauses	10.0	5.0	10.0	5.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	5.0	5.0	0.0	5.0	5.0	10.0
2a(iv)	Media visibility	10.0	5.0	0.0	5.0	5.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	5.0	10.0
2b	*Other fiscal rules in place*	*1.1*	*4.4*	*0.0*	*1.1*	*5.0*	*6.1*	*3.3*	*0.0*	*8.3*	*10.0*	*6.7*	*3.9*	*7.8*	*3.3*	*5.0*	*3.3*	*6.1*	*0.0*	*6.7*
2b(i)	Other fiscal rules in place - balanced budget rules	0.0	10.0	0.0	0.0	5.0	5.0	10.0	0.0	5.0	10.0	0.0	5.0	10.0	0.0	5.0	10.0	5.0	0.0	10.0
2b(ii)	Other fiscal rules in place - debt rules	0.0	0.0	0.0	3.3	3.3	3.3	0.0	0.0	10.0	10.0	10.0	0.0	10.0	10.0	0.0	0.0	10.0	0.0	3.3
2b(iii)	Other fiscal rules in place - expenditure/revenue rules	3.3	3.3	0.0	0.0	6.7	10.0	0.0	0.0	10.0	10.0	10.0	6.7	3.3	0.0	10.0	0.0	3.3	0.0	6.7
3	***Structure of budget negotiations within the executive***	***7.5***	***4.7***	***8.3***	***7.5***	***7.5***	***5.8***	***8.3***	***10.0***	***9.2***	***9.2***	***8.3***	***7.5***	***7.5***	***8.3***	***7.5***	***5.6***	***6.7***	***9.2***	***10.0***

Table AIII: Quality of Budget Institutions Index – results (post-crisis data) (cont.)		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
3a	*Place where budget negotiations take place*	*7.5*	*5.0*	*10.0*	*7.5*	*7.5*	*7.5*	*10.0*	*10.0*	*10.0*	*7.5*	*5.0*	*7.5*	*7.5*	*10.0*	*7.5*	*5.0*	*5.0*	*7.5*	*10.0*
3b	*Imposition of budget ceilings by government on the initial spending requests of each line ministry*	*10.0*	*6.7*	*10.0*	*10.0*	*10.0*	*0.0*	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*6.7*	*10.0*	*10.0*	*10.0*
3c	*Final/ultimate decision-making power to resolve/settle disputes during the budget negotiation process*	*5.0*	*2.5*	*5.0*	*5.0*	*5.0*	*10.0*	*5.0*	*10.0*	*7.5*	*10.0*	*10.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*10.0*	*10.0*
4	***Structure of the parliamentary process leading to the approval of the budget law***	***2.5***	***1.7***	***4.2***	***5.0***	***2.5***	***8.3***	***3.3***	***6.7***	***3.3***	***4.2***	***5.0***	***5.0***	***3.3***	***0.0***	***1.7***	***3.3***	***2.5***	***8.3***	***8.3***
4a	*Restrictions on formal powers of the Legislature to amend the budget proposed by the Executive*	*0.0*	*0.0*	*7.5*	*5.0*	*0.0*	*7.5*	*0.0*	*10.0*	*10.0*	*5.0*	*0.0*	*5.0*	*0.0*	*0.0*	*5.0*	*0.0*	*0.0*	*5.0*	*5.0*
4b	*Legislature budgetary voting procedure - whether it votes first on the total amount of expenditure before it votes on specific appropriations*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*10.0*	*0.0*	*0.0*	*0.0*	*0.0*	*10.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*10.0*	*10.0*
4c	*Centralised parliamentary committee structure dealing with the budget*	*7.5*	*5.0*	*5.0*	*10.0*	*7.5*	*7.5*	*10.0*	*10.0*	*0.0*	*7.5*	*5.0*	*10.0*	*10.0*	*0.0*	*0.0*	*10.0*	*7.5*	*10.0*	*10.0*
5	***Flexibility of budget execution***	***7.7***	***6.7***	***7.2***	***6.6***	***3.9***	***5.8***	***6.7***	***5.7***	***6.6***	***3.8***	***5.6***	***6.9***	***6.1***	***6.1***	***4.1***	***6.7***	***6.6***	***6.9***	***6.5***
5a	*Executive authority to cut, cancel or rescind spending once the budget has been approved by the Legislature*	*8.8*	*8.8*	*8.8*	*8.8*	*0.0*	*5.6*	*6.9*	*7.8*	*7.5*	*4.4*	*2.5*	*0.0*	*8.8*	*8.1*	*0.0*	*8.8*	*10.0*	*7.8*	10.0
5b	*Possibility for line ministers to re-allocate funds within their own budget envelope*	*7.5*	*7.5*	*10.0*	*5.0*	*5.0*	*2.5*	*7.5*	*2.5*	*5.0*	*1.3*	*2.5*	*7.5*	*7.5*	*8.8*	*7.5*	*7.5*	*7.5*	*5.0*	7.5
5c	*Executive authority to increase spending after the budget has been approved by the Legislature*	*4.4*	*5.6*	*5.0*	*2.5*	*5.6*	*10.0*	*2.5*	*2.5*	*3.8*	*4.4*	*7.5*	*10.0*	*3.1*	*4.4*	*3.8*	*5.6*	*3.8*	*10.0*	3.4
5d	*Supplementary budgets - top reason why supplementary budget/s were necessary*	*10.0*	*5.0*	*5.0*	*10.0*	*5.0*	*5.0*	*10.0*	*10.0*	*10.0*	*5.0*	*10.0*	*10.0*	*5.0*	*3.3*	*5.0*	*5.0*	*5.0*	*5.0*	5.0
6	***Budget transparency***	***7.7***	***4.0***	***5.7***	***9.6***	***8.3***	***6.9***	***9.3***	***4.9***	***8.4***	***6.9***	***8.8***	***9.2***	***7.8***	***3.7***	***8.9***	***4.8***	***6.8***	***6.1***	***6.6***

Table AIII: Quality of Budget Institutions Index – results (post-crisis data) (cont.)		**AT**	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
6a	*Legislative authorisation of off-budget expenditures and contingent liabilities*	*10.0*	*0.0*	*5.0*	*10.0*	*7.5*	*5.0*	*10.0*	*2.5*	*10.0*	*7.5*	*10.0*	*10.0*	*10.0*	*0.0*	*10.0*	*2.5*	*5.0*	*10.0*	10.0
6b	*Comprehensiveness of budget documentation*	*6.3*	*5.3*	*5.3*	*8.8*	*7.5*	*9.0*	*7.8*	*9.0*	*5.3*	*6.5*	*6.3*	*7.5*	*6.8*	*4.3*	*6.8*	*5.3*	*8.8*	*5.0*	6.5
6b(i)	Distinction of new revenue-raising measures and between expenditures under current commitments in law and policy and new policies, in the annual budget documentation presented to the legislature	5.0	8.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0	6.0	6.0	6.0	3.0	10.0	5.0	8.0
6b(ii)	Inclusion in budget documentation approved by the legislature of financial assets and liabilities, state and municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	7.5	2.5	2.5	7.5	5.0	10.0	7.5	10.0	2.5	5.0	2.5	5.0	7.5	2.5	7.5	7.5	7.5	5.0	5.0
6c	*Public availability of budgetary information and methodologies*	*6.7*	*6.7*	*6.7*	*10.0*	*10.0*	*6.7*	*10.0*	*3.3*	*10.0*	*6.7*	*10.0*	*10.0*	*6.7*	*6.7*	*10.0*	*6.7*	*6.7*	*3.3*	3.3
7	***Independent fiscal institutions***	***6.4***	***7.2***	***4.7***	***4.6***	***5.6***	***5.5***	***5.2***	***4.2***	***5.5***	***3.9***	***5.4***	***3.9***	***2.2***	***5.3***	***7.5***	***6.6***	***5.6***	***5.8***	***6.4***
7a	*Formal powers of IFIs*	*6.2*	*4.4*	*6.4*	*5.7*	*6.0*	*5.1*	*4.3*	*3.5*	*6.0*	*5.3*	*5.9*	*3.9*	*2.5*	*6.0*	*4.9*	*6.6*	*4.8*	*4.1*	*6.1*
7a(i)	Fiscal Council independence	5.5	4.3	6.3	6.7	6.7	6.5	4.6	5.3	8.3	6.4	7.5	6.0	4.4	8.3	4.4	8.4	8.4	5.1	4.9
	Institutional characteristics	7.5	5.0	7.5	5.0	7.5	7.5	5.0	5.0	10.0	7.5	7.5	7.5	5.0	10.0	5.0	10.0	10.0	5.0	2.5
	Governing/high level management members	3.5	3.6	5.0	8.3	5.8	5.6	4.2	5.6	6.7	5.3	7.5	4.4	3.9	6.7	3.9	6.8	6.8	5.3	7.2
7a(ii)	Mandate/tasks of IFI	6.9	4.5	6.6	4.8	5.4	3.6	4.0	1.8	3.8	4.3	4.3	1.8	0.6	3.8	5.4	4.8	1.3	3.0	7.3
7b	*Organisational/technical capacity of independent fiscal councils*	*6.7*	*10.0*	*3.0*	*3.5*	*5.1*	*6.0*	*6.2*	*5.0*	*5.0*	*2.5*	*4.8*	*4.0*	*1.8*	*4.5*	*10.0*	*6.7*	*6.3*	*7.5*	*6.7*
7b(i)	Number of staff	3.3	10.0	0.0	0.0	0.0	3.3	6.7	3.3	3.3	0.0	3.3	0.0	3.3	0.0	10.0	6.7	6.7	10.0	6.7
7b(ii)	Access to information	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	0.0	10.0	10.0	10.0	10.0	10.0	10.0
7b(iii)	Public reports	6.0	10.0	2.0	4.0	8.0	8.0	3.0	4.0	4.0	0.0	6.0	6.0	4.0	8.0	10.0	10.0	6.0	10.0	10.0
7b(iv)	IFI in place, years since start of activity	7.5	10.0	0.0	0.0	2.5	2.5	5.0	2.5	2.5	0.0	0.0	0.0	0.0	0.0	10.0	0.0	2.5	0.0	0.0

Source: Results are produced by author

Table AIV: Quality of budget institutions index – results (pre-crisis data)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
Quality of budget institutions		**6.1**	**5.9**	**-**	**-**	**4.6**	**5.2**	**5.8**	**3.6**	**4.5**	**5.0**	**-**	**-**	**4.7**	**-**	**6.3**	**4.8**	**4.8**	**6.3**	**5.5**
1	***Medium-term budgetary framework/targets***	***8.3***	***6.3***	***1.7***	***5.4***	***6.3***	***6.7***	***6.3***	***3.3***	***4.6***	***6.3***	***4.2***	***5.0***	***0.8***	***5.0***	***6.7***	***2.9***	***5.4***	***7.5***	***6.7***
1a	*National medium-term budgetary framework (MTBF)*	*8.3*	*7.5*	*1.7*	*5.8*	*7.5*	*8.3*	*7.5*	*1.7*	*2.5*	*7.5*	*4.2*	*5.8*	*1.7*	*7.5*	*8.3*	*1.7*	*5.8*	*7.5*	*8.3*
1a(i)	Existence and coverage of national MTBF	10.0	10.0	0.0	10.0	5.0	10.0	10.0	0.0	5.0	10.0	10.0	10.0	0.0	10.0	10.0	0.0	10.0	10.0	10.0
1a(ii)	History of national MTBF	10.0	10.0	0.0	10.0	10.0	10.0	10.0	0.0	0.0	10.0	0.0	10.0	0.0	10.0	10.0	0.0	10.0	10.0	10.0
1a(iii)	Existence of coordination mechanisms prior to setting the medium-term budgetary targets	10.0	10.0	0.0	10.0	10.0	5.0	10.0	0.0	5.0	5.0	0.0	0.0	5.0	10.0	5.0	0.0	0.0	10.0	10.0
1a(iv)	Connectedness between the multi-annual budgetary targets and the preparation of the annual budget	5.0	5.0	5.0	0.0	10.0	10.0	5.0	5.0	0.0	10.0	5.0	5.0	0.0	5.0	10.0	5.0	5.0	5.0	5.0
1a(v)	Involvement of the national parliament in the preparation of the medium-term budgetary plan	5.0	5.0	5.0	0.0	5.0	10.0	5.0	5.0	0.0	5.0	5.0	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0
1a(vi)	Monitoring and enforcement of multiannual budgetary targets	10.0	5.0	0.0	5.0	5.0	5.0	5.0	0.0	5.0	5.0	5.0	5.0	0.0	5.0	5.0	0.0	5.0	5.0	10.0
1b	*Connectedness between SP and national MTBF and annual budget*	*8.3*	*5.0*	*1.7*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*6.7*	*5.0*	*4.2*	*4.2*	*0.0*	*2.5*	*5.0*	*4.2*	*5.0*	*7.5*	*5.0*
1b(i)	Connectedness between national MTBF and Stability Programme (SP)	6.7	6.7	0.0	6.7	6.7	3.3	6.7	6.7	6.7	6.7	6.7	6.7	0.0	3.3	6.7	3.3	6.7	6.7	6.7
1b(ii)	Connectedness between SP and annual budget	10.0	3.3	3.3	3.3	3.3	6.7	3.3	3.3	6.7	3.3	1.7	1.7	0.0	1.7	3.3	5.0	3.3	8.3	3.3
	SP (preliminary or final), or a document including the main medium-term macroeconomic and budgetary projections (that will be the basis for the preparation used for the SP) annexed to the budget law	10.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0
	Relation between the budgetary targets for the year t (the ongoing budget year at the time of the preparation of the budget and the SP for the year t+1) in the budget law and the SP	10.0	6.7	6.7	6.7	6.7	3.3	6.7	6.7	3.3	6.7	3.3	3.3	0.0	3.3	6.7	10.0	6.7	6.7	6.7

Table AIV: Quality of budget institutions index – results (pre-crisis data) (cont.)																				
		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
2	***Fiscal rules***	***3.5***	***2.7***	***2.4***	***5.2***	***3.9***	***4.2***	***4.6***	***0.0***	***1.9***	***3.8***	***3.0***	***3.1***	***4.0***	***0.0***	***4.9***	***2.3***	***4.7***	***4.5***	***5.5***
2a	*Fiscal rule with largest general govt coverage*	*5.3*	*2.6*	*3.5*	*7.2*	*3.6*	*4.9*	*5.3*	*0.0*	*2.2*	*4.3*	*4.5*	*3.8*	*3.5*	*0.0*	*5.6*	*2.9*	*5.6*	*6.1*	*7.1*
2a(i)	Coverage, definitions and years since rule is in place	8.3	1.3	1.3	10.0	7.5	2.5	4.5	0.0	1.3	1.3	0.0	1.3	7.5	0.0	10.0	5.0	2.5	6.3	8.8
	Government sector and coverage	6.5	0.0	0.0	10.0	5.0	2.5	6.5	0.0	0.0	0.0	0.0	2.5	10.0	0.0	10.0	5.0	2.5	10.0	10.0
	Accounting system and exclusions	10.0	5.0	5.0	10.0	10.0	5.0	5.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	10.0	5.0	5.0	0.0	10.0
	Years since fiscal rules in place	10.0	0.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0	5.0	0.0	5.0	5.0
2a(ii)	Legal basis and flexibility of objectives	6.3	7.5	8.8	5.0	3.8	3.8	5.0	0.0	3.8	7.5	8.8	8.8	5.0	0.0	7.5	3.8	8.8	5.0	6.3
	Statutory legal basis of the rule	7.5	5.0	7.5	5.0	2.5	7.5	5.0	0.0	2.5	10.0	7.5	7.5	5.0	0.0	5.0	7.5	7.5	5.0	7.5
	Room for setting or revising objectives	5.0	10.0	10.0	5.0	5.0	0.0	5.0	0.0	5.0	5.0	10.0	10.0	5.0	0.0	10.0	0.0	10.0	5.0	5.0
2a(iii)	Enforcement mechanisms	6.7	1.7	4.2	3.9	3.3	3.3	1.7	0.0	3.9	3.3	4.4	5.3	1.7	0.0	5.0	2.8	6.1	3.3	3.3
	Nature of body in charge of monitoring and enforcement	5.0	5.0	7.5	5.0	5.0	10.0	5.0	0.0	5.0	10.0	5.0	7.5	0.0	0.0	10.0	5.0	10.0	5.0	5.0
	Correction mechanisms	10.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	6.7	0.0	3.3	3.3	0.0	0.0	0.0	3.3	3.3	0.0	0.0
	Real-time monitoring and well-defined escape clauses	5.0	0.0	5.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
2a(iv)	Media visibility	0.0	0.0	0.0	10.0	0.0	10.0	10.0	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	10.0	10.0
2b	*Other fiscal rules in place*	0.0	2.8	0.0	1.1	4.4	2.8	3.3	0.0	1.1	2.8	0.0	1.7	5.0	0.0	3.3	1.1	2.8	1.1	2.2
2b(i)	Other fiscal rules in place - balanced budget rules	0.0	5.0	0.0	0.0	0.0	5.0	10.0	0.0	0.0	5.0	0.0	5.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0
2b(ii)	Other fiscal rules in place - debt rules	0.0	0.0	0.0	3.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.3	6.7
2b(iii)	Other fiscal rules in place - expenditure/revenue rules	0.0	3.3	0.0	0.0	6.7	3.3	0.0	0.0	3.3	3.3	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0	0.0
3	***Structure of budget negotiations within the executive***	***6.3***	***6.3***	***-***	***-***	***6.7***	***5.0***	***7.5***	***5.0***	***5.9***	***10.0***	***-***	***-***	***5.9***	***-***	***7.5***	***8.4***	***5.9***	***10.0***	***5.0***
3a	*Imposition of budget ceilings by government on the initial spending requests of each line ministry*	*10.0*	*10.0*	*-*	*-*	*3.3*	*0.0*	*10.0*	*0.0*	*6.7*	*10.0*	*-*	*-*	*6.7*	*-*	*10.0*	*6.7*	*6.7*	*10.0*	*0.0*

Table AIV: Quality of budget institutions index – results (pre-crisis data) (cont.)

		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
3b	Final/ultimate decision-making power to resolve/settle disputes during the budget negotiation process	2.5	2.5	-	-	10.0	10.0	5.0	10.0	5.0	10.0	-	-	5.0	-	5.0	10.0	5.0	10.0	10.0
4	**Structure of the parliamentary process leading to the approval of the budget law**	**2.5**	**1.7**	**-**	**-**	**3.3**	**8.3**	**3.3**	**6.7**	**5.0**	**3.3**	**-**	**-**	**6.7**	**-**	**0.0**	**3.3**	**3.3**	**8.3**	**8.3**
4a	Restrictions on formal powers of the Legislature to amend the budget proposed by the Executive	0.0	0.0	-	-	0.0	7.5	0.0	10.0	10.0	0.0	-	-	0.0	-	0.0	0.0	0.0	5.0	5.0
4b	Legislature budgetary voting procedure - whether it votes first on the total amount of expenditure before it votes on specific appropriations	0.0	0.0	-	-	0.0	10.0	0.0	0.0	0.0	0.0	-	-	10.0	-	0.0	0.0	0.0	10.0	10.0
4c	Centralised parliamentary committee structure dealing with the budget	7.5	5.0	-	-	10.0	7.5	10.0	10.0	5.0	10.0	-	-	10.0	-	0.0	10.0	10.0	10.0	10.0
5	**Flexibility of budget execution**	**5.1**	**7.8**	**-**	**-**	**4.5**	**5.9**	**5.8**	**4.6**	**6.1**	**5.5**	**-**	**-**	**7.4**	**-**	**5.0**	**8.6**	**6.4**	**6.0**	**6.8**
5a	Executive authority to cut, cancel or rescind spending once the budget has been approved by the Legislature	5.0	10.0	-	-	0.0	2.5	2.5	2.5	10.0	0.0	-	-	5.0	-	5.0	7.5	5.0	5.0	5.0
5b	Possibility for line ministers to re-allocate funds within their own budget envelope	2.5	4.0	-	-	2.5	7.5	7.5	6.0	5.0	7.5	-	-	5.0	-	2.5	7.5	4.0	7.5	7.5
5c	Executive authority to increase spending after the budget has been approved by the Legislature	5.8	9.0	-	-	9.5	3.8	8.0	5.0	4.5	6.5	-	-	9.5	-	2.5	9.5	6.5	6.5	4.5
5d	Supplementary budgets - top reason why supplementary budget/s were necessary	7.0	8.3	-	-	6.1	10.0	5.0	5.0	5.0	8.0	-	-	10.0	-	10.0	10.0	10.0	5.0	10.0
6	**Budget transparency**	**7.2**	**6.4**	**-**	**-**	**7.5**	**6.3**	**8.3**	**5.8**	**7.9**	**6.1**	**-**	**-**	**8.1**	**-**	**10.0**	**8.3**	**7.9**	**3.1**	**6.0**
6a	Legislative authorisation of off-budget expenditures and contingent liabilities	10.0	7.5	-	-	2.5	5.0	10.0	2.5	5.0	10.0	-	-	10.0	-	10.0	10.0	10.0	0.0	7.5
6b	Comprehensiveness of budget documentation	5.0	5.0	-	-	10.0	3.8	5.0	5.0	8.8	5.0	-	-	7.5	-	10.0	5.0	3.8	2.5	3.8

Table AIV: Quality of budget institutions index – results (pre-crisis data) (cont.)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
6b(i)	Distinction of new revenue-raising measures and between expenditures under current commitments in law and policy and new policies in the annual budget documentation presented to the legislature	0.0	5.0	-	-	10.0	0.0	0.0	5.0	10.0	10.0	-	-	5.0	-	10.0	0.0	0.0	0.0	0.0
6b(ii)	Inclusion in budget documentation approved by the legislature of financial assets and liabilities, state and municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	10.0	5.0	-	-	10.0	7.5	10.0	5.0	7.5	0.0	-	-	10.0	-	10.0	10.0	7.5	5.0	7.5
6c	*Public availability of budgetary information and methodologies*	*6.7*	*6.7*	-	-	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*3.3*	-	-	*6.7*	-	*10.0*	*10.0*	*10.0*	*6.7*	6.7
7	***Independent fiscal institutions***	***10.0***	***10.0***	***0.0***	***0.0***	***0.0***	***0.0***	***5.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***10.0***	***0.0***	***0.0***	***5.0***	***0.0***

Source: Results are produced by author

Table AV: National MTBF sub-index (post-crisis data) and European Commission MTBF index	
Spearman rank correlation coefficient	National MTBF sub-index
European Commission MTBF index	0.785
Note: The national MTBF sub-index is based on the European Commission MTBF index but additionally includes the length of time that the national MTBF has been in place, whilst the scoring scheme is also different.	

Source: Results are produced by author

Table AVI: Fiscal rules sub-index (post-crisis data) with alternative weights and the European Commission fiscal rules strength index				
Spearman rank correlation coefficients	Fiscal rules sub-index (baseline)	Fiscal rules sub-index A	Fiscal rules sub-index B	European Commission fiscal rules strength index
Fiscal rules sub-index (baseline)	1.000	-	-	-
Fiscal rules sub-index A	0.953	1.000	-	-
Fiscal rules sub-index B	0.960	0.881	1.000	-
European Commission fiscal rules strength index	0.892	0.920	0.871	1.000
Note: Fiscal rules sub-index, weights for the two components (fiscal rule with largest coverage of general government sector and other fiscal rules in place): Fiscal rules sub-index (baseline): 67%, 33% Fiscal rules sub-index A: 75%, 25% Fiscal rules sub-index B: 50%, 50% The fiscal rules sub-index uses the same data as the European Commission fiscal rules strength index and its components are also very similar.				

Source: Results are produced by author

Table AVII: IFI sub-index (post-crisis data) and Horvath (2018) fiscal council indices	
Spearman rank correlation coefficients	IFI sub-index
Horvath (2018) fiscal councils index based on the OECD (2014) principles for IFIs	0.572
Horvath (2018) fiscal councils aggregate scrutiny effectiveness indicator	0.903

Source: Results are produced by author

Table AVIII: IFI sub-index (post-crisis data) with alternative aggregation method	
Spearman rank correlation coefficient	IFI sub-index (baseline – additive aggregation method)
IFI sub-index (multiplicative aggregation method)	0.996
Note: The scores resulting from the multiplicative aggregation method were re-adjusted on a 0-10 scale.	

Source: Results are produced by author

Table AIX: Quality of budget institutions index (post-crisis data) - alternative weighting structures				
	Weighting structure			
	Baseline	**Option 1**	**Option 2**	**Option 3**
1. Medium-term budgetary framework/targets	0.14	0.14	0.15	0.13
1a. National medium-term budgetary framework (MTBF)	*0.50*	*0.75*	*0.75*	*0.75*
1b. Connectedness between SP and national MTBF and annual budget	*0.50*	*0.25*	*0.25*	*0.25*
2. Fiscal rules	0.14	0.14	0.15	0.13
3. Structure of budget negotiations within the executive	0.14	0.14	0.15	0.17
4. Structure of the parliamentary process leading to the approval of the budget law	0.14	0.14	0.15	0.17
4a. Restrictions on formal powers of the Legislature to amend the budget proposed by the Executive	*0.33*	*0.50*	*0.50*	*0.50*
4b. Legislature budgetary voting procedure – whether it votes first on the total amount of expenditure before it votes on specific appropriations	*0.33*	*0.25*	*0.25*	*0.25*
4c. Centralised parliamentary committee structure dealing with the budget	*0.33*	*0.25*	*0.25*	*0.25*
5. Flexibility of budget execution	0.14	0.14	0.15	0.17
6. Budget transparency	0.14	0.14	0.10	0.13
7. Independent fiscal institutions	0.14	0.14	0.15	0.13

Notes:
In Option 1, equal weights are retained for the seven sub-indices, but within sub-index 1, more weight is assigned to the national MTBF than to the connectedness of the SP to the national budgetary process; and within sub-index 4, more weight is assigned to restrictions on legislative amendment powers than to the other two characteristics of the budget approval stage.
In Option 2, the adjustments to the weights in Option 1 are retained and in addition, less weight is assigned to the budget transparency sub-index, since this can be considered as complementary to the characteristics captured by the other sub-indices, rather than contributing directly to more fiscal discipline.
In Option 3, half of the weight is equally distributed between sub-indices 1, 2, 6 and 7; and the other half between sub-indices 3, 4 and 5, broadly reflecting the contracts and delegation approaches to fiscal governance, respectively.

Source: Produced by author

Table AX: Quality of budget institutions index (post-crisis data) with alternative weights				
	Spearman rank correlation coefficients			
Spearman rank correlation coefficients	Baseline	Option 1	Option 2	Option 3
Baseline	1.000	-	-	-
Option 1	0.889	1.000	-	-
Option 2	0.891	0.993	1.000	-
Option 3	0.893	0.981	0.979	1.000

Source: Results are produced by author

Table AXI: Quality of budget institutions index (post-crisis data) and forms of fiscal governance	
	Form of fiscal governance
1. Medium-term budgetary framework/targets	-
1a. National medium-term budgetary framework (MTBF)	contracts
1b. Connectedness between SP and national MTBF and annual budget	other
2. Fiscal rules	contracts
3. Structure of budget negotiations within the executive	delegation
4. Structure of the parliamentary process leading to the approval of the budget law	-
4a. Restrictions on formal powers of the Legislature to amend the budget proposed by the Executive	delegation
4b. Legislature budgetary voting procedure – whether it votes first on the total amount of expenditure before it votes on specific appropriations	other
4c. Centralised parliamentary committee structure dealing with the budget	other
5. Flexibility of budget execution	
5a. Executive authority to decrease spending during budget implementation	delegation
5b. Possibility for line ministers to reallocate funds within their own budget envelope	other
5c. Constraints on executive flexibility to increase spending during budget implementation	other
5d. Supplementary budgets	other
6. Budget transparency	contracts
7. Independent fiscal institutions	contracts

Notes:
Some institutional characteristics (categorised as 'other') are not included in neither the delegation index nor the contracts index. Connectedness between the SP and the national budgetary process is not included in the contracts index since all EA countries are required to prepare a SP. Within the budget approval stage, the sequence of the voting procedure and the parliamentary committee structure are not included in the delegation index as they do not directly affect the relative strength of the legislature vis-à-vis the executive. In the budget implementation stage, flexibility for line ministries to reallocate funds within their own budget envelope and restrictions on the executive authority to increase spending and on the use of supplementary budgets are not included in the delegation index as they imply less power for the finance minister.

Source: Produced by author

Appendix II

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources

Dimensions of legislative budgetary power (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
I. Formal legislative budgetary power			
IA. Involvement of the legislature in national budgetary process			
1A1. Involvement of the legislature in the MTBF	• Which actors are involved in establishing the budgetary objectives/targets and/or projections arising from medium-term budgetary framework?	- only national parliament is involved (10) - national parliament is involved together with other entities (5) - national parliament is not involved (0)	European Commission's MTBF database (question 3.13)
	• Involvement of the national parliament in the preparation of the medium-term budgetary plan	- the medium-term plan is formally sent, discussed and voted upon by the parliament, which may approve, reject or amend it (10) - the medium-term plan is formally sent, discussed and voted upon by the parliament, which may approve or reject, but not amend it (6.7) - the medium-term plan is sent and presented to parliament by a member of the government and discussed, but the parliament does not vote on the medium-term plan (3.3) - the medium-term plan is not sent to parliament before its publication/the medium-term plan is sent to parliament but there is no discussion on it (0)	European Commission's MTBF database (question 3.36)
	• Who is in charge of monitoring respect of the budgetary objectives/targets established according to the medium-term budgetary framework in the draft budget?	- only national parliament is in charge (10) - national parliament is in charge together with other entities (5) - national parliament is not involved (0)	European Commission's MTBF database (question 4.3)
	• Which of the following applies to the monitoring report?	- the monitoring report is presented in parliament (10) - the government is obliged to comment on the monitoring report (0) - neither the government nor the ministry of finance comment on the monitoring report (0) - the government is not obliged to comment on the monitoring report, but typically does so (e.g. by a public statement) (0) - the minister of finance is obliged to comment on the monitoring report (0) - the monitoring report is available to the public (0) - the minister of finance is not obliged to comment on the monitoring report, but typically does so (e.g. by a public statement) (0) - not applicable (no monitoring report) (0)	European Commission's MTBF database (question 5.5)
IA2. Involvement of the legislature in fiscal rules[246]	• Who is in charge of monitoring compliance to the fiscal rule?	- only national parliament is in charge (10) - national parliament is in charge together with other entities (5) - national parliament is not involved (0)	European Commission's Fiscal rules database (question 4.1)

[246] Refers to fiscal rule with the largest coverage of general government finances only.

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
IA2. Involvement of the legislature in fiscal rules (cont.)	• Which body is in charge of enforcing compliance with the fiscal rule in case of non-compliance?	- only national parliament is in charge (10) - national parliament is in charge together with other entities (5) - national parliament is not involved (0)	European Commission's Fiscal rules database (question 5.1)
	• Is a corrective plan presented to parliament in case or risk of non-compliance with the targets implied by the fiscal rule?	- corrective plan is presented to national parliament (10) - corrective plan is not presented to national parliament/other correction mechanisms or sanctions apply/no pre-defined action (0)	European Commission's Fiscal rules database (question 5.4)
IA3. Legislative budget amendment powers	• Can parliament propose the annual budget independent from the government?	- Yes (10) - No (0)	Author's questionnaire to all EA countries
	• What are the formal powers of the Legislature to amend the budget proposed by the Executive?	- the legislature has unrestricted powers to amend the budget (10) - the legislature may make amendments but only if it does not change the total deficit/surplus proposed by the Executive (7.5) - the legislature may only decrease existing expenditures/revenues (i.e. the Legislature cannot increase existing items nor create new ones) (5) - the legislature may not make any changes; it can only approve or reject the budget as a whole (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 64) Author's questionnaire for non-OECD EA countries
	• Notwithstanding the formal powers of the legislature to modify the budget, is a vote on the budget considered a vote of confidence in the government?	- No (10) - Yes (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 66) Author's questionnaire for non-OECD EA countries
	• Does the executive have the power to veto the budget approved by the legislature?	- no, it does not have such power (10) - yes, it has line item veto power (6.7) - yes, it has package veto power (3.3) - yes, it has both line item and package veto powers (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 68a) Author's questionnaire for non-OECD EA countries
IA4. Reversionary budget	• If the budget is not approved by the legislature before the start of the fiscal year, which of the following describes the consequences?	- government shuts down, emergency budget applies until (interim) agreement is reached expenditure without legislative approval are not allowed (10) - last year's budget takes effect on an interim basis, i.e. for a limited period/other interim measures are voted on by the legislature (6.7) - the executive's budget proposal takes effect on an interim basis, i.e. for a limited period (3.3) - the executive's budget proposal takes effect (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 67) Author's questionnaire for non-OECD EA countries

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
IA5. Legislative authorisation to changes to the budget during implementation			
Executive authority to cut/cancel/rescind spending	• Whether executive can cut/cancel/rescind spending once the budget has been approved by the legislature • Whether executive has authority to cut/cancel/rescind all types of spending[247]	- Yes (*score is the average of the following elements)* - No (10) - Executive does not have authority to cut spending (10) - Authority applies to one type of spending (7.5) - Authority applies to two types of spending only (5) - Authority applies to one types of spending only (2.5) - Authority applies to all types of spending only (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 72-84) Author's questionnaire for non-OECD EA countries
Executive authority to cut/cancel/rescind spending (cont.)	• Whether there are any thresholds that apply to the executive's authority to cut/cancel/rescind spending • Whether approval is required for the executive to cut/cancel/rescind spending	- Yes (5) - No (0) - Yes, ex-ante approval by legislature required (4) - Yes, ex-post approval by legislature required (3) - Yes, approval (ex-ante or ex-post) by other entity required (0) - No approval required (0)	
Power of line ministries to re-allocate funds within their budget envelope	• Whether line ministers can re-allocate funds within their own budget envelope • Whether there are any thresholds that apply to line ministers' re-allocation of funds within their own budget envelope • Whether approval is required for line ministers to re-allocate funds within their own budget envelope	- Yes (*score is the average of the following elements)* - No (10) - Yes (5) - No (0) - Yes, ex-ante approval by legislature required (7.5) - Yes, ex-post approval by legislature required (6.25) - Yes, approval (ex-ante or ex-post) by other entity required (0) - No approval required (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 72-84) Author's questionnaire for non-OECD EA countries
Restrictions on executive authority to increase spending	• Whether executive can increase spending once the budget has been approved by the legislature • Whether executive has authority to increase all types of spending	- Yes (*score is the average of the following elements)* - No (10) - Executive does not have authority to increase spending (10) - Authority applies to one type of spending only (7.5) - Authority applies to two types of spending only (5) - Authority applies to three types of spending only (2.5) - Authority applies to all types of spending (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (questions 72-84) Author's questionnaire for non-OECD EA countries

[247] The following types of spending are identified in the OECD Budget Practices and Procedures Survey: mandatory, operational, discretionary, investment. This categorisation also applies to executive authority to increase spending.

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
Restrictions on executive authority to increase spending (cont.)	• Whether there are any thresholds that apply to the executive's authority to increase spending • Whether approval is required for the executive to increase spending	- Yes (5) - No (0) - No (5) - Yes, ex-ante approval by legislature required (4) - Yes, ex-post approval by legislature required (3) - Yes, approval (ex-ante or ex-post) by other entity required (0) - No approval required (0)	
IA6. Legislative authorisation of off-budget expenditures and contingent liabilities	• Is legislative authorisation required for off-budget expenditures and contingent liabilities?	Legislative authorisation is required for: - all off-budget expenditures and contingent liabilities (or off-budget expenditures and contingent liabilities do not apply) (10) - most off-budget expenditures and contingent liabilities (7.5) - some off-budget expenditures and contingent liabilities (5) - few off-budget expenditures and contingent liabilities (2.5) - for any off-budget expenditures and contingent liabilities (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (question 39) Author's questionnaire for non-OECD EA countries
IB. <u>Legislative involvement in SGP procedures</u>			
IB1. Discussion of SGP documents in the legislature	• Degree of involvement of legislature in the preparation of the SP	- the SP is formally sent, discussed and voted upon by the parliament, which may approve, reject, or amend it (10) - the SP is formally sent, discussed and voted upon by the parliament, which may approve or reject but not amend it (8) - the SP is not formally sent to the parliament or subject to its approval, but it is derived from a document including the main medium-term macroeconomic and budgetary projections that had previously been approved by the parliament (6) - the SP is sent and presented to parliament by a member of the government and discussed, but the parliament does not vote on the SCP (4) - the SP is sent to parliament before its publication, but there is no formal presentation or discussion (2) - the SP is not sent to parliament before its publication (0) - there is no coverage on the subject (0)	European Commission's MTBF database (question 6.7)

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
IB1. Discussion of SGP documents in the legislature (cont.)	• Are the European Commission/Council Recommendations and Opinions on the SP discussed in the legislature? • If the European Commission/Council Recommendations and Opinions on the SP are discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?	*Score is average of the following two elements with a weight of 0.67 for the first element and 0.33 for the second element:* - Yes (10) - Yes, but not on a regular basis/discussed in legislative committee/s but not in plenary (5) - No (0) - before the discussion in Council (10) - could be before or after the Council meeting (6.7) - after the Council meeting (3.3) - not applicable, not discussed in the Legislature (0)	Author's questionnaire to all EA countries
	• Is the European Commission Opinion on the DBP discussed in the Legislature?[248]	- Yes, the Commission Opinion on the DBP is debated in the legislature in a specific session (10) - Yes, the Commission Opinion on the DBP is debated in the legislature during the budgetary debates (5) - The Commission Opinion on the DBP is debated in the legislature, but not on a regular basis (2.5) - No, there is no discussion in the Legislature on the Commission Opinion on the DBP (0)	Author's questionnaire to all EA countries
	• Are the European Commission Opinion/Council Decision on the existence of an excessive deficit and the European Commission/Council Recommendation to end the excessive deficit situation discussed in the Legislature? • If the Opinion/Decision/Recommendation on the excessive deficit are discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?	*Score is average of the following two elements with a weight of 0.67 for the first element and 0.33 for the second element:* - Yes (10) - Yes, but not on a regular basis/discussed in legislative committee/s but not in plenary (5) - No (0) - before the discussion in Council (10) - could be before or after the Council meeting (6.7) - after the Council meeting (3.3) - not applicable, not discussed in the Legislature (0)	Author's questionnaire to all EA countries

[248] The CION's opinion on the DBP is not discussed in a Council meeting (the opinion is only discussed in Eurogroup).

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
IB1. Discussion of SGP documents in the legislature (cont.)	• Is the Recommendation/Decision on the abrogation of the excessive deficit procedure discussed in the legislature? • If the Recommendation/Decision on the abrogation of the excessive deficit procedure is discussed in the legislature, does this discussion take place before the discussion in Council or after the Council meeting?	*Score is average of the following two elements with a weight of 0.67 for the first element and 0.33 for the second element:* - Yes (10) - Yes, but not on a regular basis/discussed in legislative committee/s but not in plenary (5) - No (0) - before the discussion in Council (10) - could be before or after the Council meeting (6.7) - after the Council meeting (3.3) - not applicable, not discussed in the Legislature (0)	Author's questionnaire to all EA countries
IB2. Discussion of SGP documents in legislative committees	• Is the SP discussed in legislative committee/s? • If the SP is discussed in legislative committee/s, please specify the committee/s involved:	*Score is summation of the following two elements:* - Yes (5) - Yes, but not regularly (2.5) - No (0) - budget/finance committee (5) - economics committee (0) - European committee (0) - other (0) - not applicable, the SP is not discussed in legislative committees (0)	Author's questionnaire to all EA countries
	• Are the European Commission/Council Recommendations and Opinions on the SP discussed in legislative committees? • If the European Commission/Council Recommendations and Opinions on the SP is discussed in legislative committee/s, please specify the committee/s involved:	*Score is summation of the following two elements:* - Yes (5) - Yes, but not regularly (2.5) - No (0) - budget/finance committee (5) - economics committee (0) - European committee (0) - other (0) not applicable, the SP is not discussed in legislative committees (0)	Author's questionnaire to all EA countries
	• Is the European Commission Opinion on the DBP discussed in legislative committee/s?	*Score is summation of the following two elements:* - Yes (5) - Yes, but not regularly (2.5) - No (0)	Author's questionnaire to all EA countries

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
IB2. Discussion of SGP documents in legislative committees (cont.)	• If the European Commission Opinion on the DBP is discussed in legislative committee/s, please specify the committee/s involved:	- budget/finance committee (5) - economics committee (0) - European committee (0) - other (0) - not applicable, the SP is not discussed in legislative committees (0)	
	• Are the Opinion/Decision/Recommendation on the excessive deficit discussed in legislative committee/s? • If the Opinion/Decision/Recommendation on the excessive deficit is discussed in legislative committee/s, please specify the committee/s involved:	*Score is summation of the following two elements:* - Yes (5) - Yes, but not regularly (2.5) - No (0) - budget/finance committee (5) - economics committee (0) - European committee (0) - other (0) - not applicable, the SP is not discussed in legislative committees (0)	Author's questionnaire to all EA countries
	• Is the Recommendation/Decision on the abrogation of the EDP discussed in legislative committee/s? • If the Recommendation/Decision on the abrogation of the EDP is discussed in legislative committee/s, please specify the committee/s involved:	*Score is summation of the following two elements:* - Yes (5) - Yes, but not regularly (2.5) - No (0) - budget/finance committee (5) - economics committee (0) - European committee (0) - other (0) - not applicable, the SP is not discussed in legislative committees (0)	Author's questionnaire to all EA countries
IB3. Legislature informed on implementation of EDP	• Is the Legislature informed on the implementation of Council's recommendations to end the excessive deficit situation in your country?	- Yes, the legislature is informed automatically on a regular basis and any deviations or risks thereof are explained (10) - Yes, the legislature is informed but only in case of deviations or risks thereof (6.7) - the legislature is informed only if it requests information (3.3) - No (0)	Author's questionnaire to all EA countries
II. Legislative budget organisational capacity			
II1. Time available for budget scrutiny	• Specify the month for: submission of the draft budget to parliament; approval of the budget by parliament	- more than two months between submission and approval (10) - two months between submission and approval (5) - less than two months between submission and approval (0)	European Commission's MTBF database (question 2.3)

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
II2. Characteristics of legislative budget committees	• Thinking about the following types of committee structures for dealing with the budget, please indicate which arrangement applies to each chamber[249]:	- a single budget/finance committee coordinates a process in which sectoral committees make recommendations to the budget/finance committee. The budget/finance committee then reviews and accepts or rejects these recommendations and formally considers all budget related matters (10) - a single budget/finance committee formally considers the budget, but members from sectoral committees attend meetings of the budget/finance committee when expenditures in their specific areas are discussed. (7.5) - a single budget/finance committee formally considers budget aggregates (total level of revenue and spending and their allocation to each sector) and sectoral committees formally consider spending for sector specific appropriations. (5) - sectoral committees formally consider appropriations for each respective sector. No budget/finance committee is in place or it provides technical assistance only. (0) - No formal committee involvement, but committees may choose to consider aspects of the budget (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 59) Author's questionnaire for non-OECD EA countries
	• If a budget/finance committee is in place in the Legislature, please indicate how long is the tenure of legislators sitting on it, generally? • Does the budget/finance committee have the power to request witnesses and to question ministers or senior civil servants?	*Score is summation of the following two elements:* - five years or more (5) - the electoral term/four years (4) - between two years and four years (3) - less than two years/variable (2) - no budget committee in place (0) - Yes, and this takes place regularly (once a year or more) (5) - No (0) - Not applicable, budget/finance committee does not exist (0)	Author's questionnaire to all EA countries
II3. Specialised budget research office	• Is there a specialised budget research office/unit attached to the legislature to conduct analyses of the budget? • If a specialised budget research office/unit is in place, please estimate the number of full-time equivalent staff employed by this office/unit	*Score is summation of the following two elements:* - Yes (5) - No (0) - more than 20 (5) - more than 10 but less than 20 (2.5) - less than 10 (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (question 60) Author's questionnaire for non-OECD EA countries

249 Where both the upper and lower chambers of the legislature are involved in the budgetary process, the score reflects the average for the two chambers.

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)

Dimensions of legislative budgetary power (sub-indices)	How are the variables manifested? (indicators)	Scoring scheme (on scale 0 – 10)	Data sources
II4. Access to budgetary information	• Distinction of new expenditure and revenue measures in budget documentation	*Score is summation of the following two components:* Expenditures under current commitments in law and policy are: - always distinguished from new policies in the annual budget documentation presented to the legislature (5) - sometimes distinguished from new policies in the annual budget documentation presented to the legislature (3) - rarely distinguished from new policies in the annual budget documentation presented to the legislature (1) - never distinguished from new policies in the annual budget documentation presented to the legislature (0) New revenue-raising measures are: - always distinguished in the annual budget documentation presented to the legislature (5) - sometimes distinguished in the annual budget documentation presented to the legislature (3) - rarely distinguished in the annual budget documentation presented to the legislature (1) never distinguished in the annual budget documentation presented to the legislature (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (questions 48, 49) Author's questionnaire for non-OECD EA countries
	• Inclusion in the budget documentation approved by the legislature of: financial liabilities, financial assets, state transfers/guarantees, municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	- All or almost all items included (10) - Most items included (7.5) - Some items included (5) - Only few items included (2.5) - None of the items included (0)	OECD EA countries - OECD Budget Practices and Procedures Survey (questions 38b, 39b, 50b) Author's questionnaire for non-OECD EA countries
	• Public availability of budgetary information, assumptions and methodologies: methodology and assumption for establishing fiscal projections used in the budget, sensitivity analyses of fiscal and/or macroeconomic models, independent reviews/analysis of macroeconomic and/or fiscal assumptions, budget circular, pre-budget report to the legislature, executive budget proposal submitted to the legislature, fiscal policy objectives for the medium term, comprehensive annual financial plan encompassing all revenues and expenditures including	- Most of the listed items are made publicly available (10) - Some of the listed items are made publicly available (6.7) - Few of the listed items are made publicly available (3.3) - None of the listed items are made publicly available (0)	OECD EA countries – OECD Budget Practices and Procedures Survey (question 51a) Author's questionnaire for non-OECD EA countries

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)			
Dimensions of legislative budgetary power (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
II4. Access to budgetary information (cont.)	off-budget expenditures and extra-budgetary funds, comprehensive annual financial plan encompassing all revenues and expenditures for all levels of government (including regional and local), medium-term perspective on total revenue and expenditure (possibly in the form of a medium-term expenditure framework), long-term perspective on total revenue and expenditure, citizens' budget, citizens' budget guide (explaining the budget process and actors involved), budget approved by the legislature.		
	• Is the Legislature informed on implementation of the budget?	- Yes, informed automatically on the implementation of the budget and explanations of deviations from the budget are provided (10) - Yes, informed automatically but only in case of deviations from the budget (6.7) - Informed only if it requests information (3.3) - No (0)	Author's questionnaire to all EA countries
	• Is a year-end fiscal report audited by the supreme audit institution released within six-months of the end of the fiscal year? • Is the audited year-end fiscal report discussed in the legislature?	*Score is summation of the following two elements:* - Yes (5) - No (0) - Yes (5) - No (0)	Author's questionnaire to all EA countries
II5. Relationship of legislature with IFI	• Please specify the way in which the parliament interacts with the fiscal institution in the planning stage of the budgetary process:	- national parliament has to audition fiscal council during the budgetary process (10) - generally auditioned by national parliament during the process, no obligation (5) - no interaction (0)	European Commission's IFI database (question 6.5)
	• Appointment and dismissal of governing/high-level management members	*Score is summation of the following two elements:* - appointment by parliament only (5) - appointment by parliament and government/other (2.5) - appointment only by government and/or other (0) - dismissal by parliament only (5) - dismissal by parliament and government/other (2.5) - dismissal only government and/or other (0)	IMF Fiscal Councils Dataset, Appointment of governing/high-level management members IMF Fiscal Councils Dataset, Dismissal of governing/high-level management members

Table AXII: The legislative budgetary power index - indicators, scoring scheme and data sources (cont.)			
Dimensions of legislative budgetary power (sub-indices)	**How are the variables manifested? (indicators)**	**Scoring scheme (on scale 0 – 10)**	**Data sources**
II5. Relationship of legislature with IFI (cont.)	• Are reports by the IFI submitted to the legislature?	- Yes and they constitute an important input in legislative budget debates (10) - Yes, but they do not constitute an important input in legislative budget debates (5) - Only some reports are submitted to the legislature/reports are not submitted to parliament but still constitute an important input in legislative budget debates (2.5) No, they are not submitted to the legislature and do not constitute an important input in legislative budget debates (0)	Author's questionnaire to all EA countries
	• Can the legislature or its budget/finance committee request the leadership of the IFI or its senior staff to provide responses to legislative questions?	- Yes and this takes place at least once a year (10) - Yes, but this takes place very infrequently (less than once a year) (5) - No (0)	Author's questionnaire to all EA countries

QUESTIONNAIRE ON BUDGET INSTITUTIONS AND LEGISLATIVE BUDGETING TO OECD EURO AREA COUNTRIES
Please respond to the following questions by inserting an X to indicate the correct answer or providing details as requested. Provide comments as necessary.

I BUDGET FORMULATION
i Structure of budget negotiations within the executive
1 Where do budget negotiations take place?
Full cabinet participates in the negotiations ______
Bilaterally between the finance minister and spending ministers ______
Outside cabinet between the political parties ______
Other, please specify

____

____

II BUDGET APPROVAL
i Structure of the legislative process leading to the approval of the budget law

2 Can the Legislature propose the annual budget independent from the government?

Yes ______
No ______
Other, please specify

____

____

III BUDGET TRANSPARENCY
i Publication of budgetary data
3 Please indicate the frequency of public reports on budget outcomes.

monthly | quarterly | Half-yearly | annual

Other, please specify

____

____

4 Please specify whether these reports cover:
consolidated general government sector ______
consolidated central government ______
central government, not consolidated and other public sector entities/ levels of government ______
central government, not consolidated ______
other, please specify

____

____

5 Please specify whether these reports are:
on a cash basis ______
in accruals (ESA2010) ______

IV ORGANISATIONAL CAPACITY OF THE LEGISLATURE
i Specialised committees
6 If a budget/finance committee is in place in the Legislature, please indicate how long is the tenure of legislators sitting on it, generally?

One year or less | Two years | Five years

Other, please specify

____

____

Not applicable, budget/finance committee does not exist _____

7 Does the budget/finance committee have the power to request witnesses and to question ministers or senior civil servants?

Yes, and this takes place regularly (once a year or more) _____
Yes, but this takes place very infrequently (less than once a year) _____
No _____
Other, please specify

____

____

Not applicable, budget/finance committee does not exist _____

ii Access to budgetary information

8 Is the Legislature informed on implementation of the budget?

Yes, informed automatically on the implementation of the budget and explanations of deviations from the budget are provided _____
Yes, informed automatically but only in case of deviations from the budget _____
Informed only if it requests information _____
No _____
Other, please specify

____

____

9 Is a year-end fiscal report audited by the supreme audit institution released within six-months of the end of the fiscal year?

Yes _____
No _____
Provide comments, if necessary

____

____

10 Is the audited year-end fiscal report discussed in the Legislature?

Yes _____
No _____
Provide comments, if necessary

____

____

V RELATIONSHIP OF LEGISLATURE WITH INDEPENDENT FISCAL INSTITUTION(S)

11 Are reports by the independent fiscal institution submitted to the Legislature?

Yes, and they constitute an important input in legislative budget debates _____
Yes, but they do not constitute an important input in legislative budget debates _____
No, they are not submitted to the Legislature _____
Other, please specify

____

____

12 Can the Legislature or its budget/finance committee request the leadership of the independent fiscal institution or its senior staff to provide responses to the Legislature's questions?

Yes, and this takes place at least once a year _____

Yes, but this takes place very infrequently (less than once a year) _____
No _____
Other, please specify

____
____

13 If you have any additional comments or remarks regarding the relationship of the Legislature with independent fiscal institution(s), please include them here: _____

____
____

VI THE ROLE OF THE LEGISLATURE IN THE IMPLEMENTATION OF THE SGP

i Involvement of Legislature in Stability Programme (SP)

14 Is the SP discussed in legislative committee/s?
Yes _____
No _____
Other, please specify

____
____

15 If the SP is discussed in legislative committee/s, please specify the committee/s involved
budget/finance committee _____
economics committee _____
European committee _____
other, please specify

____
____
not applicable, the SP is not discussed in legislative committees _____

16 Are the European Commission/Council Recommendations and Opinions on the SP discussed in the Legislature?
Yes _____
No _____
Please comment, if necessary

____
____

17 Are the European Commission/Council Recommendations and Opinions on the SP discussed in legislative committees?
Yes _____
No _____
Other, please specify

____
____

18 If the European Commission/Council Recommendations and Opinions on the SP are discussed in legislative committee/s, please specify the committee/s involved:
budget/finance committee _____
economics committee _____
European committee _____
other, please specify

____
____
not applicable, the SP is not discussed in legislative committees _____

19 If the European Commission/Council Recommendations and Opinions on the SP are discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?
Before the discussion in Council _____

After the Council meeting _____
Not applicable, not discussed in the Legislature _____
Please comment, if necessary

____
____

20 If you have any additional comments or remarks regarding the role of the Legislature in the Stability Programme, please include them here:

____
____

ii Involvement of the Legislature in the Draft Budgetary Plan (DBP)

21 Is the European Commission Opinion on the DBP discussed in the Legislature?
Yes, the Commission Opinion on the DBP is debated in the Legislature in a specific session _____
Yes, the Commission Opinion on the DBP is debated in the Legislature during the budgetary debates _____
No, there is no discussion in the Legislature on the Commission Opinion on the DBP _____
other, please specify

____
____

22 Is the European Commission Opinion on the DBP discussed in legislative committee/s?
Yes _____
No _____
Other, please specify

____
____

23 If the European Commission Opinion on the DBP is discussed in legislative committee/s, please specify the committee/s involved:
budget/finance committee _____
economics committee _____
European committee _____
other, please specify

____
____

not applicable, the SP is not discussed in legislative committees _____

24 If you have any additional comments or remarks regarding the role of the Legislature in the Draft Budgetary Plan, please include them here:

____
____

iii Involvement of the Legislature in excessive deficit procedure (EDP)

Please respond to the questions in this Section with reference to the current ongoing excessive deficit procedure or most recent closed excessive deficit procedure.
This Section is not applicable to Estonia and Luxembourg as they have never been subject to an excessive deficit procedure

25 Are the European Commission Opinion/Council Decision on the existence of an excessive deficit and the European Commission/Council Recommendation to end the excessive deficit situation discussed in the Legislature?
Yes _____
No _____
Please comment, if necessary

26 If the Opinion/Decision/Recommendation on the excessive deficit are discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?

Before the discussion in Council ______
After the Council meeting ______
Not applicable, not discussed in the Legislature ______
Please comment, if necessary

27 Are the Opinion/Decision/Recommendation on the excessive deficit discussed in legislative committee/s?

Yes ______
No ______
Other, please specify

28 If the Opinion/Decision/Recommendation on the excessive deficit are discussed in legislative committee/s, please specify the committee/s involved:

budget/finance committee ______
economics committee ______
European committee ______
other, please specify

not applicable, the SP is not discussed in legislative committees ______

29 Is the Legislature informed on the implementation of Council's recommendations to end the excessive deficit situation in your country?

Yes, the Legislature is informed automatically on a regular basis on the implementation of the Council's excessive deficit recommendations and any deviations or risks thereof are explained ______
Yes, the Legislature is informed but only in case of deviations or risks thereof ______
The Legislature is informed only if it requests information ______
No ______
Other, please specify

30 Is the European Commission recommendation/Council decision abrogating the excessive deficit procedure discussed in the Legislature?

Yes ______
No ______
Please comment, if necessary

31 If the Recommendation/Decision on the abrogation of the excessive deficit procedure is discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?

Before the discussion in Council ______
After the Council meeting ______
Please comment if necessary

____
____
Not applicable, not discussed in the Legislature _____

32 Is the Recommendation/Decision on the abrogation of the excessive deficit discussed in legislative committee/s?
Yes _____
No _____
Other, please specify
____
____

33 If the Recommendation/Decision on the abrogation of the excessive deficit is discussed in legislative committee/s, please specify the committee/s involved:
budget/finance committee _____
economics committee _____
european committee _____
other, please specify
____
____
not applicable, the SP is not discussed in legislative committees _____

34 If you have any additional comments or remarks regarding the role of the Legislature in the Excessive Deficit Procedure, please include them here:
____
____

35 If you have any additional comments or remarks regarding the role of the Legislature in the
implementation of the Stability and Growth Pact, which were not covered by the questionnaire,
please include them here:
____
____
____
____

36 If there are any additional issues that you would like to clarify or note that were not addressed in the whole questionnaire, please include them here:
____
____
____
____

Respondent(s') Contact Information
Please provide the contact information for the main person responsible for responding to the questionnaire.

This information will only be used if follow up to clarify responses is necessary. If you wish to include more than one contact person, you can enter the information for the additional staff at the end of this page. The contact details provided will remain confidential.

Surname(s): ______________________________
First Name(s): ______________________________
Respondent's institution: ______________________________
Position/Title: ______________________________
Email address: ______________________________
Telephone: ______________________________

Names and emails of additional respondents, if applicable:

QUESTIONNAIRE ON BUDGET INSTITUTIONS AND LEGISLATIVE BUDGETING TO NON-OECD EURO AREA COUNTRIES
Please respond to the following questions by inserting an X to indicate the correct answer or providing details as requested. Provide comments as necessary.

I BUDGET FORMULATION
i Structure of budget negotiations within the executive
1 Where do budget negotiations take place?
Full cabinet participates in the negotiations ____
Bilaterally between the finance minister and spending ministers ____
Outside cabinet between the political parties ____
Other, please specify ____
____
____

2 Does the government impose budget ceilings on the initial spending requests of each line ministry? (OECD Q31)
Yes for total/overall expenditure of the line ministry ____
Yes for other aggregate levels (e.g by program or sector) ____
Yes for agency level or other organisational level ____
No, there are no such limits ____

3 During the budget negotiation process, who has the final/ultimate decision-making power to resolve/settle disputes? (OECD Q33)
President ____
Prime Minister ____
Minister of Finance ____
Cabinet ____
Ministerial committee ____
Other, please explain ____
____
____

II BUDGET APPROVAL
i Structure of the legislative process leading to the approval of the budget law

4 Can the Legislature propose the annual budget independent from the government?

Yes ____
No ____
Other, please specify ____
____
____

5 What are the formal powers of the Legislature to amend the budget proposed by the Executive? (OECD Q64)
The Legislature has unrestricted powers to amend the budget ____
The Legislature may make amendments but only if it does not change the total deficit/surplus proposed by the Executive ____
The Legislature may only decrease existing expenditures/revenues (i.e. the Legislature cannot increase existing items nor create new ones) ____
The Legislature may not make any changes; it can only approve or reject the budget as a whole ____
Other, please specify
____
____

6 Does the Legislature first vote on the total amount of expenditure before it votes on specific appropriations? (OECD Q63)
Yes ____

No ____
Other, please specify ____

____

____

7 <u>Please indicate whether, overall, the changes made by the Legislature to the budget in the last fiscal year involved:</u> (Based on OECD Q65a)

an increase in total spending ____
total spending was unchanged ____
a decrease in total spending ____
no changes to the budget ____
other, please specify ____

____

____

8 <u>If the changes made by the Legislature to the budget involved an increase in total spending, has this been compensated by an increase in total revenue?</u> (Based on OECD Q65)

Yes, fully compensated ____
Yes, but only partly compensated ____
No, total revenue was not increased ____
Other, please specify ____
Not applicable, changes made by the Legislature to the budget did not involve an increase in total spending ____

9 <u>If possible, please provide the overall improvement or worsening in the budget balance made by the Legislature, in national currency in the last fiscal year.</u> (Based on OECD Q65b)

Overall improvement (increase in budget surplus/decrease in budget deficit) ____
Overall worsening (decrease in the budget surplus/increase in budget deficit) ____

10 <u>Please indicate whether this change in the budget balance is typical of changes made by the legislature to the budget in previous years.</u>

Change in last fiscal year is typical of changes made by the legislature to the budget in previous years ____
Change in last fiscal year is higher than typical changes made by the legislature to the budget in previous years ____
Change in last fiscal year is lower than typical changes made by the legislature to the budget in previous years ____
Other, please specify

____

____

11 <u>Notwithstanding the formal powers of the Legislature to modify the budget, is a vote on the budget considered a vote of confidence in the government?</u> (OECD Q66)

No ____
Yes ____
Other, please specify

____

____

12 <u>Does the executive have the power to veto the budget approved by the Legislature?</u> (OECD Q68a)

No, it does not have such power ____
Yes, it has line item veto power ____
Yes, it has package veto power ____
Yes, it has both line item and package veto powers ____
Other, please specify

____

____

ii Reversionary budgets

13 <u>If the budget is not approved by the Legislature before the start of the fiscal year, which of the following describes the consequences?</u> (OECD Q67)

the executive's budget proposal takes effect ____
the executive's budget proposal takes effect on an interim basis, i.e. for a limited period ____
last year's budget takes effect on an interim basis, i.e. for a limited period/other interim measures are voted on by the Legislature ____
government shuts down, emergency budget applies until (interim) agreement is reached ____
expenditure without legislative approval are not allowed ____
other, please specify

____
____

III BUDGET IMPLEMENTATION

i Flexibility of the budget execution (Based on OECD Q72-84)

14 <u>Does the Executive have the authority to cut, cancel or rescind spending once the budget has been approved by the Legislature?</u>

Yes ____
No ____
If you answered No, please proceed to question 20.

15 <u>If the Executive has authority to cut/cancel/rescind spending, does this authority apply to all types of spending?</u>

All types of spending ____
Only some types of spending ____
Please specify (e.g. mandatory, operational, investment)

____
____

16 <u>Are there any thresholds that apply to the executive's authority to cut/cancel/rescind spending?</u>

Yes ____
No ____

17 <u>Is approval required for the executive to cut/cancel/rescind spending?</u>

Yes ____
No ____

18 <u>Please indicate what institution(s) must grant approval, if applicable</u>

Ministry of Finance/Economy ____
Legislature ____
Other, please specify ____

____
____

19 <u>Please indicate the type of approval, if applicable</u>

Ex-ante approval ____
Ex-post approval ____

20 <u>Can line ministers re-allocate funds within their own budget envelope?</u>

Yes ____
No ____
If you answered No, please proceed to question 25.

21 Are there any thresholds that apply to line ministers' re-allocation of funds within their own budget envelope?

Yes ____
No ____

22 Is approval required for line ministers to re-allocate funds within their own budget envelope?
Yes ____
No ____

23 Please indicate what institution(s) must grant approval, if applicable
Ministry of Finance/Economy ____
Legislature ____
Other, please specify
____
____

24 Please indicate the type of approval, if applicable
Ex-ante approval ____
Ex-post approval ____

25 Is an increase in spending by the Executive possible after the budget has been approved by the Legislature?
Yes ____
No ____
If you answered No, please proceed to question 31 in the next Section (Section ii Supplementary budgets).

26 If the Executive has authority to increase spending, does this authority apply to all types of spending?
All types of spending ____
Only some types of spending ____
Please specify (e.g. mandatory, operational, investment spending)
____
____

27 Are there any thresholds that apply to the executive's authority to increase spending?
Yes ____
No ____

28 Is approval required for the executive to increase spending?
Yes ____
No ____

29 Please indicate what institution(s) must grant approval, if applicable
Ministry of Finance/Economy ____
Legislature ____
Other, please specify ____
____
____

30 Please indicate the type of approval, if applicable
Ex-ante approval ____
Ex-post approval ____

ii Supplementary Budgets (Based on OECD Q85-88)
31 How many supplementary budgets have been approved in the last fiscal year? (excluding end of year cleaning budgets)
Number of supplementary budgets ____

32 What was the total amount of supplementary budgets (in national currency)?
____
Please comment, if necessary
____

33 Is the total amount typical of supplementary budgets in previous years?

Yes, the total amount of supplementary budgets in the last fiscal year is typical of that in previous years ____

No, the total amount of supplementary budgets in the last fiscal year is higher than that in previous years ____

No, the total amount of supplementary budgets in the last fiscal year is lower than that in previous years ____

Other, please specify

34 Please select the top reason(s) why the supplementary budget/s were necessary (you can select more than one reason)

Changing economic forecasts resulting in lower/higher expenditure ____

Increase of estimates of mandatory spending; stimulus measures ____

Ad hoc emergency needs (e.g. natural disaster) ____

New policy initiatives ____

Transfer of funds from one appropriation to another (no net increase) ____

Formal approval of appropriations carried forward from one fiscal year to the next ____

Recession/cancelation of planned spending ____

Other reason , please specify ____

IV BUDGET TRANSPARENCY

i Off-budget activities and contingent liabilities (Based on OECD Q38, 39)

35 Is legislative authorisation required for off-budget expenditures (e.g. social security or public health funds, infrastructure/capital funds, special accounts managed by Finance Ministry/Treasury/Central Budget Authority and kept out of the budget)?

Yes ____

No ____

Please comment, if necessary

36 Is legislative authorisation required for contingent liabilities (e.g. loan guarantees, law suits pending, public private partnerships)?

Yes ____

No ____

Please comment, if necessary

ii Publication of budgetary data

37 Please indicate the frequency of public reports on budget outcomes.

monthly | quarterly | Half-yearly | annual

Other, please specify

38 Please specify whether these reports cover:

consolidated central government ____

central government, not consolidated and other public sector entities/levels of government ____

central government, not consolidated ____

other, please specify ____
____
____

39 Please specify whether these reports are:
on a cash basis ____
in accruals (ESA2010) ____

iii Comprehensiveness of budget documentation

40 In the annual budget documentation presented to the Legislature are expenditures under current commitments in law and policy distinguished from new policies? (OECD Q48)
Yes, always ____
Yes, sometimes ____
Rarely ____
Never ____

41 In the annual budget documentation presented to the Legislature, are new revenue-raising measures distinguished? (OECD Q49)
Yes, always ____
Yes, sometimes ____
Rarely ____
Never ____

42 Which of the following are included in the budget documentation approved by the legislature? (OECD Q38, 39, 50b)
financial liabilities ____
financial assets ____
state transfers/guarantees ____
municipal transfers/guarantees ____
tax expenditures with estimates of revenue foregone ____
off-budget expenditures ____
contingent liabilities ____

43 Please indicate whether the following are made publicly available, not publicly available, not applicable (e.g. not produced or not produced by government): (OECD Q51a)

methodology and assumption for establishing fiscal projections used in the budget ____
sensitivity analyses of fiscal and/or macroeconomic models ____
independent reviews/analysis of macroeconomic and/or fiscal assumptions ____
budget circular ____
pre-budget report to the legislature ____
executive budget proposal submitted to the legislature ____
fiscal policy objectives for the medium term ____
comprehensive annual financial plan encompassing all revenues and expenditures including off budget ____
expenditures and extra-budgetary funds ____
comprehensive annual financial plan encompassing all revenues and expenditures for all levels of government (including regional and local) ____
medium-term perspective on total revenue and expenditure (possibly in the form of a medium-term expenditure framework) ____
long term perspective on total revenue and expenditure (10 or more years) ____
citizens' budget ____
citizens' budget guide (explaining the budget process and actors involved) ____
budget approved by the legislature ____
other, please specify ____
____

V ORGANISATIONAL CAPACITY OF THE LEGISLATURE

i Parliamentary structure

44 If there is more than one chamber in the Legislature, how would you describe their relative powers over the budget? (OECD Q58)

the Legislature is unicameral ____
there are two chambers with equal powers over the budget ____
there are two chambers, but only the lower chamber is involved in the budget process ____
both chambers are involved in the budget process but the lower chamber can overrule the upper chamber ____
other, please specify ____

____

____

ii Specialised committees

45 Thinking about the following types of committee structures for dealing with the budget, please indicate which arrangement applies to each chamber: (OECD Q59)

lower and upper chamber ____
a single budget/finance committee coordinates a process in which sectoral committees make recommendations to the budget/finance committee. The budget/finance committee then reviews and accepts or rejects these recommendations and formally considers all budget related matters ____
a single budget/finance committee formally considers the budget, but members from sectoral committees attend meetings of the budget/finance committee when expenditures in their specific areas are discussed. ____
a single budget/finance committee formally considers budget aggregates (total level of revenue and spending and their allocation to each sector) and sectoral committees formally consider spending for sector specific appropriations. ____
sectoral committees formally consider appropriations for each respective sector. No budget/finance committee is in place or it provides technical assistance only. ____
No formal committee involvement, but committees may choose to consider aspects of the budget ____
other, please specify

____

____

Not applicable ____

46 If a budget/finance committee is in place in the Legislature, please indicate how long is the tenure of legislators sitting on it, generally:

One year or less | Two years | Five years

Other, please specify

____

Not applicable, budget/finance committee does not exist ____

47 Does the budget/finance committee have the power to request witnesses and to question ministers or senior civil servants?

Yes, and this takes place regularly (once a year or more) ____
Yes, but this takes place very infrequently (less than once a year) ____
No ____

Other, please specify

____

____

Not applicable, budget/finance committee does not exist ____

iii Access to technical expertise

48 Is there a specialised budget research office/unit attached to the Legislature to conduct analyses of the budget? (OECD Q60a)

Yes, there is a specialised budget research office/unit ____

No ____

Other, please specify ____

____

____

49 If a specialised budget research office/unit is in place, please estimate the number of full-time equivalent staff employed by this office/unit (OECD Q60b)

Number of full-time equivalent staff _____

iv Access to budgetary information

50 Is the Legislature informed on implementation of the budget?

Yes, informed automatically and explanations of deviations from the budget are provided ____

Yes, informed automatically but only in case of deviations from the budget ____

Informed only if it requests information ____

No ____

Other, please specify ____

____

____

51 Is a year-end fiscal report audited by the supreme audit institution released within six-months of the end of the fiscal year?

Yes ____

No ____

Provide comments, if necessary

____

____

52 Is the audited year-end fiscal report discussed in the Legislature?

Yes ____

No ____

Provide comments, if necessary

____

____

VI RELATIONSHIP OF LEGISLATURE WITH INDEPENDENT FISCAL INSTITUTION(S)

53 Are reports by the independent fiscal institution submitted to the Legislature?

Yes, and they constitute an important input in legislative budget debates ____

Yes, but they do not constitute an important input in legislative budget debates ____

No, they are not submitted to the Legislature ____

Other, please specify

____

____

54 Can the Legislature or its budget/finance committee request the leadership of the independent fiscal institution or its senior staff to provide responses to the Legislature's questions?

Yes, and this takes place at least once a year ____

Yes, but this takes place very infrequently (less than once a year) ____

No ____
Other, please specify

____
____

55 If you have any additional comments or remarks regarding the relationship of the Legislature with independent fiscal institution(s), please include them here:

____
____

VIII THE ROLE OF THE LEGISLATURE IN THE IMPLEMENTATION OF THE SGP
i Involvement of Legislature in Stability Programme (SP)

56 Is the SP discussed in legislative committee/s?
Yes ____
No ____
Other, please specify

____
____

57 If the SP is discussed in legislative committee/s, please specify the committee/s involved:
budget/finance committee ____
economics committee ____
European committee ____
other, please specify ____

____
____
not applicable, the SP is not discussed in legislative committees ____

58 Are the European Commission/Council Recommendations and Opinions on the SP discussed in the Legislature?
Yes ____
No ____
Please comment, if necessary

____
____

59 Are the European Commission/Council Recommendations and Opinions on the SP discussed in legislative committees?
Yes ____
No ____
Other, please specify

____
____

60 If the European Commission/Council Recommendations and Opinions on the SP are discussed in legislative committee/s, please specify the committee/s involved:
budget/finance committee ____
economics committee ____
european committee ____
other, please specify

____
____
not applicable, the SP is not discussed in legislative committees ____

61 If the European Commission/Council Recommendations and Opinions on the SP are discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?
Before the discussion in Council ____
After the Council meeting ____

Not applicable, not discussed in the Legislature ____
Please comment, if necessary

____
____

62 <u>If you have any additional comments or remarks regarding the role of the Legislature in the Stability Programme, please include them here:</u>

____
____

ii Involvement of the Legislature in the Draft Budgetary Plan (DBP)

63 <u>Is the European Commission Opinion on the DBP discussed in the Legislature?</u>

Yes, the Commission Opinion on the DBP is debated in the Legislature in a specific session ____
Yes, the Commission Opinion on the DBP is debated in the Legislature the budgetary debates ____
No, there is no discussion in the Legislature on the Commission Opinion on the DBP ____
other, please specify

____
____

64 <u>Is the European Commission Opinion on the DBP discussed in legislative committee/s?</u>

Yes ____
No ____
Other, please specify

____
____

65 <u>If the European Commission Opinion on the DBP is discussed in legislative committee/s, please specify the committee/s involved:</u>

budget/finance committee ____
economics committee ____
European committee ____
other, please specify ____

____
____

not applicable, the SP is not discussed in legislative committees ____

66 <u>If you have any additional comments or remarks regarding the role of the Legislature in the Draft Budgetary Plan, please include them here:</u>

____
____

iii Involvement of the Legislature in excessive deficit procedure (EDP)

Please respond to the questions in this Section with reference to the current ongoing excessive deficit procedure or most recent closed excessive deficit procedure.

67 <u>Are the European Commission Opinion/Council Decision on the existence of an excessive deficit and the European Commission/Council Recommendation to end the excessive deficit situation discussed in the Legislature?</u>

Yes ____
No ____
Please comment, if necessary

____
____

68 If the Opinion/Decision/Recommendation on the excessive deficit are discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?

Before the discussion in Council ____
After the Council meeting ____
Not applicable, not discussed in the Legislature ____
Please comment, if necessary

____
____

69 Are the Opinion/Decision/Recommendation on the excessive deficit discussed in legislative committee/s?

Yes ____
No ____
Other, please specify

____
____

70 If the Opinion/Decision/Recommendation on the excessive deficit are discussed in legislative committee/s, please specify the committee/s involved:

budget/finance committee ____
economics committee ____
european committee ____
other, please specify ____

____
____
not applicable, the SP is not discussed in legislative committees ____

71 Is the Legislature informed on the implementation of Council's recommendations to end the excessive deficit situation in your country?

Yes, the Legislature is informed automatically on a regular basis and any deviations or risks thereof are explained ____
Yes, the Legislature is informed but only in case of deviations or risks thereof ____
The Legislature is informed only if it requests information ____
No ____
Other, please specify

____
____

72 Is the European Commission recommendation/Council decision abrogating the excessive deficit procedure discussed in the Legislature?

Yes ____
No ____
Please comment, if necessary

____
____

73 If the Recommendation/Decision on the abrogation of the excessive deficit procedure is discussed in the Legislature, does this discussion take place before the discussion in Council or after the Council meeting?

Before the discussion in Council ____
After the Council meeting ____
Please comment if necessary

____
____
Not applicable, not discussed in the Legislature ____

74 Is the Recommendation/Decision on the abrogation of the excessive deficit discussed in legislative committee/s?

Yes ____

No ____
Other, please specify
____
____

75 If the Recommendation/Decision on the abrogation of the excessive deficit is discussed in legislative committee/s, please specify the committee/s involved:

budget/finance committee ____
economics committee ____
European committee ____
other, please specify ____
____
____
not applicable, the SP is not discussed in legislative committees ____

76 If you have any additional comments or remarks regarding the role of the Legislature in the Excessive Deficit Procedure, please include them here:
____
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78 If there are any additional issues that you would like to clarify or note that were not addressed in the whole questionnaire, please include them here:
____
____
____
____

Respondent(s') Contact Information

Please provide the contact information for the main person responsible for responding to the questionnaire.
This information will only be used if follow up to clarify responses is necessary. If you wish to include more than one contact person, you can enter the information for the additional staff at the end of this page. The contact details provided will remain confidential.

Surname(s): ________________________________
First Name(s): ________________________________
Respondent's institution: ________________________________
Position/Title: ________________________________
Email address: ________________________________
Telephone: ________________________________

Names and emails of additional respondents, if applicable:
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PARTICIPANT INFORMATION SHEET – QUESTIONNAIRE TO OECD EA COUNTRIES

Title of Research Project: Budget institutions and fiscal discipline in Euro Area countries: a focus on legislative budgeting and on Malta's budget institutions reforms since the Great Crisis

Name of Researcher, Introduction and Invitation: I am Moira Catania, an assistant lecturer at the University of Malta. I am pursuing a PhD at the University of Bradford, UK, under the supervision of Dr M.J. Baimbridge and Dr I. Litsios. As part of my study, I am conducting research on budget institutions in Euro Area countries, with a particular focus on the role of the legislature in the budget process and in the implementation of the Stability and Growth Pact. In order to have a comprehensive dataset on budget institutions, questionnaires are being distributed to national experts. You are being invited to participate in this questionnaire on the basis of your official position and key role in the budget process in your country.

Research Description: The aim of this research is to identify differences in budget institutions, and in particular in legislative budgeting, across Euro Area countries. The research will cover the following dimensions of budget institutions: fiscal rules and medium-term budgetary frameworks; procedural rules which govern the budget process, for instance the role of the finance minister vis-à-vis spending ministers, and the role of the executive vis-à-vis the legislature during the budget approval stage; rules concerning budget transparency, including budget documentation and publication of fiscal data; and independent fiscal councils. Numerical indices will be constructed, using the data generated by these questionnaires and other relevant data available from the OECD budgeting practices and procedures database and the European Commission DG Ecfin's fiscal governance databases, to capture key characteristics of budget institutions and legislative budgeting in Euro Area countries.

Procedure: The questionnaire concerns factual information on budget procedures in your country, which is not available from other sources. The research involves completing the questionnaire, which is provided as a word document, and sending the completed questionnaire back to the researcher, via email. It will take approximately 35 minutes to complete the questionnaire. If you have any queries on how to complete the questionnaire or need any clarification, you are welcome to contact the researcher via email or telephone. It would be appreciated if you could return the completed questionnaire within two weeks from receipt of this invitation. We fully understand that it may not be possible for you to respond to the questionnaire yourself and you can nominate another respondent from your institution. If this is the case, please provide the additional respondent's details at the end of the questionnaire.

Consent, Participation and Withdrawal: Filling out and returning the questionnaire will indicate your consent to participate in the research. Given your expertise on the budget process in your country, your contribution is crucial to the research and it would be appreciated if you could complete all the questionnaire. However, participation is entirely voluntary and you are welcome to respond only partially or not at all to the questionnaire. Please note that you can withdraw your participation at any time. If you decide to withdraw your participation after submitting your responses to the questionnaire, please inform the researcher via email and the information provided will be deleted and will not be used in the research.

Confidentiality: Your name and a precise reference to your official position will not be divulged when disseminating the results of the research and in publications. Furthermore, the participants' institutions will not be identified individually for each country but rather in aggregate form for the entire sample. Each participant will be assigned a country code and details of the participants will be stored securely and separately from the responses to the questionnaires. Access to the participants' contact details will be restricted to the researcher. These personal records will be destroyed once reports or publications from this research have been finalised.

Data Storage and Retention: The data generated from the questionnaires will be stored in secure data files during the duration of the study and for ten years after the completion of the study. Records will not be stored on laptops or other transportable devices. Paper copies of the data will be stored in a locked cabinet and will be shredded after any reports or publications from this research have been finalised. The data will be accessible and available for use by the researcher and her PhD supervisors, Dr M.J. Baimbridge and Dr I. Litsios.

Result Reporting: If you wish to be kept updated on output emanating from the research, you are welcome to request this by sending an email to the researcher and you will receive a short report on the main findings from the questionnaire.

Ethical Review of the Study: This study has been granted ethics approval by the Chair of the Humanities, Social and Health Sciences Research Ethics Panel at the University of Bradford on 17th June 2016.

Contact Details: If you have any questions regarding this research, please feel free to contact the researcher or her PhD supervisors. The following are the relevant contact details:

Researcher: Moira Catania
Email: moira.catania@um.edu.mt; Tel: 00 356 23403089

PhD Supervisors:
Dr Mark J. Baimbridge,
Senior Lecturer in Economics, Faculty of Social Sciences, University of Bradford, UK: Email: M.J.Baimbridge@bradford.ac.uk; Tel: 0044127423 4792

Dr Ioannis Litsios
Lecturer in Economics, Faculty of Social Sciences, University of Bradford, UK
Email: I.Litsios@bradford.ac.uk; Tel: 00 44 1274 23 5584

PARTICIPANT INFORMATION SHEET – QUESTIONNAIRE TO NON-OECD EA COUNTRIES

Title of Research Project: Budget institutions and fiscal discipline in Euro Area countries: a focus on legislative budgeting and on Malta's budget institutions reforms since the Great Crisis

Name of Researcher, Introduction and Invitation: I am Moira Catania, an assistant lecturer at the University of Malta. I am pursuing a PhD at the University of Bradford, UK, under the supervision of Dr M.J. Baimbridge and Dr I. Litsios. As part of my study, I am conducting research on budget institutions in Euro Area countries, with a particular focus on the role of the legislature in the budget process and in the implementation of the Stability and Growth Pact. In order to have a comprehensive dataset on budget institutions, questionnaires are being distributed to national experts. You are being invited to participate in this questionnaire on the basis of your official position and key role in the budget process in your country.

Research Description: The aim of this research is to identify differences in budget institutions, and in particular in legislative budgeting, across Euro Area countries. The research will cover the following dimensions of budget institutions: fiscal rules and medium-term budgetary frameworks; procedural rules which govern the budget process, for instance the role of the finance minister vis-à-vis spending ministers, and the role of the executive vis-à-vis the legislature during the budget approval stage; rules concerning budget transparency, including budget documentation and publication of fiscal data; and independent fiscal councils. Numerical indices will be constructed, using the data generated by these questionnaires and other relevant data available from the OECD budgeting practices and procedures database and the European Commission DG Ecfin's fiscal governance databases, to capture key characteristics of budget institutions and legislative budgeting in Euro Area countries.

Procedure: The questionnaire concerns factual information on budget procedures in your country, which is not available from other sources. In order to create matching data for your country to the OECD dataset, it includes relevant questions from the OECD's 2012 budget practices and procedures survey. The research involves responding to the questions in the questionnaire, which is provided as a word document, and sending the completed questionnaire back to the researcher, via email. It will take approximately 75 minutes to complete the questionnaire. If you have any queries on how to complete the questionnaire or need any clarification, you are welcome to contact the researcher via email or telephone. It would be appreciated if you could return the completed questionnaire within two weeks from receipt of this invitation. We fully understand that it may not be possible for you to respond to the questionnaire yourself and you can nominate another respondent from your institution. If this is the case, please provide the additional respondent's details at the end of the questionnaire.

Consent, Participation and Withdrawal: Filling out and returning the questionnaire will indicate your consent to participate in the research. Given your expertise on the budget process in your country, your contribution is crucial to the research and it would be appreciated if you could complete all the questionnaire. However, participation is entirely voluntary and you are welcome to respond only partially or not at all to the questionnaire. Please note that you can withdraw your participation at any time. If you decide to withdraw your participation after submitting your responses to the questionnaire, please inform the researcher via email and the information provided will be deleted and will not be used in the research.

Confidentiality: Your name and a precise reference to your official position will not be divulged when disseminating the results of the research and in publications. Furthermore, the participants' institutions will not be identified individually for each country but rather in aggregate form for the entire sample. Each participant will be assigned a country code and details of the participants will be stored securely and separately from the responses to the questionnaires. Access to the participants' contact details will be restricted to the researcher. These personal records will be destroyed once reports or publications from this research have been finalised.

Data Storage and Retention: The data generated from the questionnaires will be stored in secure data files during the duration of the study and for ten years after the completion of the study. Records will not be stored on laptops or other transportable devices. Paper copies of the data will be stored in a locked cabinet and will be shredded after any reports or publications from this research have been finalised. The data will be accessible and available for use by the researcher and her PhD supervisors, Dr M.J. Baimbridge and Dr I. Litsios.

Result Reporting: If you wish to be kept updated on output emanating from the research, you are welcome to request this by sending an email to the researcher and you will receive a short report on the main findings from the questionnaire.

Ethical Review of the Study: This study has been granted ethics approval by the Chair of the Humanities, Social and Health Sciences Research Ethics Panel at the University of Bradford on 17th June 2016.

Contact Details: If you have any questions regarding this research, please feel free to contact the researcher or her PhD supervisors. The following are the relevant contact details:

Researcher:
Moira Catania
Email: moira.catania@um.edu.mt; Tel: 00 356 23403089

PhD Supervisors
Dr Mark J. Baimbridge
Senior Lecturer in Economics, Faculty of Social Sciences, University of Bradford, UK
Email: M.J.Baimbridge@bradford.ac.uk; Tel: 00 44127423 4792

Dr Ioannis Litsios
Lecturer in Economics, Faculty of Social Sciences, University of Bradford, UK
Email: I.Litsios@bradford.ac.uk; Tel: 00 44 1274 23 5584

UNIVERSITY of BRADFORD

Ethics Ref:

Research Ethics Application Form

This form has been approved by the Committee for Ethics in Research

A1. Title of Research Project:
Budget institutions and fiscal discipline in Euro Area countries: a focus on legislative budgeting and on Malta's budget institutions reforms since the Great Crisis

A2. Contact person (Principal Investigator, in the case of a staff-led research project, or the Principal Supervisor in the case of a student research project):

Title: Dr	First Name/Initials: Mark. J	Last Name: Baimbridge
Post: Principal Supervisor School/Department: Faculty of Social Sciences, Economics		
Email: M.J.Baimbridge@bradford.ac.uk Telephone: +44 (0)1274 23 4792		

Title: Dr	First Name/Initials: Roberto	Last Name: Espindola
Post: Secondary Supervisor School/Department: Faculty of Social Sciences, Centre for International Development		
Email: R.Espindola@bradford.ac.uk Telephone: +44 (0) 1274 233823		

A2.1. Is this a student research project?

If yes, please provide the student's contact details and course:

Yes. PhD, part-time extra-mural

Student details: Moira Catania (UB no. 11017269)

Email: moira.catania@um.edu.mt

Telephone: 00 356 23403089

Mobile: 00 356 79002324

A2.2. Other key investigators/co-applicants (within/outside University), where applicable:

Please list all (add more rows if necessary)

Title	Full Name	Post	Responsibility in project	Organisation	Department
N/A					

A2.3 Name of body funding the project (if appropriate) and any other declarations of interest: (NOTE: *Only projects with the funding confirmed need approval)*

PhD is being funded from a scholarship fund at the University of Malta, where Moira Catania is employed as an assistant lecturer.

A3. Proposed Project Duration:

Start date: 2011	End date: 2018

Complete this form if you are a member of staff or a student who plans to undertake a research project which will not involve the NHS but which will involve people participating in research either directly (e.g. interviews, questionnaires and/or clinical studies not involving NHS patients) and/or indirectly (e.g. people permitting access to data and/or tissue). **Ultimate responsibility for gaining ethical approval lies with the Principal Investigator or Principal Supervisor of the project.**

Documents to enclose with this form, where appropriate:

This form should be accompanied, where appropriate, by an Information Sheet / Covering Letter / Written Script which informs the prospective participants about the proposed research, and by a Consent Form. Applicants should also attach any unvalidated Questionnaires, Interview Guides and the full research proposal.

Further guidance on how to complete this application form is available in the document **Guidelines for Completing the Research Ethics Application form** and this can be found at: http://www.bradford.ac.uk/rkts/research-support-for-academics/ethics/ResearchEthicsApprovalProcess/

It is essential that this form is completed with reference to the information in the application form guidance document. Please pay particular attention to completing the form in sufficient detail to allow reviewers to judge ethical issues raised by this study. The form is intended to expand to allow as much space as is needed.

For University staff and students working with NHS patients or staff, or working on NHS premises, research ethics applications should be made through an NHS Research Ethics Committee: NHS Research Ethics Committee (REC)

Travel Overseas to High Risk Areas: if you are planning to travel overseas to high risk areas, as advised by the Government's Foreign and Commonwealth Office, you should read the guidelines and complete the Risk Assessment form to be submitted to Finance. A signed copy of the Risk Assessment form should also accompany this form when applying for Research Ethics Approval. The Risk Assessment form is available at http://www.bradford.ac.uk/finance/finance-teams-contacts-and-services/insurance/travel-insurance/ (Please scroll down to bullet point 4 under the heading Prior to Travel.)

Once you have completed this research ethics application form in full, and other documents where appropriate, check that your name, the title of your research project and the date appears on the first page and email it to the Research Support Unit Ethics Administrator. Please keep a copy and note that the original signed and dated version of 'Part B – the Signed Declaration' of the application form should also be provided to the Research Support Unit Ethics Administrator in hard copy.

Attachments

Please confirm that you have included the following documentation with your submission:

Information Sheet	Yes X	No ❒
Consent Form *Further details on this issue are available in Section A9.1 of the application form.*	Yes ❒	No X
Research Proposal	Yes X	No ❒
Unvalidated Questionnaires	Yes X	No ❒

Interview Guidelines	Yes X	No ❐
Risk Assessment Form (only required when involving travel to high risk areas)	Yes ❐	No X

Part A

A4. Mark 'X' in one or more of the following boxes if your research:

☐ involves children or young people aged under 18 years

☐ involves using samples of human biological material collected before for another purpose*

*Please contact the University's HTA Designated Individual, Sue Boyce, Ethical Tissue, [s.g.boyce@bradford.ac.uk or ext. 5897] for advice.

http://www.bradford.ac.uk/rkts/research-support-for-academics/ethics/GuidanceonEthicalIssues/ - click on Human Tissue Act

A5. Briefly summarise the project's aims, objectives and methodology

(*this must be in language comprehensible to a lay person*)

This research aims to assess budget institutions in Euro Area (EA) countries and to analyse their effect on fiscal discipline. The study focuses on the role of the legislature in the budget process and includes a case study on Malta. The study involves three research components. The first component involves a description of budget institutions in EA countries, using numerical composite indicators. The second component involves an empirical analysis of the relationship between characteristics of budget institutions and fiscal discipline in EA countries, with a particular emphasis on the influence of legislative budgeting. The third component involves a case study on Malta and aims to understand how the reforms to the EU's fiscal governance system, which were introduced following the Great Crisis, affected Malta's budgetary institutions. The first and third components of the study will involve the generation of primary data, through questionnaires and interviews, respectively.

In the first research component, questionnaires will be sent, via email, to budget directors from the 19 Euro Area countries. The questionnaire comprises questions on budget procedures and institutions, with a particular focus on the role of the legislature in the budget process and in the implementation of the Stability and Growth Pact. Indices capturing characteristics of budget institutions will be constructed using this primary data, complemented with secondary data from the OECD budgeting practices and procedures and the European Commission's DG Ecfin fiscal governance databases. In order to obtain matching data to the OECD dataset for the four non-OECD Euro Area countries (Malta, Cyprus, Latvia and Lithuania), the questionnaires to these countries will also include the relevant questions from the OECD budget practices and procedures 2012 survey.

In the third component of the study, interviews will be used to gain an insight on how the reforms to the EU's fiscal governance system following the Great Crisis affected Malta's budgetary institutions. The case study on Malta will start at the national level, by analysing the reforms to the budget institutions and assessing if and when encounters with the EU have taken place, to identify the causal processes through which change came about. The participants involve high ranking officials and politicians involved in the reform process of Malta's budget institutions.

A6. Is there any potential for physical and/or psychological harm / distress to participants?

It is not expected that the participants could be directly physically or psychologically harmed by taking part in the research. The questionnaire concerns factual, standardised information on budget procedures. Similar data has already been provided by national authorities to the OECD and/or European Commission. As regards the interviews, possibly there could be some embarrassment for the participants if their responses differ from the official government stance and the information is made public. This possible risk will be addressed through measures to ensure that the participants are not named or otherwise identified when disseminating the research results and in publications. Furthermore, participants will be allocated a code and their names and details will be stored separately from the data records. Further details on the measures to ensure confidentiality of the data are provided in Section A13.

Both the participants in the questionnaires and in the interviews constitute high-ranking officials and given their busy schedules, the time required to participate in the research may constitute an inconvenience. The questionnaire is estimated to take approximately 35 minutes to complete for participants from the fifteen OECD Euro Area countries and around 75 minutes for participants from the non-OECD countries. In order to reduce the response burden, the timing of the questionnaire will be carefully selected and known busy periods (e.g. budget preparation) will be avoided. Furthermore, participants will also be offered the possibility to nominate another respondent from their institution, if they wish. As regards the interviews, these are estimated to take around 45 minutes. Finding a timeslot for the interviews may be difficult and so participants will be offered flexibility to choose a date and time which is most convenient to them, even after office hours.

A7. Does your research raise any issues of personal safety for you or other researchers involved in the project and, if yes, explain how these issues will be managed? [*especially if taking place outside working hours, off University premises or outside the UK]*

The research will be carried out off University of Bradford premises as the student is based in Malta. The questionnaires will be sent to participants in EA countries via email. On the other hand, the interviews will be carried out in Malta. The research does not raise any issues of personal safety for the researcher or for the participants.

A8.1 Explain how the potential participants in the project will be:

Identified:

Potential participants, for both the questionnaires and the interviews, will be identified on the basis of their official position.

The key participants for the questionnaires will be the budget directors from the 19 EA countries. A reserve list of participants will be prepared (consisting of officials from fiscal councils or academics with relevant expertise, from each country) and the questionnaire will be sent to them if there is no response from the first participant contacted. The budget directors as well as the participants on the reserve list will be identified from the official websites of the institutions concerned.

For the interviews, the participants will involve high-level officials and politicians that have been involved in the reform process of Malta's budget institutions, namely officials from the Ministry for Finance, parliament, representatives of the two main political parties, the Malta Fiscal Advisory Council and the Central Bank of Malta. The inclusion criteria for these participants is that they hold a position of significant responsibility (defined as comparable to the post of Director in Malta's public service). Through my previous work at the Ministry for Finance, I had worked closely with some of these officials and this will facilitate the process of identifying participants for the interviews. Although I know some of them on a personal basis, currently there is no power relationship with the potential participants, as since 2010 I have been employed as academic staff with the University of Malta. As some officials may have changed positions and new individuals could have been appointed, a snowball sampling technique will then be used, asking the participants that I know on a personal basis to contact and facilitate the interview with the other participants.

Approached:

For both the questionnaires and the interviews, potential participants will be approached through an email, which will inform them briefly on the aims and objectives of the study, explain how they were selected and invite them to participate in the research.

Recruited:

With the invitation email to the potential participants for the questionnaire, the questionnaire and the participant information sheet will be attached. The questionnaire will be attached to the email as a MS Word document and participants will be requested to return, via email, the document with the responses to the researcher.

Participants in the interviews will also be recruited via email. Once they reply positively to the email invitation to participate in the research, a further email will be sent to set up an appointment for the interview. If necessary, further contacts with the participants will be made via telephone to set up the appointments.

A8.2 Please give rationale for sample size (as appropriate):

The total number of participants for the questionnaire will be 19 experts, one from each country. This is similar to the approach used by the OECD and the European Commission to generate their databases on budget institutions and procedures. As explained above, the participant will be offered the possibility to nominate another respondent from the same institution. Furthermore, in case of non-response from a country's budget director, the questionnaire will be sent to another national expert.

The total number of participants for the interviews will be around 15. The number of participants is limited as the participants constitute key experts knowledgeable on Malta's budget process and involved in the reform of Malta's budget institutions. Despite the small sample, the participants comprise officials from different institutions thus providing a comprehensive perspective on the reform process. The sample comprises two participants from each institution. This will reduce the risk of bias in the interviews and clarifications will be sought on conflicting responses. Furthermore, this also reduces the risk of identifying the participants, thus enhancing the confidentiality of the interviews.

A9. Will informed consent be obtained from the participants?

Yes X❒ No ❒

If informed consent or consent is not to be obtained please explain why:

Further guidance is at: http://www.bradford.ac.uk/rkts/research-support-for-academics/ethics/GuidanceonEthicalIssues/ - click on Consent

A9.1. If you are planning to obtain informed consent, please explain the proposed process:

With the invitation email, the participants in the questionnaire will receive the information sheet as an attachment. The information sheet will include details on the aims and nature of the study, as well as confidentiality issues, and it will explain that filling out and returning the questionnaire will indicate their consent to participate in the research. They will be explained that given their expertise, their contribution is crucial for the research and that they are thus invited to complete all the questionnaire, but that of course participation is entirely voluntary and that they are free to respond only partially or not at all to the questionnaire.

As regards participants in the interviews, once they respond positively to the invitation email, they will receive a second email to set up the appointment for the interview. With this second email, they will receive the information sheet providing details on the nature of the study and on confidentiality issues. Verbal informed consent will be obtained at the beginning of the interview. Since the interviews involve high-ranking officials and politicians, obtaining written consent may make the interview more official and discourage some participants from taking part in the research. The participants will be explained that they are invited to reply to all questions in the interview but that they are free not to reply to any of the questions if they wish.

A9.2 If you have obtained informed consent, what arrangements are in place to ensure participants receive on going relevant information about the study and the opportunity to withdraw consent if required?

Participants in the research will be informed, through the information sheet, that they can withdraw from participation at any time, even after they have submitted their responses to the questionnaire or the interview has been conducted. They can ask for the information provided not to be used in the research and for the information to be deleted. To this effect, they will be provided with the email contact details of the researcher.

In order to be kept updated on output emanating from the research that directly draws upon their participation, in the information sheet, the participants will be informed, that if they wish, they can request a short report of the main findings, by sending an email to the researcher.

A9.3 If you have obtained informed consent, how long will the participants have to decide whether to take part in the study? *(If less than 24 hours, please justify)*

For the participants in the questionnaire, if no reply is received to the invitation email within 10 working days, a reminder will be sent via email. If no reply is received within 10 working days of the reminder, a final contact will be made via telephone to establish whether the participant is willing to participate in the study. If this is not the case, the questionnaire will be sent to the participant from the reserve list for that country, using the same procedure.

For the participants in the interviews, if no reply is received to the invitation email within 10 working days, this will be followed up with contacts via telephone as this could facilitate the setting of the appointment. If after another 10 working days, an appointment for the interview has not been set, the participant will be considered not to be interested to participate in the research.

A9.4 Will informed consent be obtained from participants from one of the following groups?

- Children under 18
- People with learning disabilities
- People with a terminal illness
- People with mental health problems
- People with dementia
- Asylum seekers
- Those with a particularly dependent relationship with the researcher
- Other potentially vulnerable groups (please specify)

No.

If yes, please state what special arrangements have been made to deal with the issues of obtaining consent from the participants above?

N/A

A10. What special arrangements have been made for participants for whom English is not a first language? *(If there are no arrangements, please explain why)*

Although the questionnaire will be sent to officials from Euro Area countries where English is not a first language, the participants are high-ranking officials and using English as a working language is not expected to be a problem. For the participants in the interviews, this is also not an issue as English is Malta's second official language, but interviewees will be asked whether they prefer to hold the interview in English or Maltese.

A11. What steps have been taken to ensure participants have not been involved in similar studies (in order to prevent over exposure) where this may be an issue?

Some studies on budget institutions have also been based on questionnaires to budget directors in European countries (e.g. Gleich, 2003; Yläoutinen, 2004; Hallerberg et al. 2007, 2009). However, given that these are now somewhat dated, it is unlikely that the same participants will be involved. On the other hand, more overlap is likely with the participants from the most recent (2012) OECD budget practices and procedures survey and the questionnaires by the European Commission (DG Ecfin) to compile its fiscal governance databases, which are conducted annually. Nevertheless, given their key role in the budget process, it is not appropriate to exclude budget directors from the sample as this could impact negatively on the quality of the data generated. In order to reduce the burden of participating in the questionnaire, its timing will be carefully chosen to avoid known busy periods for the participants and to avoid coinciding with the European Commission's annual questionnaire. Furthermore, as highlighted earlier, participants will be able to nominate another respondent from their institution for the questionnaire.

As regards the participants in the interviews, overexposure from other studies is unlikely given the lack of studies on Malta's budget institutions. But there may be some overlap with the European Commission's fiscal governance questionnaire. Furthermore, the budget director will be asked to respond to the questionnaire and also to take part in an interview. The small size of Malta's public administration limits the potential participants with the necessary key expertise on the budget process. The budget director constitutes a crucial participant in the interviews given the key role in the budget process, whilst participation in the questionnaire is required in order to have comparable data for Malta to that of the other EA countries for the first component of the study. In order to reduce the inconvenience to this participant, the timing of the questionnaire and the interview will not coincide together and ample time will be allowed between the two (a month, as a minimum).

A12. Could this project potentially disadvantage any group of persons not included in the research?

No, because there is no direct benefit to the participants from taking part in the research.

A13. What measures will be put in place to ensure confidentiality and/or anonymity of personal data, where appropriate?

The participants in the research do not constitute vulnerable individuals and the content of the questionnaire and the interview does not involve private information. But since the participants involve high-ranking officials, the responses to the questionnaire and the interviews will be confidential. Since the participants involve key experts, it is not possible to gather the data through completely coded data collection techniques. Nevertheless, it will be ensured that the participants are not named or otherwise identified when disseminating the results of the research and in publications. Furthermore, details of the participants will be stored separately from the research data and code identifiers will be used on the data records. For the data generated by the questionnaires, country codes will be used for each participant (e.g. MT for the participant from Malta), whilst codes for each institution will be used for the data generated by the interviews (e.g. BO1 and BO2 for the two interviewees from the Budget Office).

The participants in the questionnaire involve one key expert from each country. This would be no different to their participation in completing the OECD and European Commission questionnaires and similarly, the aim of this questionnaire is to obtain factual information on the budget procedures and institutions. Nevertheless, any reports or publications from this research will neither identify the names of the participants nor will there be precise reference to their official position. In order to reduce further the risk that participants are identified, the participants' institutions (ministry of finance, fiscal councils and academia) will not be identified individually for each country, but rather at an aggregate level for the whole sample.

As the interviews seek to generate data on the extent and depth of reforms in Malta's budget institutions, additional measures will be adopted to further reduce the risk that the participants are identified, by interviewing two participants from each institution. The names and official position of the participants will not be revealed and the interviewees will be referred to through their institution. The organisational affiliation of the participants constitutes key analytical categories for the research and not using the participants' institution as descriptors of the data generated would result in substantial detail in the reported findings being omitted, thus compromising the relevance of the data for addressing the research questions at hand. Having two participants from each institution mitigates to some extent the risk that statements are attributed to particular individuals, and when possible and relevant, combined rather than individual responses will be used. Furthermore, particular attention will be devoted to remove other personal, contextual identifiers from the generated data, to avoid that the individual participants are identified through deductive disclosure. It is recognised that given the necessarily confined sampling frame, the guarantee of confidentiality limits the ways that the interviews' accounts can be reported and data will not be disclosed if there is a risk of potentially exposing the participants' identities through specific quotations or presented examples.

The data generated through the questionnaires and the interviews will be stored in a secure data file during the duration of the study and for ten years after the completion of the study. Records will be kept only on the student's work computer and home computer. The data will not be stored on laptops or other transportable devices. Paper copies of the data will be stored in a locked cabinet at the student's work office and shredded after any reports or publications from this research have been finalised. The data will be accessible and available for use by the student, Moira Catania, and her supervisors, Dr M.J. Baimbridge and Dr R. Espindola.

The personal details of the participants and the key list, linking the codes used on the data records with the participants' names and official positions, will be stored securely, separately from the data records. Access to these details will be restricted to the student, Moira Catania. Such personal records will be destroyed after any reports or publications from this research have been finalised.

A14. Will financial / in kind payments (other than reasonable expenses and compensation for time) be offered to participants? *(Indicate how much and on what basis this has been decided)*

Yes ❒ No X

It is not considered appropriate to offer any financial/in kind payments to participants in order to encourage them to take part in the research, since the participants involve high-ranking officials who may even consider such offer as offensive.

A15. Will the research involve the production of recorded media such as audio and/or video recordings?

Yes X No ❒

The questionnaires will not involve the production of recorded media, but audio recordings of the interviews will be used.

A15.1. *This question is only applicable if you are planning to produce recorded media:*

How will you ensure that there is a clear agreement with participants as to how these recorded media may be stored, used and (if appropriate) destroyed?

Before the actual start of the interview, participants will be asked permission to audio-record the interview. The audio tapes and paper copies of their transcripts will be stored in a locked cabinet at the student's work office. They will be destroyed after any reports or publications from this research have been completed. Electronic copies of the recordings and the transcripts will be stored only in a secure data file, on the student's work and home computers, for the duration of the study and for ten years after the completion of the study. They will not be stored on any laptops or other transportable devices. The audio tapes and copies of the recordings and transcripts will be accessible and available for use by the student, Moira Catania, and her supervisors, Dr M.J. Baimbridge and Dr R. Espindola.

A16. Which institution has agreed to act as **research sponsor** for the project? *(If you are conducting the research as either a student of the University of Bradford or as a researcher working on a University of Bradford research project, the University of Bradford will normally act as research sponsor. If you are conducting the research as a student or employee of another university, that institution should normally sponsor the research.)*

This research is being carried out as a PhD student at the University of Bradford.

A17. Please confirm that the research sponsor has **provision in place for indemnifying the researcher** for negligent or non-negligent harm to participants?

(If you are conducting the research as either a student of the University of Bradford or as a researcher working on a University of Bradford research project, such indemnity is in place. If you are conducting the research as a student or employee of another university, that institution should normally provide indemnity.)

More information is available at:

http://www.bradford.ac.uk/rkts/research-support-for-academics/ethics/GuidanceonEthicalIssues/ - click on Insurance for Research

Part B – The Signed Declaration

Title of Research Project: Budget institutions and fiscal discipline in Euro Area countries: a focus on legislative budgeting and on Malta's budget institutions reforms since the Great Crisis

I confirm my responsibility to deliver the research project in accordance with the University of Bradford's policies and procedures, which include the University's:

- '**Research Governance & Quality Assurance Code of Good Research Practice**' and the
- '**Code of Practice for Ethics in Research'** (Ethics Policy)

http://www.bradford.ac.uk/rkts/research-support-for academics/ethics/EthicsPolicyandStrategy/

and, where externally funded, with the terms and conditions of the research funder.

In signing this research ethics application form I am also confirming that:

- The completed form is accurate to the best of my knowledge and belief.
- The project will comply with the University's Research Ethics Policy.
- I undertake to adhere to the content and process of the project as detailed in this (and attached) documents and to inform the Panel of any changes.
- I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and

confidentiality of personal data, including the need to register when necessary with the appropriate Data Protection Officer.

- In the case of Human Tissue, blood and tissue samples, I have liaised with the University designated HTA Individual. The Human Tissue Act Designated Individual is currently Mrs Susan Boyce, Head of Ethical Tissue.
- I understand that the project, including research records and data, may be subject to inspection for audit purposes, if required in future and that these records will be stored for a period of 10 years from the end of the project.
- I understand that personal data about me as a researcher in this form will be held by those involved in the ethics review procedure (e.g. the Research Support Unit Ethics Administrator and/or Ethics Reviewers) and that this will be managed according to Data Protection Act principles.
- If this is an application for a 'generic' project all the individual projects that fit under the generic project are compatible with this application.

Name of the **Principal Investigator** (or the name of the **Principal Supervisor** if this is a student research project):

Dr M.J. Baimbridge (Principal Supervisor)

Signature of **Principal Investigator** (or the **Principal Supervisor**):

……………………………………………… Date:

Please email the completed application form together with supporting documents and provide a signed, hard copy of 'Part B' to the Ethics Administrator (ethics@bradford.ac.uk), RKTS, F.24, Richmond Building.

TABLE AXIII: Legislative budgetary power index – results (post-crisis data)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
Legislative budgetary power		**3.3**	**1.6**	**3.0**	**2.7**	**3.3**	**4.2**	**2.9**	**2.8**	**2.3**	**2.8**	**2.2**	**3.6**	**2.0**	**0.6**	**3.2**	**2.7**	**1.3**	**1.4**	**3.0**
I	***Formal legislative budgetary power***	***5.7***	***3.4***	***4.4***	***4.2***	***4.6***	***5.3***	***4.6***	***4.9***	***4.5***	***3.5***	***3.9***	***6.0***	***3.7***	***2.4***	***5.9***	***4.2***	***2.9***	***3.9***	***3.6***
IA	***Involvement of legislature in national budgetary process***	***4.0***	***2.5***	***2.5***	***2.6***	***2.2***	***3.8***	***2.8***	***2.7***	***2.6***	***4.1***	***3.1***	***5.2***	***3.4***	***2.9***	***4.1***	***4.1***	***2.9***	***3.4***	***2.7***
IA1	*Involvement of legislature in MTBF*	*2.5*	*0.8*	*0.8*	*0.8*	*0.8*	*6.3*	*2.5*	*4.2*	*0.8*	*5.4*	*3.8*	*3.8*	*5.0*	*0.0*	*5.8*	*6.3*	*1.7*	*3.3*	*1.3*
	Involvement of parliament in establishing the budgetary objectives/targets and/or projections arising from the MTBF	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	5.0	5.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	5.0
	Involvement of parliament in the preparation of the medium-term budgetary plan (domestic MTBF or SCP)	10.0	3.3	3.3	3.3	3.3	10.0	0.0	6.7	3.3	6.7	10.0	10.0	10.0	0.0	3.3	10.0	6.7	3.3	0.0
	Involvement of parliament in monitoring respect of the budgetary objectives/targets established according to the MTBF in the draft budget	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	0.0	0.0	0.0
	Monitoring report is presented in parliament	0.0	0.0	0.0	0.0	0.0	10.0	10.0	10.0	0.0	10.0	0.0	0.0	10.0	0.0	10.0	10.0	0.0	10.0	0.0
IA2	*Involvement of legislature in fiscal rules*[250]	*3.3*	*0.0*	*0.0*	*3.3*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*6.7*	*0.0*	*5.0*	*3.3*	*1.7*	*0.0*	*0.0*	*0.0*
	Parliament in charge of monitoring compliance to the fiscal rule	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0
	Parliament in charge of enforcing compliance with the fiscal rule in case of non-compliance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0

[250] In respect of fiscal rule with largest coverage of general government finances.

TABLE AXIII: Legislative budgetary power index – results (post-crisis data) (cont.)

		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
	Whether corrective plan is presented in parliament in case or risk of non-compliance with the targets implied by the fiscal rule	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0
IA3	*Legislative budgetary amendment powers*	*10.0*	*5.0*	*5.6*	*2.5*	*6.7*	*3.3*	*6.7*	*3.3*	*1.7*	*4.2*	*6.7*	*7.5*	*6.7*	*5.0*	*4.2*	*8.3*	*8.3*	*6.4*	*7.5*
	Whether parliament can propose the annual budget independent from the government	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
	Formal powers of the Legislature to amend the budget proposed by the Executive	10.0	10.0	5.0	7.5	10.0	5.0	10.0	0.0	0.0	7.5	10.0	7.5	10.0	10.0	7.5	10.0	10.0	7.5	7.5
	Notwithstanding the formal powers of the legislature to modify the budget, whether a vote on the budget is considered a vote of confidence in the government	10.0	0.0	10.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	10.0	10.0	10.0	10.0
	Whether the executive have the power to veto the budget approved by the legislature	10.0	10.0	3.3	0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	3.3	10.0
IA4	*Reversionary budget*	*6.7*	*6.7*	*6.7*	*6.7*	*0.0*	*6.7*	*6.7*	*6.7*	*10.0*	*10.0*	*3.3*	*6.7*	*6.7*	*6.7*	*6.7*	*6.7*	*6.7*	*6.7*	*6.7*
IA5	*Legislative authorisation for changes to the budget during implementation*	*1.3*	*2.2*	*1.9*	*2.1*	*5.8*	*6.5*	*1.1*	*1.8*	*3.0*	*5.0*	*5.2*	*6.7*	*2.2*	*0.8*	*4.6*	*1.7*	*0.8*	*4.2*	*0.8*
	Executive authority to cut, cancel or rescind spending once the budget has been approved by the Legislature	1.3	1.3	1.3	1.3	10.0	4.0	1.3	0.8	2.0	5.3	6.0	10.0	1.3	0.0	10.0	1.3	0.0	0.0	0.0
	Possibility for line ministers re-allocate funds within their own budget envelope	0.0	0.0	0.0	2.5	3.8	5.6	0.0	2.5	3.8	5.6	2.5	0.0	3.1	0.0	0.0	0.0	0.0	2.5	0.0

TABLE AXIII: Legislative budgetary power index – results (post-crisis data) (cont.)

		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
	Executive authority to increase spending by the Executive after the budget has been approved by the Legislature	2.5	5.3	4.5	2.5	3.8	10.0	2.0	2.0	3.3	4.0	7.0	10.0	2.3	2.5	3.8	3.8	2.5	10.0	2.3
IA6	*Legislative authorisation of off-budget expenditures and contingent liabilities*	*10.0*	*0.0*	*5.0*	*10.0*	*7.5*	*5.0*	*10.0*	*2.5*	*10.0*	*7.5*	*10.0*	*10.0*	*10.0*	*0.0*	*10.0*	*2.5*	*5.0*	*10.0*	*10.0*
IB	***Involvement of legislature in SGP procedures***[251]	***9.0***	***5.2***	***8.3***	***7.3***	***9.2***	***8.2***	***8.2***	***9.3***	***8.5***	***2.4***	***5.3***	***7.6***	***4.3***	***1.3***	***9.6***	***4.4***	***2.8***	***4.9***	***5.4***
IB1	*Discussion of SGP documents in the legislature*	*7.1*	*5.3*	*4.9*	*4.7*	*7.7*	*6.6*	*6.5*	*7.8*	*7.4*	*2.0*	*4.2*	*4.9*	*3.6*	*0.5*	*8.8*	*4.0*	*2.1*	*5.5*	*4.5*
IB2	*Discussion of SGP documents in legislative committees*	*10.0*	*7.0*	*10.0*	*10.0*	*10.0*	*8.0*	*10.0*	*10.0*	*8.0*	*2.0*	*5.0*	*8.0*	*5.0*	*0.0*	*10.0*	*6.0*	*3.0*	*6.0*	*5.0*
IB3	*Legislature informed on implementation of EDP*[252]	*10.0*	*3.3*	*10.0*	*n/a*	*10.0*	*10.0*	*n/a*	*10.0*	*10.0*	*3.3*	*6.7*	*10.0*	*n/a*	*3.3*	*10.0*	*3.3*	*3.3*	*3.3*	*6.7*
II	***Legislative budget organisational capacity***	***5.8***	***4.6***	***6.7***	***6.6***	***7.2***	***7.9***	***6.4***	***5.9***	***5.1***	***7.9***	***5.7***	***6.0***	***5.4***	***2.4***	***5.4***	***6.4***	***4.5***	***3.5***	***8.3***
II1	*Time available for budget scrutiny*	*5.0*	*5.0*	*5.0*	*10.0*	*10.0*	*5.0*	*10.0*	*0.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*0.0*	*0.0*	*5.0*	*5.0*	*0.0*	*10.0*
II2	*Characteristics of legislative budget committees*	*7.3*	*7.5*	*7.5*	*9.5*	*8.3*	*8.8*	*10.0*	*9.5*	*5.0*	*8.8*	*7.0*	*8.5*	*10.0*	*0.0*	*4.5*	*9.5*	*8.3*	*9.5*	*10.0*
	Parliamentary committee structures for dealing with the budget	7.5	5.0	5.0	10.0	7.5	7.5	10.0	10.0	0.0	7.5	5.0	10.0	10.0	0.0	0.0	10.0	7.5	10.0	10.0
	General length of tenure of legislators sitting on budget/finance committee	4.0	10.0	10.0	8.0	8.0	10.0	10.0	8.0	10.0	10.0	8.0	4.0	10.0	0.0	8.0	8.0	8.0	8.0	10.0

[251] Since Estonia and Luxembourg have never been subject to an excessive deficit procedure, their sub-index is computed on the basis of involvement of the legislature in the Stability Programme and Draft Budgetary Plan only. For Spain, due to data unavailability, sub-indices IB1 and IB2 exclude the component relating to involvement of the legislature in the abrogation of EDP.
[252] Sub-index not relevant for Estonia and Luxembourg since they have never been subject to an EDP and data not available for Germany.

TABLE AXIII: Legislative budgetary power index – results (post-crisis data) (cont.)

		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
	Power of budget/finance committee to request witnesses and to question ministers or senior civil servants	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	0.0	10.0	10.0	10.0	10.0	10.0
II3	*Specialised budget research office*	*5.0*	*0.0*	*7.5*	*0.0*	*0.0*	*10.0*	*0.0*	*5.0*	*0.0*	*10.0*	*0.0*	*0.0*	*0.0*	*0.0*	*7.5*	*5.0*	*0.0*	*0.0*	*5.0*
II4	*Access to budgetary information*	*7.8*	*7.4*	*7.4*	*8.5*	*9.0*	*8.9*	*8.1*	*7.3*	*8.1*	*6.9*	*7.5*	*9.0*	*7.0*	*7.0*	*8.7*	*7.4*	*7.5*	*5.3*	*6.3*
	Distinction of new revenue-raising measures and between expenditures under current commitments in law and policy from new policies in the annual budget documentation presented to the legislature	5.0	8.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0	6.0	6.0	6.0	3.0	10.0	5.0	8.0
	Inclusion in budget documentation approved by the legislature of financial assets and liabilities, state and municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	7.5	2.5	2.5	7.5	5.0	10.0	7.5	10.0	2.5	5.0	2.5	5.0	7.5	2.5	7.5	7.5	7.5	5.0	5.0
	Public availability of budgetary information and methodologies	6.7	6.7	6.7	10.0	10.0	6.7	10.0	3.3	10.0	6.7	10.0	10.0	6.7	6.7	10.0	6.7	6.7	3.3	3.3
	Legislature informed on implementation of the budget	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	3.3	3.3	10.0
	Year-end fiscal report audited by the supreme audit institution released within six-months of the end of the fiscal year and audited year-end fiscal report discussed in legislature	10.0	10.0	10.0	5.0	10.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	5.0
II5	*Relationship of legislature with IFI*	*3.8*	*3.1*	*6.3*	*5.0*	*8.8*	*6.9*	*3.8*	*7.5*	*7.5*	*8.8*	*8.8*	*7.5*	*5.0*	*5.0*	*6.3*	*5.0*	*1.9*	*2.5*	*10.0*

TABLE AXIII: Legislative budgetary power index – results (post-crisis data) (cont.)

		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
	Interaction of parliament with the fiscal institution in the planning stage of the budgetary process	0.0	5.0	10.0	0.0	10.0	10.0	0.0	0.0	5.0	10.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	10.0
	Appointment and Dismissal of Governing/High Level Management Members	0.0	0.0	0.0	0.0	5.0	2.5	0.0	10.0	5.0	5.0	10.0	10.0	0.0	5.0	0.0	0.0	0.0	5.0	10.0
	Reports by the independent fiscal institution submitted to the Legislature	10.0	2.5	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	2.5	0.0	10.0
	Possible for the legislature or its budget/finance committee to request the leadership of the independent fiscal institution or its senior staff to provide responses to legislative questions	5.0	5.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	0.0	10.0

Table AXIV: Legislative budgetary power index – results (pre-crisis data)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
	Legislative budgetary power	**2.1**	**1.5**	**-**	**-**	**3.1**	**3.4**	**3.4**	**1.2**	**0.9**	**5.0**	**-**	**-**	**2.7**	**-**	**2.4**	**3.1**	**2.7**	**2.4**	**2.6**
I	***Formal legislative budgetary power***	***4.8***	***4.3***	**-**	**-**	***4.2***	***5.6***	***5.5***	***2.9***	***2.6***	***5.6***	**-**	**-**	***5.0***	**-**	***5.5***	***5.8***	***4.9***	***3.9***	***4.4***
IA	***Involvement of legislature in national budgetary process***	***4.8***	***4.3***	**-**	**-**	***4.2***	***5.6***	***5.5***	***2.9***	***2.6***	***5.6***	**-**	**-**	***5.0***	**-**	***5.5***	***5.8***	***4.9***	***3.9***	***4.4***
IA1	*Involvement of legislature in MTBF*	*1.3*	*1.3*	*1.3*	*0.0*	*5.0*	*6.3*	*3.8*	*3.8*	*0.0*	*5.0*	*1.3*	*3.8*	*1.3*	*0.0*	*3.8*	*5.0*	*1.3*	*3.8*	*1.3*
	Involvement of parliament in establishing the budgetary objectives/targets and/or projections arising from the MTBF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0
	Involvement of parliament in the preparation of the medium-term budgetary plan (domestic MTBF or SCP)	5.0	5.0	5.0	0.0	5.0	10.0	5.0	5.0	0.0	5.0	5.0	5.0	5.0	0.0	5.0	5.0	5.0	5.0	5.0
	Involvement of parliament in monitoring respect of the budgetary objectives/targets established according to the MTBF in the draft budget	0.0	0.0	0.0	0.0	5.0	5.0	0.0	0.0	0.0	5.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
	Monitoring report is presented in parliament	0.0	0.0	0.0	0.0	10.0	10.0	10.0	10.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0
IA2	*Involvement of legislature in fiscal rules*[253]	*0.0*	*0.0*	*0.0*	*3.3*	*0.0*	*5.0*	*1.7*	*0.0*	*0.0*	*0.0*	*0.0*	*6.7*	*0.0*	*0.0*	*0.0*	*0.0*	*3.3*	*0.0*	*0.0*
	Parliament in charge of monitoring compliance to the fiscal rule	0.0	0.0	-	0.0	0.0	5.0	5.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	5.0	0.0	0.0
	Parliament in charge of enforcing compliance with the fiscal rule in case of non-compliance	0.0	0.0	-	0.0	0.0	10.0	0.0	-	0.0	0.0	0.0	10.0	0.0	-	0.0	0.0	5.0	0.0	0.0
	Whether corrective plan is presented in parliament in case or risk of non-compliance with the targets implied by the fiscal rule	0.0	0.0	-	10.0	0.0	0.0	0.0	-	0.0	0.0	0.0	10.0	0.0	-	0.0	0.0	0.0	0.0	0.0
IA3	*Legislative budgetary amendment powers*	*6.0*	*6.0*	-	-	*6.0*	*8.0*	*10.0*	*2.0*	*2.0*	*6.0*	-	-	*6.0*	-	*8.0*	*10.0*	*6.0*	*7.7*	*8.0*

[253] In respect of fiscal rule with largest coverage of general government finances.

Table AXIV: Legislative budgetary power index – results (pre-crisis data) (cont.)																				
		AT	**BE**	**CY**	**EE**	**FI**	**FR**	**DE**	**EL**	**IE**	**IT**	**LV**	**LT**	**LU**	**MT**	**NL**	**PT**	**SK**	**SI**	**ES**
	Formal powers of the Legislature to amend the budget proposed by the Executive	10.0	10.0	-	-	10.0	5.0	10.0	0.0	0.0	10.0	-	-	10.0	-	10.0	10.0	10.0	7.5	5.0
	Notwithstanding the formal powers of the legislature to modify the budget, whether a vote on the budget is considered a vote of confidence in the government	0.0	0.0	-	-	0.0	10.0	10.0	0.0	0.0	0.0	-	-	0.0	-	5.0	10.0	0.0	10.0	10.0
	Whether the executive have the power to veto the budget approved by the legislature	10.0	10.0	-	-	10.0	10.0	10.0	10.0	10.0	10.0	-	-	10.0	-	10.0	10.0	10.0	3.3	10.0
IA4	*Reversionary budget*	*6.7*	*6.7*	-	-	*3.3*	*6.7*	*3.3*	*6.7*	*6.7*	*6.7*	-	-	*10.0*	-	*6.7*	*6.7*	*6.7*	*6.7*	*6.7*
IA5	*Legislative authorisation for changes to the budget during implementation*	*4.7*	*4.5*	-	-	*8.2*	*2.7*	*4.0*	*2.2*	*2.2*	*5.8*	-	-	*2.5*	-	*4.8*	*3.3*	*2.2*	*5.0*	*3.0*
	Executive authority to cut, cancel or rescind spending once the budget has been approved by the Legislature	2.5	2.5	-	-	10.0	2.5	2.5	0.0	0.0	10.0	-	-	0.0	-	5.0	2.5	0.0	2.5	2.5
	Possibility for line ministers re-allocate funds within their own budget envelope	7.5	5.0	-	-	7.5	2.5	2.5	2.5	2.5	2.5	-	-	2.5	-	7.5	2.5	2.5	2.5	2.5
	Executive authority to increase spending by the Executive after the budget has been approved by the Legislature	4.0	6.0	-	-	7.0	3.0	7.0	4.0	4.0	5.0	-	-	5.0	-	2.0	5.0	4.0	10.0	4.0
IA6	*Legislative authorisation of off-budget expenditures and contingent liabilities*	*10.0*	*7.5*	-	-	*2.5*	*5.0*	*10.0*	*2.5*	*5.0*	*10.0*	-	-	*10.0*	-	*10.0*	*10.0*	*10.0*	*0.0*	*7.5*
II	***Legislative budget organisational capacity***	***4.5***	***3.4***	-	-	***7.5***	***6.1***	***6.3***	***4.1***	***3.3***	***9.0***	-	-	***5.4***	-	***4.4***	***5.3***	***5.5***	***6.4***	***5.9***
II1	*Time available for budget scrutiny*	*5.0*	*5.0*	*10.0*	*10.0*	*10.0*	*10.0*	*10.0*	*0.0*	*0.0*	*10.0*	*10.0*	*10.0*	*5.0*	*0.0*	*0.0*	*0.0*	*5.0*	*10.0*	*10.0*
II2	*Characteristics of legislative budget committees*	*7.5*	*5.0*	-	-	*10.0*	*7.5*	*10.0*	*10.0*	*5.0*	*10.0*	-	-	*10.0*	-	*0.0*	*10.0*	*10.0*	*10.0*	*10.0*
II3	*Specialised budget research office*	*0.0*	*0.0*	-	-	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*10.0*	-	-	*0.0*	-	*7.5*	*5.0*	*0.0*	*0.0*	*0.0*
II4	*Access to budgetary information*	*5.4*	*3.6*	-	-	*10.0*	*6.9*	*5.0*	*6.3*	*8.1*	*5.8*	-	-	*6.7*	-	*10.0*	*6.3*	*6.9*	*5.4*	*3.6*

Table AXIV: Legislative budgetary power index – results (pre-crisis data) (cont.)

		AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
	Distinction between expenditures under current commitments in law and policy from new policies in the annual budget documentation presented to the legislature	0.0	5.0	-	-	10.0	0.0	0.0	5.0	10.0	10.0	-	-	5.0	-	10.0	0.0	0.0	0.0	0.0
	Inclusion in budget documentation approved by the legislature of financial assets and liabilities, state and municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	10.0	2.5	-	-	10.0	7.5	5.0	5.0	7.5	0.0	-	-	5.0	-	10.0	10.0	7.5	5.0	2.5
	Public availability of budgetary information and methodologies	6.7	6.7	-	-	10.0	10.0	10.0	10.0	10.0	3.3	-	-	6.7	-	10.0	10.0	10.0	6.7	6.7
	Year-end fiscal report audited by the supreme audit institution released within six-months of the end of the fiscal year and audited year-end fiscal report discussed in legislature	5.0	0.0	-	-	10.0	10.0	5.0	5.0	5.0	10.0	-	-	10.0	-	10.0	5.0	10.0	10.0	5.0

Source: Results are produced by author

Table AXV: Legislative budgetary amendment powers sub-index IA3 (post-crisis data) with alternative weights			
Spearman rank correlation coefficients	Sub-index IA3 baseline	Sub-index IA3 alternative 1	Sub-index IA3 alternative 2
Sub-index IA3 baseline	1.000	-	-
Sub-index IA3 alternative 1	0.915	1.000	-
Sub-index IA3 alternative 2	0.915	0.731	1.000

Notes:
Legislative budgetary amendment powers sub-index IA3 comprises the following variables:
- whether parliament can propose the annual budget independent from the government
- formal powers of the legislature to amend the budget proposed by the executive
- whether a vote on the budget is considered a vote of confidence in the government
- whether the executive has the power to veto the budget approved by the legislature

In the baseline sub-index, the second and third components are assigned a weight of 33% each, whilst the other first and fourth components are assigned a weight of 17% each.
In the first alternative, each component is assigned an equal weight of 25% each.
In the second alternative, only the second and third components are included, with an equal weight of 50% each.

Source: Results are produced by author

Table AXVI: Sub-index IA Involvement of legislature in national budgetary process (post-crisis data) – correlation among its sub-indices						
Spearman rank correlation coefficients	IA1. Involvement of legislature in MTBF	IA2. Involvement of legislature in fiscal rules	IA3. Legislative budgetary amendment powers	IA4. Reversionary budget	IA5. Legislative authorisation for changes to the budget during implementation	IA6. Legislative authorisation of off-budget expenditures and contingent liabilities
IA1. Involvement of legislature in MTBF	1.000	-	-	-	-	-
IA2. Involvement of legislature in fiscal rules	-0.011	1.000	-	-	-	-
IA3. Legislative budgetary amendment powers	0.089	0.128	1.000	-	-	-
IA4. Reversionary budget	0.085	0.000	-0.390	1.000	-	-
IA5. Legislative authorisation for changes to the budget during implementation	0.363	-0.044	-0.307	-0.127	1.000	-
IA6. Legislative authorisation of off-budget expenditures and contingent liabilities	0.102	0.084	0.126	0.008	0.220	1.000

Source: Results are produced by author

Table AXVII: Discussion of SGP documents in the legislature sub-index IB1 (post-crisis data) with alternative weights

Spearman rank correlation coefficients	Sub-index IB1 baseline	Sub-index IB1 alternative 1	Sub-index IB1 alternative 2
Sub-index IB1 baseline	1.000	-	-
Sub-index IB1 alternative 1	0.996	1.000	-
Sub-index IB1 alternative 2	0.993	0.989	1.000

Notes:
- Baseline sub-index: whether SGP document is discussed in legislature (weight of 67%), timing of discussion - before or after relevant Council meeting (weight of 33%)
- In the first alternative, whether SGP document is discussed in legislature (weight of 75%), timing of discussion (weight of 25%)
- In the second alternative, whether SGP document is discussed in legislature (weight of 50%), timing of discussion (weight of 50%)

Source: Results are produced by author

Table AXVIII: Characteristics of legislative budget committees sub-index II2 (post-crisis data) with alternative weights

Spearman rank correlation coefficients	Sub-index II2 baseline	Sub-index II2 alternative 1
Sub-index II2 baseline	1.000	-
Sub-index II2 alternative 1	0.980	1.000

Notes:
Sub-index IB1 comprises the following components:
- parliamentary committee structures for dealing with the budget
- general length of legislators sitting on budget/finance committee
- power of budget/finance committee to request witnesses and to question ministers or senior civil servants

- In the baseline, the first component has a weight of 50%, whilst the other two components have a weight of 25% each.
- In the alternative, all three components have an equal weight of 33% each.

Source: Results are produced by author

Table AXIX: Legislative budgetary power index (post-crisis data) – results with alternative aggregation method

	AT	BE	CY	EE	FI	FR	DE	EL	IE	IT	LV	LT	LU	MT	NL	PT	SK	SI	ES
Legislative budgetary power index baseline	3.3	1.6	3.0	2.7	3.3	4.2	2.9	2.8	2.3	2.8	2.2	3.6	2.0	0.6	3.2	2.7	1.3	1.4	3.0
Legislative budgetary power index alternative 1	5.7	4.0	5.6	5.4	5.9	6.6	5.5	5.4	4.8	5.7	4.8	6.0	4.6	2.4	5.7	5.3	3.7	3.7	5.9

Note:
In the baseline index, the formal powers and budgetary organisational capacity sub-indices (I and II, respectively) are aggregated using a multiplicative approach.
In the alternative index, the two sub-indices are aggregated using a linear approach.

Source: Results are produced by author

Table AXX: Legislative budgetary power index (post-crisis data) – descriptive statistics, comparison of linear and multiplicative aggregation methods

	Mean	Median	Standard deviation	Range
Legislative budgetary power index baseline	2.6	2.8	0.9	0.6 – 4.2
Legislative budgetary power index alternative 1	5.1	5.4	1.0	2.4 – 6.6

Note:
In the baseline index, the formal powers and budgetary organisational capacity sub-indices (I and II, respectively) are aggregated using a multiplicative approach.
In the alternative index, the two sub-indices are aggregated using a linear approach.

Source: Results are produced by author

Table AXXI: Legislative budgetary power index (post-crisis data) – comparison of linear and multiplicative aggregation methods

Spearman rank correlation coefficients	Legislative budgetary power index baseline	Legislative budgetary power index alternative 1
Legislative budgetary power index baseline	1.000	-
Legislative budgetary power index alternative 1	0.946	1.000

Note:
In the baseline index, the formal powers and budgetary organisational capacity sub-indices (I and II, respectively) are aggregated using a multiplicative approach.
In the alternative index, the two sub-indices are aggregated using a linear approach.

Source: Results are produced by author

Table AXXII: Legislative budgetary power index (post-crisis data) – alternative weighting structures					
	Baseline legislative budgetary power index	Kim's (2015) legislative budgetary power index	Option 1: weights based on Kim (2015)	Option 2	Option 3
I. Formal legislative budgetary powers	***0.50***	***0.565***	***0.565***	***0.50***	***0.50***
IA. Involvement of legislature in national budgetary process	*0.67*	-	*0.667*	*0.75*	*0.50*
IA1. Involvement of legislature in MTBF	0.17	-	0.167	0.17	0.17
IA2. Involvement of legislature in fiscal rules	0.17	-	0.167	0.17	0.17
IA3. Legislative budgetary amendment powers	0.17	0.457	0.229	0.17	0.17
IA4. Reversionary budget	0.17	0.243	0.122	0.17	0.17
IA5. Legislative authorisation for changes to budget during implementation	0.17	0.301	0.151	0.17	0.17
IA6. Legislative authorisation for off-budget expenditures and contingent liabilities	0.17	-	0.167	0.17	0.17
IB. Involvement of legislature in SGP procedures	*0.33*	-	*0.333*	*0.25*	*0.50*
II. Legislative budget organisational capacity	***0.50***	***0.435***	***0.435***	***0.50***	***0.50***
II1. Time available for budget scrutiny	0.20	0.146	0.088	0.20	0.20
II2. Characteristics of legislative budget committees	0.20	0.395	0.237	0.20	0.20
II3. Specialised budget research office	0.20	0.460	0.276	0.20	0.20
II4. Access to budgetary information	0.20	-	0.200	0.20	0.20
II5. Relationship of legislature with IFI	0.20	-	0.200	0.20	0.20

Notes:
In the baseline index, within formal powers, involvement of the legislature in the national budgetary process has a weight of 67% whilst involvement of the legislature in SGP procedures has a weight of 33%.
In Option 2, the corresponding weights are 75% and 25%, respectively.
In Option 3, the two components have an equal weight of 50% each.

In Kim's (2015) index, the sub-index relating to specialised budget research office is described as access to information.

Table AXXIII: Legislative budgetary power index (post-crisis data) with alternative weights				
Spearman rank correlation coefficients	Baseline	Option 1: weights based on Kim (2015)	Option 2	Option 3
Baseline	1.000	-	-	-
Option 1: weights based on Kim (2015)	0.956	1.000	-	-
Option 2	0.937	0.970	1.000	-
Option 3	0.981	0.902	0.874	1.000
Note: In the baseline index, within formal powers, involvement of the legislature in the national budgetary process has a weight of 67% whilst involvement of the legislature in SGP procedures has a weight of 33%. In Option 2, the corresponding weights are 75% and 25%, respectively. In Option 3, the two components have an equal weight of 50% each.				

Source: Results are produced by author

Table AXXIV: Sub-index I Formal legislative budgetary power index (post-crisis data) – correlation among its sub-indices		
Spearman rank correlation coefficients	Sub-index IA: involvement of legislature in national budgetary process	Sub-index IB: involvement of legislature in SGP procedures
Sub-index IA: involvement of legislature in national budgetary process	1.000	-
Sub-index IB: involvement of legislature in SGP procedures	-0.204	1.000

Source: Results are produced by author

Table AXXV: Legislative budgetary power index (pre-crisis data) – comparison to other indices			
Spearman rank correlation coefficients	Lienert's (2005) index	Wehner's (2010) index	Kim's (2015) index
Legislative budgetary power index (pre-crisis data)	0.552	0.000	-0.024
Notes: The sample size of the constructed index was adjusted to be the same as that in the other indices.			

Source: Results are produced by author

Table AXXVI: Legislative budgetary power and quality of budget institutions indices – comparison		
Legislative budgetary power index		**Quality of budget institutions index**
I	***Formal legislative budgetary power***	
IA	***Involvement of legislature in national budgetary process***	
IA1	*Involvement of legislature in MTBF*	
	Involvement of parliament in establishing the budgetary objectives/targets and/or projections arising from the MTBF	Not included
	Involvement of parliament in the preparation of the medium-term budgetary plan (domestic MTBF or SCP)	Included in sub-index 1 medium-term budgetary framework/targets – national MTBF
	Involvement of parliament in monitoring respect of the budgetary objectives/targets established according to the MTBF in the draft budget	Not included
	Monitoring report is presented in parliament	Not included
IA2	*Involvement of legislature in fiscal rules*	
	Parliament in charge of monitoring compliance to the fiscal rule	Not included
	Parliament in charge of enforcing compliance with the fiscal rule in case of non-compliance	Not included
	Whether corrective plan is presented in parliament in case or risk of non-compliance with the targets implied by the fiscal rule	Not included
IA3	*Legislative budgetary amendment powers*	
	Whether parliament can propose the annual budget independent from the government	Not included
	Formal powers of the Legislature to amend the budget proposed by the Executive	Included in sub-index 4 structure of the parliamentary process leading to the approval of the budget law, but different scoring system (restrictions to amendment powers yield higher scores in the quality of budget institutions index, but lower scores in the legislative budgetary power index)
	Notwithstanding the formal powers of the legislature to modify the budget, whether a vote on the budget is considered a vote of confidence in the government	Not included
	Whether the executive have the power to veto the budget approved by the legislature	Not included
IA4	*Reversionary budget*	Not included
IA5	*Legislative authorisation for changes to the budget during implementation*	
	Executive authority to cut, cancel or rescind spending once the budget has been approved by the Legislature	Included in sub-index 5 flexibility of budget execution, but different scoring system (in quality of budget institutions index, executive authority to cut or cancel spending yields higher scores, but lower scores in legislative budgetary power index)

Table AXXVI: Legislative budgetary power and quality of budget institutions indices – comparison (cont.)		
Legislative budgetary power index		**Quality of budget institutions index**
	Executive authority to cut, cancel or rescind spending once the budget has been approved by the Legislature (cont.)	Also, in legislative budgetary power index, only required approval of legislature is considered, whereas in quality of budget institutions index, all forms of required approval are considered (e.g. ministry of finance or government).
	Possibility for line ministers re-allocate funds within their own budget envelope	Included in sub-index 5 flexibility of budget execution, but different scoring system (in quality of budget institutions index, flexibility to shift spending yields higher scores, but lower scores in legislative budgetary power index) and in legislative budgetary power index, only required approval of legislature is considered, whereas in quality of budget institutions index, all forms of required approval are considered (e.g. ministry of finance or government)
	Executive authority to increase spending by the Executive after the budget has been approved by the Legislature	Included in sub-index 5 flexibility of budget execution, but only required approval of legislature is considered, whereas in quality of budget institutions index, all forms of required approval are considered (e.g. ministry of finance or government)
IA6	*Legislative authorisation of off-budget expenditures and contingent liabilities*	Included in sub-index 6 budget transparency
IB	***Involvement of legislature in SGP procedures***	
IB1	*Discussion of SGP documents in the legislature*	Not included
IB2	*Discussion of SGP documents in legislative committees*	Not included
IB3	*Legislature informed on implementation of EDP*	Not included
II	***Legislative budget organisational capacity***	
II1	*Time available for budget scrutiny*	Not included
II2	*Characteristics of legislative budget committees*	
	Parliamentary committee structures for dealing with the budget	Included in sub-index 4 structure of the parliamentary process leading to the approval of the budget law
	General length of tenure of legislators sitting on budget/finance committee	Not included
	Power of budget/finance committee to request witnesses and to question ministers or senior civil servants	Not included
II3	*Specialised budget research office*	Not included
II4	*Access to budgetary information*	
	Distinction of new revenue-raising measures and between expenditures under current commitments in law and policy from new policies in the annual budget documentation presented to the legislature	Included in sub-index 6 budget transparency

Table AXXVI: Legislative budgetary power and quality of budget institutions indices – comparison (cont.)		
Legislative budgetary power index		**Quality of budget institutions index**
	Inclusion in budget documentation approved by the legislature of financial assets and liabilities, state and municipal transfers/guarantees, tax expenditures with estimates of revenue foregone, off-budget expenditures, contingent liabilities	Included in sub-index 6 budget transparency
	Public availability of budgetary information and methodologies	Included in sub-index 6 budget transparency
	Legislature informed on implementation of the budget	Not included
	Year-end fiscal report audited by the supreme audit institution released within six-months of the end of the fiscal year and audited year-end fiscal report discussed in legislature	Not included
II5	*Relationship of legislature with IFI*	
	Interaction of parliament with the fiscal institution in the planning stage of the budgetary process	Included in sub-index 7 independent fiscal institutions
	Appointment and Dismissal of Governing/High Level Management Members	Included in sub-index 7 independent fiscal institutions, but in the legislative budgetary power index, scores are assigned only if parliament is involved in the appointment/dismissal procedures, whereas in the quality of budget institutions index, lower scores are also assigned if other non-government entities are involved
	Reports by the independent fiscal institution submitted to the Legislature	Not included
	Possible for the legislature or its budget/finance committee to request the leadership of the independent fiscal institution or its senior staff to provide responses to legislative questions	Not included

Source: Produced by author

Table AXXVII: Legislative budgetary power and quality of budget institutions indices (post-crisis data)		
Spearman rank correlation coefficients	Legislative budgetary power index	Sub-index IA3: Legislative budgetary amendment powers
Quality of budget institutions index	0.391	-0.059

Source: Results are produced by author

Appendix III

Table AXXVIII: Empirical analysis - variables description and data sources		
Variable Name	**Variable description**	**Source**
Fiscal variables		
budget balance as a ratio to GDP	net lending (+) or net borrowing (-): general government - ESA 2010; Percentage of GDP at current prices (excessive deficit procedure)	European Commission (2017f) *Annual macro-economic database (AMECO online).*
primary budget balance as a ratio to GDP	net lending (+) or net borrowing (-) excluding interest: general government - ESA 2010; Percentage of GDP at current prices (excessive deficit procedure)	European Commission (2017f) *Annual macro-economic database (AMECO online).*
cyclically adjusted budget balance as a ratio to potential GDP	cyclically adjusted net lending (+) or net borrowing (-) of general government: Adjustment based on potential GDP (excessive deficit procedure); Percentage of potential GDP at current prices	European Commission (2017f) *Annual macro-economic database (AMECO online).*
cyclically adjusted budget balance as a ratio to trend GDP	cyclically adjusted net lending (+) or net borrowing (-) of general government: Adjustment based on trend GDP Excessive deficit procedure; Percentage of trend GDP at current prices	European Commission (2017f) *Annual macro-economic database (AMECO online).*
cyclically adjusted primary budget balance as a ratio to potential GDP	net lending (+) or net borrowing (-) excluding interest of general government adjusted for the cyclical component: Adjustment based on potential GDP Excessive deficit procedure; Percentage of potential GDP at current prices	European Commission (2017f) *Annual macro-economic database (AMECO online).*
cyclically adjusted primary budget balance as a ratio to trend GDP	net lending (+) or net borrowing (-) excluding interest of general government adjusted for the cyclical component: Adjustment based on trend GDP Excessive deficit procedure; Percentage of trend GDP at current prices	European Commission (2017f) *Annual macro-economic database (AMECO online).*
government debt ratio	general government consolidated gross debt: Excessive deficit procedure (based on ESA 2010); Percentage of GDP at current prices (excessive deficit procedure)	European Commission (2017f) *Annual macro-economic database (AMECO online).*
annual change in government debt ratio to GDP	annual change in general government consolidated gross debt: Excessive deficit procedure (based on ESA 2010); Percentage points of GDP at current prices (debt $_{t,i}$ - debt $_{t-1,i}$)	Author's calculations from government debt ratio to GDP
Institutional variables		
quality of budget institutions index	composite index measuring the quality of budget institutions	Author's calculations (refer to Section 4.4 of Chapter 4 and Tables AIII and AIV in Appendix I)
legislative budgetary power index	composite index measuring legislative budgetary power	Author's calculations (refer to Section 5.4 of Chapter 5 and Tables AXIII and AXIV in Appendix II)
European Commission MTBF index	medium-term budgetary frameworks index compiled by European Commission's Directorate General for Economic and Financial Affairs	European Commission (2017c) *MTBF database - old methodology*
European Commission fiscal rules strength index	fiscal rules strength index compiled by European Commission's Directorate General for Economic and Financial Affairs	European Commission (2017b) *Fiscal rules database - old methodology*
IFI dummy variable[1]	Dummy variable to indicate whether an independent fiscal institution is in place	Author's calculations from International Monetary Fund (2015) *Fiscal councils dataset.*

Table AXXVIII: Empirical analysis - variables description and data sources (cont.)

Variable Name	Variable description	Source
Institutional variables (cont.)		
legislative amendment powers indicator	Indicator capturing whether the legislature has powers to amend the executive's draft budget and whether any restrictions apply	Author's calculations – corresponds to indicator IA3: legislative budget amendment in Table AXII in Appendix II (refer to Section 5.4 of Chapter 5 and Tables AXIII and AXIV in Appendix II).
Control variables		
% change in real GDP	annual change in Gross Domestic Product at constant prices - 2010 reference levels	Author's calculations from GDP data at constant prices - 2010 reference levels, from European Commission (2017f) *Annual macro-economic database (AMECO online)*
unemployment rate	unemployment rate: total - definition EUROSTAT - percentage of civilian labour force	European Commission (2017f) *Annual macro-economic database (AMECO online)*
legislative election held	dummy variable indicating that legislative elections were held in country *i* in year *t* (variable = 1 if elections were held, = 0 otherwise)	Inter-American Development Bank (2015) *Database of Political Institutions*
margin of majority	fraction of parliamentary seats held by the government - calculated by dividing the number of government seats by total (government plus opposition plus non-aligned) seats	Inter-American Development Bank (2015) *Database of Political Institutions*
government fractionalization index	the probability that two deputies picked at random from among the government parties will be of different parties	Inter-American Development Bank (2015) *Database of Political Institutions*
bailout dummy variable	dummy variable indicating that country *i* was subject to economic adjustment programme/balance of payments assistance programme during year *t*, starting in year when country concerned made request for assistance until the country exited the programme	Author's calculations from European Commission (2017g) and European Stability Mechanism (2017)

Note:
[1] For Germany and Slovenia, the IFI dummy variable is set at 1 also when only one fiscal council (out of the two) is established.

Table AXXIX: Empirical analysis – variables, descriptive statistics					
Variable Name	**Number of observations**	**Mean**	**Median**	**Standard deviation**	**Range**
Fiscal variables					
budget balance as a ratio to GDP	190	-3.5	-2.7	4.2	-32.1 – 5.1
primary budget balance as a ratio to GDP	190	-1.1	-0.4	3.9	-29.3 – 6.7
cyclically adjusted budget balance as a ratio to potential GDP	190	-3.0	-2.7	3.7	-31.0 – 3.1
cyclically adjusted budget balance as a ratio to trend GDP	190	-3.6	-2.9	4.1	-29.6 – 4.3
cyclically adjusted primary budget balance as a ratio to potential GDP	190	-0.7	0.0	3.5	-28.2 – 6.2
cyclically adjusted primary budget balance as a ratio to trend GDP	190	-1.2	-0.2	3.9	-26.7 – 5.6
government debt ratio	190	66.5	64.7	37.7	3.7 – 179.7
annual change in government debt ratio to GDP	190	2.9	1.6	6.9	-26.6 – 25.8
Institutional variables					
quality of budget institutions index	146	5.7	5.8	0.9	3.6 – 7.8
legislative budgetary power index	146	2.6	2.7	0.9	0.6 – 5.0
European Commission MTBF index	190	1.3	1.4	0.5	0.4 – 2.0
European Commission fiscal rules strength index	190	0.5	0.4	1.1	-1.0 – 3.0
legislative amendment powers indicator	146	7.7	10.0	3.4	0.0 – 10.0
Control variables					
% change in real GDP	190	1.3	1.6	4.5	-14.8 – 26.3
unemployment rate	190	9.6	8.3	5.0	3.7 – 27.5
margin of majority	190	0.6	0.6	0.1	0.4 – 0.8
government fractionalization index	190	0.4	0.5	0.3	0.0 – 0.8

Note:
The descriptive statistics for the quality of budget institutions and legislative budgetary power indices refer to the 2006-15 period and hence differ from those presented in Tables 4.5 and 4.7 and Tables 5.6 and 5.9 in Chapters 4 and 5, respectively, which are compiled separately for the pre- and post-crisis indices.

Source: Results are produced by author

Table AXXX: Empirical analysis – variables, correlation coefficients

Spearman rank correlation coefficients

Fiscal variables	budget balance as a ratio to GDP	primary budget balance as a ratio to GDP	cyclically adjusted budget balance as a ratio to potential GDP	cyclically adjusted budget balance as a ratio to trend GDP	cyclically adjusted primary budget balance as a ratio to potential GDP	cyclically adjusted primary budget balance as a ratio to trend GDP	annual change in government debt ratio to GDP
budget balance as a ratio to GDP	1.000	-	-	-	-	-	-
primary budget balance as a ratio to GDP	0.890	1.000	-	-	-	-	-
cyclically adjusted budget balance as a ratio to potential GDP	0.786	0.732	1.000	-	-	-	-
cyclically adjusted budget balance as a ratio to trend GDP	0.750	0.709	0.935	1.000	-	-	-
cyclically adjusted primary budget balance as a ratio to potential GDP	0.584	0.729	0.862	0.811	1.000	-	-
cyclically adjusted primary budget balance as a ratio to trend GDP	0.606	0.732	0.838	0.908	0.921	1.000	-
annual change in government debt ratio to GDP	-0.644	-0.630	-0.419	-0.436	-0.364	-0.401	1.000

Institutional variables	quality of budget institutions index	legislative budgetary power index	European Commission MTBF index	European Commission fiscal rules strength index	IFI dummy variable	legislative amendment powers indicator
quality of budget institutions index	1.000	-	-	-	-	-
legislative budgetary power index	0.147	1.000	-	-	-	-
European Commission MTBF index	0.441	0.252	1.000	-	-	-
European Commission fiscal rules strength index	0.399	0.265	0.390	1.000	-	-
IFI dummy variable	0.544	-0.161	0.285	0.283	1.000	-
legislative amendment powers indicator	-0.131	0.025	-0.147	0.042	0.076	1.000

Control variables	% change in real GDP	unemployment rate	legislative election held	margin of majority	government fractionalization index	government debt ratio in year *t-1*	bailout dummy variable
% change in real GDP	1.000	-	-	-	-	-	-
unemployment rate	-0.285	1.000	-	-	-	-	-
legislative election held	0.063	-0.007	1.000	-	-	-	-
margin of majority	0.145	-0.126	-0.036	1.000	-	-	-
government fractionalization index	0.131	-0.125	0.009	0.448	1.000	-	-
government debt ratio in year *t-1*	-0.288	0.281	-0.023	-0.098	-0.396	1.000	-
bailout dummy variable	-0.330	0.528	-0.038	-0.058	-0.124	0.308	1.000

Source: Results are produced by author

Table AXXXI: Dynamic specification of the main model estimated using difference GMM (Arellano and Bond 1991)

	one-step estimator	two-step estimator
Lagged budget balance % of GDP	0.642**	0.600***
	(0.003)	(0.000)
% Change in real GDP	0.274*	0.353*
	(0.048)	(0.019)
Unemployment rate	-0.095	-0.145
	(0.685)	(0.262)
Legislative election held	0.740	0.305
	(0.369)	(0.474)
Margin of majority	3.716	4.139
	(0.572)	(0.348)
Government fractionalization index	-1.902	-2.177
	(0.415)	(0.365)
Bailout dummy variable	0.797	1.404
	(0.533)	(0.197)
Quality of budget institutions index	0.225	0.400
	(0.773)	(0.353)
Legislative budgetary power index	-0.563	-0.411
	(0.322)	(0.339)
F	80.37	34.25
Observations	127	127
No. of instruments	16	16
No. of groups	19	19
Arellano-Bond test for AR(1) in first differences (*p*-value)	0.109	0.068
Arellano-Bond test for AR(2) in first differences (*p*-value)	0.244	0.214
Sargan test of overid. restrictions (*p*-value) (not robust, but not weakened by many instruments)	0.322	0.322
Hansen test of overid. restrictions (*p*-value) (robust, but weakened by many instruments)	0.156	0.156

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Notes:
The dynamic version of the main model does not satisfy the tests concerning the presence of autocorrelation and hence an alternative specification, excluding the lagged government debt ratio from the explanatory variables, is estimated.

Given the sample size, the dynamic specification of the model is estimated using difference GMM (Arellano and Bond 1991) rather than system GMM (Arellano and Bover 1995; Blundell and Bond 1998), which uses more instruments. Furthermore, to minimize the number of instruments, the number of lags used is limited by collapsing them as suggested by Roodman (2006). Both the estimates using one-step and the two-step Arellano-Bond GMM estimators are shown and the standard errors are calculated using Windmeijer's (2005) finite sample correction.

Whilst the impact of cross-sectional dependence is more severe in dynamic panel estimators as the estimated parameters are inconsistent (De Hoyos and Sarafidis 2006), the small sample size poses a constraint to address this problem using the common correlated effects estimator. Thus, the results of the dynamic specification of the model are being presented only for completeness.

Source: Results are produced by author

Table AXXXII: Reverse causality tests - from the budget balance to the institutional indices

	Quality of budget institutions index	Legislative budgetary power index
Lagged budget balance % of GDP	0.003	0.003
	(0.632)	(0.560)
Lagged quality of budget institutions index	0.797^{***}	
	(0.000)	
Lagged legislative budgetary power index		0.797^{***}
		(0.000)
Country fixed effects	yes	yes
Time dummies	yes	yes
Constant	1.053^{***}	0.525^{***}
	(0.000)	(0.000)
F	732592.0	260412.3
Observations	127	127

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Note:
The highly significant and large coefficient for the lagged institutional indices reflects the fact that there are only two readings for these variables (for the pre- and post-crisis periods), with the indices assumed unchanged in the interim years.

Source: Results are produced by author

Table AXXXIII: Reverse causality check - from the institutional indices to the budget balance

	Budget balance (% of GDP)	Budget balance (% of GDP)
Lagged budget balance % of GDP	0.147	0.155
	(0.054)	(0.063)
Lagged quality of budget institutions index	1.577	
	(0.082)	
Lagged legislative budgetary power index		1.122
		(0.141)
Country fixed effects	yes	yes
Time dummies	yes	yes
Constant	-10.10^{*}	-4.832^{*}
	(0.032)	(0.015)
F	86.20	94.44
Observations	127	127

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Results are produced by author

Testing the main model

Test for heteroscedasticity

The main model with fixed effects was run in Stata 13, without robust standard errors and then the modified Wald test for groupwise heteroscedasticity in fixed effect regression models was carried out (using command: *xttest3*).

Modified Wald test for groupwise heteroscedasticity in fixed effect regression model	
H0: sigma(i)^2 = sigma^2 for all i	
chi2 (19) =	35029.72
Prob > chi2 =	0.0000

The null hypothesis of no groupwise heteroscedasticity is thus strongly rejected.

Test for autocorrelation

To test for autocorrelation in the panel data, the Wooldridge test was used, as suggested by Drukker (2003). This involves first setting the panel data (using command: *tsset countrynum year, yearly*)[254] and then running the first differenced equation (using command: *xtserial bdg [explanatory variables], output*).

Wooldridge test for autocorrelation in panel data	
H0: no first-order autocorrelation	
F(1, 18) =	10.563
Prob > F=	0.0044

The null hypothesis of no first-order autocorrelation is thus rejected.

Test for cross-sectional dependence

Pesaran's CD test was used to test for cross-sectional dependence. This is an alternative to the Breusch and Pagan (1980) Lagrange multiplier test, which is not appropriate for this panel dataset, since it exhibits substantial size distortions when T<N. The test was run after estimating the fixed effects model (using command: *xtcsd, pesaran abs*).

Pesaran's test of cross-sectional independence	
H0: cross sectional independence	
Pesaran's test of cross sectional independence	5.997
Prob =	0.0000
Average absolute value of the off-diagonal elements =	0.415

The CD test strongly rejects the null hypothesis of no cross-sectional dependence.

Test for normality

To explore non-normalities in the panel data model, an extension of the standard Jarque-Bera test was used (using command: *xtsktest*)[255], as proposed by Alejo et al. (2015). This test examines skewness and excess kurtosis in the error component of the panel data – both the country specific error (u_i) and the random error (e_{it}).

Tests for skewness and kurtosis in the one-way error-components model		
H0: normality in *u*: skewness in *u* =0 and kurtosis in *u* = 3; H0: normality in *e*: skewness in *e* = 0 and kurtosis in *e* = 3		
Skewness_*e*	P>|z|=	0.110
Kurtosis_*e*	P>|z|=	0.008
Skewness_*u*	P>|z|=	0.550
Kurtosis_*u*	P>|z|=	0.467
Joint test for normality on *e*	Prob>chi 2 =	0.0086
Joint test for normality on *u*	Prob>chi 2 =	0.6422

[254] Countrynum is the panel variable and year is the time variable.
[255] The test was applied as a standard command for all variables since as a post-estimation command it only works with regressions estimated using OLS or with random effects models.

The null hypothesis of normality cannot be rejected for the country-specific error component (*u*) but it is rejected for the individual-specific component (*e*). However, there are only indications of excess kurtosis whilst the null hypothesis of no skewness cannot be rejected.

Test for fixed effects vs pooled OLS
To test whether a fixed effects model is more appropriate than a pooled OLS model, the F test provided in the fixed effects regression results was used (using command: *xtreg bdg gdp unempl legelec maj govfrac debtlagged bailout qltybudginst legbudgpower, fe*).

Test for fixed effects vs pooled OLS	
F test that all u_i = 0: F(18, 118) =	3.250
Prob > F =	0.0001

The result strongly rejects pooled OLS, in favour of fixed effects estimation.

Test for fixed effects vs random effects
To determine whether it is more appropriate to use a fixed effects or random effects model, first the Hausman test was conducted. This involved running the fixed effects and random effects models and storing the results (as fe and re, respectively) and then carrying out the Hausman test (using command: *hausman re fe, sigmamore*)[256].

Hausman test for fixed effects vs random effects	
H0: difference in coefficients not systematic	
chi2(9) =	12.09
Prob > chi2	0.2084

The null hypothesis, that there are no systematic differences between the coefficients obtained using the fixed effects and the random effects estimator, cannot be rejected, indicating that a random effects estimator is appropriate. However, the Hausman test has important limitations, including that it assumes homoscedasticity and also does not allow for serial correlation (StataCorp 2017). In view of the presence of both heteroscedasticity and serial correlation, as shown by the results of the tests above, an alternative to the Hausman test – the Mundlak test, which is robust to heteroscedasticity and within serial correlation – was carried out to determine between fixed effects and random effects (StataCorp 2017).

The Mundlak test involves generating the country-level means of the time-varying regressors (using command: *bysort countrynum: egen double mvariablename = mean(variablename))* and including them in the random effects regression. The Mundlak test assesses whether the coefficients of the country-level means of the explanatory variables are zero:

Mundlak test for fixed effects vs random effects	
H0: the coefficients of the country-level means of the time-varying regressors are zero	
chi2(9) =	60.45
Prob > chi2	0.0000

The null hypothesis can be rejected, indicating that the unobserved random component is related to the regressors, and hence a fixed effects model is appropriate.

[256] The sigmamore option helps to guarantee a positive-definite-differenced covariance matrix (StataCorp 2013).

Appendix IV

Table AXXXIV: Secondary data sources for the case study on Malta's budget institutions	
Maltese legislation	Constitution of Malta
	Financial Administration and Audit Act (Cap. 174)
	Fiscal Responsibility Act (Cap. 534)
	Government Borrowing and Management of Public Debt Act (Cap. 575)
	Act XVI of 2013 Appropriation (2014) Act
	Act XL of 2014 Second (2014) Appropriation Act
	Act XXXIX of 2014 Appropriation (2015) Act
	Act XLII of 2015 Second (2015) Appropriation Act
	Act XLI of 2015 Appropriation (2016) Act
	Act LVIII of 2016 Second (2016) Appropriation Act
	Act LVII of 2016 Appropriation (2017) Act
	Act XXX of 2017 Second (2017) Appropriation Act
	Act No. VII of 2018, An Act to implement Budget measures for the financial year 2018 and other administrative measures
EU legislation	Treaty on stability, coordination and governance in the economic and monetary union, 2012
	Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies
	Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States
	Regulation (EU) No 1173/2011 of the European Parliament and of the Council of 16 November 2011 on the effective enforcement of budgetary surveillance in the euro area
	Regulation (EU) No 473/2013 of the European Parliament and of the Council of 21 May 2013 on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit of the Member States in the euro area
Ministry for Finance reports and official documents	Ministry for Finance (2013) Strengthening Malta's Fiscal Framework, An Economic Assessment
	Ministry for Finance (2015a) Malta: Annual Report 2014
	Ministry for Finance (2015b) Malta: Update of Stability Programme 2015-2018
	Ministry for Finance (2016a) Malta: Annual Report 2015
	Ministry for Finance (2016b) Medium-Term Fiscal Strategy for Malta: Update of Stability Programme 2016 - 2019
	Ministry for Finance (2017a) Malta: Annual Report 2016
	Ministry for Finance (2017b) Medium-Term Fiscal Strategy for Malta: Update of Stability Programme 2017 - 2020
	Ministry for Finance (2018a) Medium-Term Fiscal Strategy for Malta: Update of Stability Programme 2018 – 2021
	Ministry for Finance (2018b) Malta: Annual Report 2017
European Commission assessments and reports	European Commission (2016c) Assessment of the 2016 Stability Programme for Malta
	European Commission (2014b) European Economic Forecast Spring 2014 - Malta
	European Commission (2015c) European Economic Forecast Spring 2015 - Malta
	European Commission (2016d) European Economic Forecast Spring 2016 - Malta
	European Commission (2017h) European Economic Forecast Spring 2017 - Malta
	European Commission (2018c) European Economic Forecast Spring 2018 – Malta

Table AXXXIV: Secondary data sources for the case study on Malta's budget institutions (cont.)	
Malta Fiscal Advisory Council assessments and reports	Malta Fiscal Advisory Council (2015a) An assessment of the macroeconomic forecasts for the Maltese economy prepared by the Ministry for Finance in April 2015.
	Malta Fiscal Advisory Council (2015b) An assessment of the main fiscal forecasts prepared by the Ministry for Finance and presented in the Update of the Stability Programme for Malta 2015-2018
	Malta Fiscal Advisory Council (2015c) An assessment of the medium-term fiscal strategy 2015-2018, annual report 2014 and half-yearly report 2015 published by the Ministry for Finance
	Malta Fiscal Advisory Council (2018a) Assessment of the macroeconomic forecasts – update of Stability Programme 2018-2021
	Malta Fiscal Advisory Council (2018b) Assessment of the fiscal forecasts – update of Stability Programme 2018 - 2021
	Malta Fiscal Advisory Council (2018c) Annual report and statement of accounts 2017.
Transcripts relating to the presentation, debate and approval by parliament of the Fiscal Responsibility Act (Cap.534)	Parliament of Malta (2014a) Plenary Sitting No. 175, 14 July 2014
	Parliament of Malta (2014b) Permanent Committee for the Consideration of Bills, Meeting No. 32, 18 July 2014
	Parliament of Malta (2016b) Plenary Sittings Nos. 427 – 447, 17 October to 2 November 2016
	Parliament of Malta (2016c) Plenary Sitting No. 460, 7 December 2016
Transcripts of Public Accounts Committee Meetings	Parliament of Malta (2016a) PAC Meeting No. 96, 28 June 2016
	Parliament of Malta (2017) PAC Meeting No. 101, 30 January 2017

INTERVIEW GUIDE

Details of Interview

Date:	Location:
Interview number:	Identifying code for participant:

Introduction

Thank you for accepting to take part in this research. This interview comprises part of my research on Malta's budget institutions. The aim is to gain an insight on the changes which have taken place in Malta's budget procedures, in the context of the reforms to the EU's fiscal governance framework following the Great Crisis.

I would like to assure you that your responses will be treated in strictest confidence and your name will not feature in any part of the written reports resulting from this research. The participants will be identified by means of their organisation and from each organisation two officials have been selected.

I would also like to ask your permission to audio record the interview and to take some notes during the interview, so that I do not inadvertently miss out something you have said or change the words.

1. Timing of the budgetary process

Let us start by discussing the changes in the national budgetary timeline.

1.1 The Stability Programme is being submitted in Spring, before, rather than after the annual budget in Autumn. How did this change in the timing affect the budgetary process?

1.2 In 2015, the timing of the budget was shifted forward so that it preceded by a few days the deadline of 15 October for submitting the draft budgetary plan. What did this change in the timing of the budget entail?

2. Medium-term budgetary framework

2.1 How is the annual budget related to the medium-term budgetary framework presented in the Stability Programme?

2.2 What considerations are taken into account when setting the budgetary targets?

3. Numerical fiscal rules

3.1 The Fiscal Responsibility Act introduced national fiscal rules in Malta for the first time. What considerations were taken into account when developing these rules?

4. Independent fiscal institutions

4.1 What were the main considerations which shaped the legislation establishing the Malta Fiscal Advisory Council (MFAC)?

4.2 How has the establishment of the MFAC changed the budgetary process?

5. Macroeconomic and budgetary projections

5.1 Can you please explain the process of generating the macroeconomic and budgetary projections which feature in the Stability Programme and the annual budget?

5.2 Please explain the process leading to the endorsement of the macroeconomic and budgetary projections by the MFAC.

6. Budget execution

6.1 How are unexpected developments which occur during the course of the budget year dealt with?

7. Legislative budgeting

The following questions concern the role of parliament in the budgetary process.

7.1 An economic and financial parliamentary committee has been set up in 2013. What role can this committee have in the national budget process and in the implementation of the SGP?

7.2 In some Euro Area countries, besides approving the budget, parliament also approves medium-term budgetary frameworks and monitoring budget implementation. What are your views on such roles for parliament in the budget process?

7.3 Similarly, in some Euro Area countries parliaments discuss and vote on the Stability Programme and also discuss opinions, decisions or recommendations given by EU institutions under the SGP. What are your views on such roles for parliament in the implementation of the SGP?

8. Other issues or comments

8.1 Finally, have there been any other changes in Malta’s budget institutions, which have not been covered by this interview, and which you would like to point out?

PARTICIPANT INFORMATION SHEET – INTERVIEW

Title of Research Project: Budget institutions and fiscal discipline in Euro Area countries: a focus on legislative budgeting and on Malta's budget institutions reforms since the Great Crisis

Name of Researcher, Researcher Introduction and Invitation: My name is Moira Catania and I am pursuing a PhD at the University of Bradford, under the supervision of Dr M.J. Baimbridge and Dr I. Litsios. As part of my study, I am conducting research on budget institutions in Malta, focusing on the reforms implemented following the Great Crisis. You are being invited to participate in this interview on the basis of your official position and your key role in the reform process of Malta's budget institutions.

Research Description: The aim of this research is to understand the causal processes through which the reforms to the EU's fiscal governance system following the Great Crisis (namely the 'Six-Pack', the 'Two-Pack' and the Fiscal Compact Treaty) have affected Malta's budget institutions. Budget institutions are defined as all those rules and regulations which govern how budgets are drafted, approved and implemented. They include both those formal rules and provisions which are written into law as well as informal ones which are followed in practice. Budget institutions thus include fiscal rules and medium-term budgetary frameworks; procedural rules which govern the budget process, for instance the role of the finance minister vis-à-vis spending ministers, and the role of the executive vis-à-vis the legislature during the budget approval stage; rules concerning budget transparency, including budget documentation and publication of fiscal data; and independent fiscal councils. The research will start at the national level, with the reforms of Malta's budget institutions, especially the changes resulting from the Fiscal Responsibility Act, 2014 (Cap.534) to assess if and when encounters with the EU have taken place and to identify the causal mechanisms through which change came about.

Procedure: The research involves taking part in an interview with me. The interview involves open-ended questions and you are encouraged to provide detailed responses in order to permit the generation of rich data on the reform process of Malta's budget institutions. The interview covers different dimensions of budget institutions, namely the timing of the budgetary process, the medium-term budgetary framework, the introduction of fiscal rules, the set up and role of the Malta Fiscal Advisory Council, the generation of macroeconomic and budgetary forecasts, budget transparency, flexibility during budget implementation and aspects of legislative budgeting. The interview is expected to take approximately around 45 minutes. The interview can be conducted either in Maltese or in English, as you prefer. It would be appreciated if the interview could be audio-recorded.

You will be contacted via email and/or telephone in order to set up an appointment for the interview, at a date and time which is convenient for you. The interview will preferably be held at your work office.

Consent, Participation and Withdrawal: At the beginning of the interview, you will be asked to confirm verbally your consent to take part in this research. Given your expertise on Malta's budget process, your contribution is crucial to the research and it would be appreciated if you could reply to all questions in the interview. However, you are of course free not to reply to any of the questions if you wish. Please note that you can withdraw your participation at any time. If you decide to withdraw your participation after the interview has taken place, please send me an email and the information provided will be deleted and will not be used in the research. Before the start of the actual interview, I will ask for your permission to audio-record the interview. This would ensure that I do not miss anything from what you said or inadvertently change your words, but if you are uncomfortable with this, feel free to indicate this and the interview can still take place.

Confidentiality: The interviews will be carried out on a confidential basis. Any reports or publications from this research will neither identify your name nor will they include a precise reference to your official position. The interviewees will be identified through their institution and to reduce the risk that participants are identified, two officials from each institution will be interviewed. Furthermore, any contextual information in the generated data, which could result in statements or examples presented being attributed to individual participants, will be withheld so as to protect the participants' identity. Participants will be assigned a code relating to their institution and personal details of the participants will be stored securely and separately from the data generated from the interviews. Access to the participants' contact details will be restricted to myself. These personal records will be destroyed once reports and publications from this research have been finalised.

Data Storage and Retention: The data generated from the interviews will be stored in secure data file (for electronic copies of the recordings and transcripts) and in a locked cabinet (for the audio tapes and paper copies of the transcripts). The data will be stored for the duration of the study and for ten years after the completion of the study. The data will not be stored on laptops or other transportable devices. The audio tapes of the interviews will be destroyed and paper copies of the interview transcripts will be shredded after any reports or publications from this research have been finalised. The data will be accessible and available for use by myself, and my PhD supervisors, Dr M.J. Baimbridge and Dr I. Litsios.

Ethical Issues: You may have concerns on how participating in this research could influence your work-relationships. If you wish to discuss these concerns, please contact me or my PhD supervisors, at any point during the research process.

Result Reporting: If you wish to be kept updated on output emanating from the research, you are welcome to request this by sending me an email and you will receive a short report on the main findings from the interviews.

Ethical Review of the Study: This study has been granted ethics approval by the Chair of the Humanities, Social and Health Sciences Research Ethics Panel at the University of Bradford on 17th June 2016.

Contact Details: If you have any questions regarding this research, please feel free to contact me or my PhD supervisors. The following are our contact details:

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Timeline of main fiscal reports published by Malta's Ministry for Finance and their assessment by the Malta Fiscal Advisory Council and the European Commission

	Apr	May	Jun	Jul	Aug	Oct	Nov	Dec
Ministry for Finance	Stability Programme/ Medium-term fiscal strategy		Annual Report	Half-Yearly Report		Draft Budgetary Plan/Budget Speech in parliament		
Malta Fiscal Advisory Council	Assessment of macroeconomic forecasts	Assessment of fiscal forecasts[1]	Overall assessment of Stability Programme/ Medium-term fiscal strategy	Overall assessment of Annual Report	Overall assessment of Half-Yearly Report	Assessment of macroeconomic forecasts	Assessment of fiscal forecasts	Overall assessment of Draft Budgetary Plan
European Commission		Spring Economic Forecasts Assessment of the Stability Programme and Proposal for Country-Specific Recommendations[2]					Autumn Economic Forecasts Opinion on Draft Budgetary Plan[3]	

Notes:

[1] The assessment of the fiscal forecasts, unlike that of the macroeconomic forecasts, is not an EU requirement. Whilst the macroeconomic forecasts are assessed by the MFAC before they are published, the assessment of the fiscal forecasts takes place after their publication. There is no fixed deadline for the publication of the assessment of the fiscal forecasts, but this is generally published within one month of the publication of the forecasts.

[2] The country-specific recommendations concern not only budgetary policy but also structural reforms. The European Commission's proposed country-specific recommendations are discussed in Council in June and endorsed by the European Council in June/July.

[3] The European Commission's opinion on the draft budgetary plan is discussed in Eurogroup generally in early December.

Source: Adapted from the European Semester timeline (European Commission 2018d); information on Ministry for Finance's and MFAC's reports compiled from their websites (Ministry for Finance no date, Malta Fiscal Advisory Council no date)

Table AXXXV: Interview data – examples of descriptive codes and analytical categories				
Descriptive code	**Analytical category**	**Quote**	**Reference**	**Memo**
More cautious forecasts	Prudent assumptions	“when you are being scrutinised, you are more cautious, ensure that the assumptions are realistic”	MFIN2 2016, pers. comm., 2 September: 7	*Prudent assumptions in order to ensure that forecasts are endorsed by MFAC*
Important that forecasts are endorsed by MFAC	Legal obligations	“we cannot afford that our forecasts are not endorsed.”	MFIN2 2016, pers. comm., 2 September: 9	*MFAC has influence from legal obligation of endorsement of forecasts*
Important to comply with SGP obligations	Supra-national legal obligations	Referring to the SGP obligations: “very important obligations on which we cannot default”	POL21 2016, pers. comm., 28 November: 10	*As a small country, Malta has to stick to the SGP rules – large countries have more leverage with the European Commission*
Budget deficit would be much higher without fiscal rules	Delegation approach	Without the fiscal rules: “the budget deficit would reach 6% year in year out”	MFIN1 2016, pers. comm., 25 August: 6	*The fiscal rules act as an external anchor to strengthen the position of the Finance Ministry vis-à-vis spending ministries*
Conflict between Finance Ministry and spending ministers	Delegation approach	“it was always like this that the Minister of Finance is one against all”	PARL12 2016, pers. comm.,13 October: 44	*Fiscal discipline responsibility applies to Finance Ministry but not to spending ministries.*
Requests for new spending during budget implementation	Delegation approach	“the Ministry for Finance always receives requests for new expenditure measures”	MFIN1 2016, pers. comm., 25 August: 5	*Strong spending pressures during budget implementation*
Constraint on expenditure	Prudent forecasts	The prudent forecasts are: “serving as a capping on the expenditure side”	MFAC4 2016, pers. comm., 7 September: 9	*The prudent forecasts are a deliberate strategy by the Ministry for Finance to limit spending requests by line ministries*
Ministry for Finance does not react to MFAC recommendations	Advisory role of MFAC	In meetings where the MFAC presents its recommendations to the Ministry for Finance: “very often they [MFIN officials] listen without commenting”	MFAC4 2016, pers. comm., 7 September: 8	*Lack of comply and explain requirement*
Ministry for Finance discusses budgetary targets with European Commission and shows willingness to address any concerns	Pre-emptive and accommodative stance	Referring to the budgetary targets, “if there are problems, we [the Finance Ministry] would discuss with them [CION] and we would see that the budget is made in a way.”	MFIN3 2016, pers. comm., 6 September: 4	*Strong influence of European Commission on budgetary targets – Ministry for Finance wants to avoid open confrontation with European Commission*

Table AXXXV: Interview data – examples of descriptive codes and analytical categories (cont.)				
Descriptive code	**Analytical category**	**Quote**	**Reference**	**Memo**
European Commission imposes SGP rules on small countries but applies flexibility in respect of large countries	Limited leverage as a small country	“we know that whilst this – the equal treatment – is an important principle, it starts to be implemented only when the small [countries] are affected, when it is a large one, then, when it comes to large countries, the equal treatment takes on a somewhat different definition”	POL11 2016, pers. comm., 4 October: 16	*As a small country, Malta has to stick to the SGP rules – large countries have more leverage with the European Commission*
Draft budget is approved without amendments	Strong executive and lack of independent parliamentary action	“what the government decides in the budget, it will pass through without any problems”	POL11 2016, pers. comm., 4 October: 8	*Strong executive powers during budget approval process reflects single-party majority government and strong partisanship in politics*
Revisions in budgetary components even if budget balance target achieved	Flexibility during budget implementation	“it is the budget balance which the Ministry for Finance tries to stick to but not the components underpinning the budget balance”	MFIN1 2016, pers. comm., 25 August: 6	*Ministry for Finance is committed to budget balance target but expenditure ceilings are not binding*

Source: Produced by author

Table AXXXVI: Main budget institutions reforms introduced by the Fiscal Responsibility Act		
Description of reform provisions	**Article/s in FRA**	**Relevant EA requirement, if applicable**
Establishment of national fiscal rules, which require: - a balanced structural budget[1] or in its absence, convergence towards the medium-term budgetary objective; - maintenance of the general government debt ratio to GDP below 60%, or if this ratio is exceeded, it must be sufficiently diminishing and approaching this reference value	Articles 7-11	Articles 5-8 of Council Directive 2011/85/EU Articles 3 and 4 of the Fiscal Compact Treaty
Set up of an independent fiscal council, which is mandated to: - assess and endorse, as it considers appropriate, the macroeconomic and fiscal forecasts prepared by the Ministry of Finance; - assesses and issues reports on the compliance of government's fiscal stance with the fiscal rules and the SGP and whether it is conducive to prudent economic management; - make recommendations aimed at improving the conduct of fiscal policy in Malta; - issue an opinion on whether exceptional circumstances exist that warrant departures from the fiscal plans and adherence to the fiscal rules.	Articles 13, 42-61[2]	Article 5 of Regulation (EU) No 473/2013 Article 4(4) of Regulation (EU) No 473/2013 Note: The fiscal council's mandate, to assess and endorse, as appropriate, the fiscal forecasts and to make recommendations, goes beyond the EA requirements.
Budgetary procedures during budget formulation: All ministries, departments and other public entities receiving a government subvention are required to prepare three-year rolling business and financial plans; Ministry of Finance assesses the plans and can propose amendments	Article 14	Not an EA requirement
Requirement of a national medium-term fiscal plan, which is submitted to parliament	Article 15	Articles 9-11 of Council Directive 2011/85/EU Article 4 of Regulation (EU) No 473/2013 Note: Some provisions are not an EA requirement: for example, the requirement in Article 15(8) that the medium-term fiscal policy strategy contains a statement of responsibility signed by the Prime Minister and the Minister of Finance attesting to the reliability and completeness of the information contained in the strategy and compliance with the principles of fiscal responsibility.
Preparation and publication of draft budgetary plan	Article 16	Article 6 of Regulation (EU) No 473/2013

Table AXXXVI: Main budget institutions reforms introduced by the Fiscal Responsibility Act (cont.)

Description of reform provisions	Article/s in FRA	Relevant EA requirement, if applicable
Consistency between the annual budget and fiscal rules and the medium-term fiscal strategy	Article 17	Article 10 of Council Directive 2011/85/EU Note: Some of the provisions are not an EA requirement; for example, the requirement in Article 17(1) that the Prime Minister and the Minister of Finance sign a statement attesting to the consistency of the annual budget with the fiscal rules, the medium-term fiscal strategy and other provisions of the Act.
Budgetary procedures during budget implementation: - proposals involving new or increased public expenditure, supported by detailed information, are assessed by Ministry of Finance[3]; - requirement that public service recruitment, pay policies, wage agreements, publicly-financed social welfare and pension benefits comply with objectives of fiscal responsibility, fiscal rules and medium-term fiscal strategy; - any new or additional expenditures which exceed the relevant budgetary allocations requires the express approval of the Minister of Finance and can be financed through virements between funds within the same department, re-allocation of expenditure within the same Ministry, from unspent resources from other Ministries or entities (subject to a threshold) or drawdown from the contingency reserve (requires express approval of Prime Minister); - personal responsibility for unauthorised new or additional expenditures or for decisions and agreements which result in new or increased commitments concerning public wages and social welfare and pension benefits.	Articles 20-28	Not an EA requirement
Introduction of a contingency reserve, to ensure that unforeseen expenditure or revenue slippages do not jeopardise compliance with the fiscal rules	Articles 31- 38	Not an EA requirement
Monitoring of budget implementation: - submission of a half-yearly report to parliament in July; - publication of an annual report in June	Articles 39, 41	Not an EA requirement

Table AXXXVI: Main budget institutions reforms introduced by the Fiscal Responsibility Act (cont.)

Description of reform provisions	Article/s in FRA	Relevant EA requirement, if applicable
Increased budget transparency: - information required to be included in the medium-term fiscal strategy, annual draft budget and in the annual budget, as well as in the half-yearly and annual reports; - provisions for the publication of monthly fiscal data; - requirement that fiscal council publishes its assessments in a timely manner and in a form which can be understood by the general public.	Articles 13, 15, 16, 17, 39	Article 3 of Council Regulation (EC) No 1466/97 Articles 3, 9 and 14 of Council Directive 2011/85/EU Article 6 of Regulation (EU) No 473/2013 Note: The publication of the half-yearly and annual reports does not constitute an EA requirement. Some of the requirements for information to be included in the medium-term fiscal strategy, draft annual budget and annual budget go beyond EA requirements.

Notes:
[1] Article 3(3) defines the structural balance as the annual cyclically-adjusted balance net of one-off and temporary measures. This is the same definition applied in the Fiscal Compact Treaty.
[2] Article 13 of the FRA fulfils the obligations of Articles 4 and 5 of Regulation (EU) No 473/2013, which require that national MTBFs and draft budgets are based on independent macroeconomic forecasts and that EA countries have independent bodies in place to monitor compliance with fiscal rules. Articles 42-61 of the FRA provide for the independence of the fiscal council as well as for other provisions relating to its set-up and conduct of its work.
[3] Similar provisions apply for measures or legislation which involve lower budgetary revenues (Article 30).

Source: Compiled by author from the Fiscal Responsibility Act, Council Regulation (EC) No 1466/97; Council Directive 2011/85/EU, Regulation (EU) No 473/2013 and the Fiscal Compact Treaty

Table AXXXVII: Ministry for Finance and European Commission forecasts - GDP and government budget balance										
	2014		**2015**		**2016**		**2017**		**2018**	
	MFIN	**CION**	**MFIN**	**CION**	**MFIN**	**CION**	**MFIN**	**CION**	**MFIN**	**CION**
GDP at constant market prices (% change)	2.3	2.3	3.4	3.6	4.2	4.1	4.3	4.6	6.1	5.8
General government budget balance (% of GDP)	-2.1	-2.5	-1.6	-1.8	-0.7	-0.9	0.5	0.5	1.1	1.1

Notes:
Forecasts refer to European Commission's Spring forecasts and Ministry of Finance's forecasts in the Updates of the Stability Programme.
Forecasts refer to the same year, i.e. forecasts for 2014 in CION Spring 2014 forecasts and MFIN 2014 SP

Source: European Commission Spring forecasts 2014-2018 (European Commission 2014b, 2015c, 2016d, 2017h, 2018c) and Malta Updates of Stability Programme 2014-2018 (Ministry for Finance 2014, 2015b, 2016b, 2017b, 2018a).

Table AXXXVIII: Malta Fiscal Advisory Council's recommendations and Ministry for Finance's reactions			
Malta Fiscal Advisory Council's Recommendations		**Ministry for Finance's reactions**	**Status[1]**
1	Consider the publication of more timely official statistics	Earlier submission is in most cases not possible, because it implies less comprehensive or poorer quality data, but "government is committed to make every effort possible to reduce as much as possible the processing time from the receipt of statistical inputs and decisions to its translation into information to be transmitted to the Fiscal Council"	Partially addressed
2	Ensure closer synergy across government departments	The process of integrating the ESA and the cash data is now being carried out within the Finance Ministry under the supervision of the National Statistics Office. But the fragmentation between the cash and accrual adjusted methodology is not considered to undermine the conduct of fiscal policy and the setting of policy objectives in ESA terms.	Partially addressed
3	Maintain detailed documentation on how the fiscal data is compiled.	Methodology followed is that in Eurostat's relevant manuals. "The Ministry is considering publishing an article on its website explaining the process in general."	Not addressed, but subject to further consideration
4	Provide detailed calculations of revenue measures	Finance Ministry has provided the fiscal council with detailed estimates or explanations when requested. More detailed explanation "would render budget documents less accessible to the public". "In the future one could consider publishing separately the technical details surrounding such models [econometric models used to generate revenue projections]"	Not addressed, but subject to further consideration
5	Ensure higher consistency between the macro and fiscal forecasts	"a high, even if not perfect, level of consistency is acceptable to ensure more timely delivery of information". Regarding the effect of fiscal variances on the macroeconomic forecast errors, the Ministry has documented these ex-post but it "does not agree in principle to do this ex-ante".	Not addressed
6	Rationalise expenditure	Whilst, in general terms, the Finance Ministry agrees with this policy, it considers that further discussions are needed for the expenditure benchmark to become a fiscal rule. "The Ministry considers that it is debatable whether it is implied by the Stability and Growth Pact."	Not addressed
7	Ensure that the budget timetable is consistent with European Semester	Budgetary process now fully aligned with European Semester.	Addressed
8	Provide details about fiscal measures for years t+1, t+2	"Details are already provided when measures are known in advance, including the impact beyond the year of implementation."	Not addressed
9	Consider a buffer over the minimum required structural effort	No longer applicable given that the MTO has been attained.	Addressed
10	Maintain accurate estimates on ageing costs	Existing estimates are sufficiently accurate.	Not addressed
11	Perform closer monitoring of output gap and its implications	The Finance Ministry is now producing a risk assessment of the output gap projections which also captures the implications on the structural budget balance.	Addressed
12	Raise awareness about the long term fiscal challenges	Government considers that this is already the case in practice.	Not addressed

Table AXXXVIII: Malta Fiscal Advisory Council's recommendations and Ministry for Finance's reactions (cont.)			
Malta Fiscal Advisory Council's Recommendations		**Ministry for Finance's reactions**	**Status[1]**
13	Specify in greater detail how expenditure growth will be constrained	Detailed overview of spending reviews and fiscal impact of any specific expenditure saving measures are provided in the annual Update of the Stability Programme and Draft Budgetary Plan.	Not addressed
14	Consider new legislation to guide the issue of government guarantees	Government Borrowing and Management of Public Debt Act (Cap.575) enacted by Parliament in July 2017, but section on government guarantees has not yet come into force.	Partially addressed
15	Provide more information about government guarantees	Government Borrowing and Management of Public Debt Act specifies the information which will be published when the relevant provisions come into force.	Partially addressed
16	Provide quantitative estimates of the impact of assumptions used	"The Government will consider ways of improving the presentation of fiscal risks."	Not addressed, but subject to further consideration
17	Provide higher detail on the impact of statistical changes	"The Ministry will introduce a dedicated line item in the relevant Tables, when necessary to clarify the impact of ESA adjustments."	Not addressed, but subject to further consideration
18	Enhance the commentary on the drivers of variations in fiscal data	The Ministry refers to the publication of a detailed table on stock-flow adjustments, published in the annual update of the Stability Programme and the Draft Budgetary Plan. It considers that sufficient details are being published and that more detail, especially on the tax elasticity assumptions, is not appropriate.	Not addressed
19	Publish a dedicated section in the Annual Report explaining possible deviations in the fiscal strategy	"The Ministry for Finance views that the present format is already capturing such deviations in detail."	Not addressed
20	State explicitly the reasons whenever the previous round of macroeconomic forecasts is retained	"the most recent reports delineate more clearly why macroeconomic forecasts used for fiscal projections are not typically revised mid-year despite the availability of more recent macroeconomic data."	Addressed
21	Address the specific issues raised by the Commission in its assessment of the Update of Stability Programme in the Ministry for Finance's publications	Whilst highlighting certain practical difficulties, "the Ministry is not completely averse to the recommendation, particularly in the case where the half-yearly fiscal performance could indicate that there are risks to the compliance with requirements of the Stability and Growth Pact and the Fiscal Responsibility Act, in terms of compliance with the fiscal rules."	Not addressed, but subject to further consideration
22	Provide more details about the assumptions used to prepare the forecasts	"this would unnecessarily complicate the presentation of the budget projections"	Not addressed
23	Revise historical data to ensure consistency with the latest published data	"the Ministry takes note of this recommendation"	Not addressed
24	Achieve further progress in pension reform	"the Ministry takes note of this recommendation"	Not addressed

Table AXXXVIII: Malta Fiscal Advisory Council's recommendations and Ministry for Finance's reactions (cont.)

Malta Fiscal Advisory Council's Recommendations		**Ministry for Finance's reactions**	**Status[1]**
25	Extend the average maturity profile of public debt	This policy has been adopted in recent years.	Addressed
26	Use IIP funds cautiously	"The government has complied with this recommendation."	Addressed
27	Sustain progress towards attaining the Europe 2020 targets	"The invitation is noted by the Ministry, but the Government considers that this recommendation goes beyond the requirements of the Fiscal Responsibility Act."	Not addressed
28	Evaluate the economic efficiency of the current property-related taxation system	"The invitation is noted by the Ministry, but the Government considers that this recommendation goes beyond the requirements of the Fiscal Responsibility Act and the matter is considered a Government prerogative."	Not addressed
29	Use revenue windfalls primarily to build fiscal buffers	Achieved through the budget surplus registered in recent years.	Addressed
30	Establish rigorous policies of how the Contingency Reserve can be resorted to	"The Ministry believes that when this Reserve was used, it was in line with the legal requirements of the Fiscal Responsibility Act"	Not addressed
31	Replenish the Contingency Reserve	Recommendation complied with.	Addressed
32	Update the Budget Office's methodologies to approximate better the ESA guidelines	"The Ministry considers that its current methodologies conform with the ESA-based fiscal targets, as required by the Fiscal Responsibility Act and the Stability and Growth Pact"	Not addressed
33	Use consistent definitions and methodologies across forecast rounds	Recommendation has been addressed in the past.	Addressed
34	Elaborate more on fiscal risks	"The Ministry considers that the current risk assessment being published in the reports is already one of the most detailed assessments presented in the European Union…On the other hand, the Ministry can consider positively the recommendations to identify the specific risk scenario leading to the upper and lower bound limits, as well as the broadening of the fiscal risks that are evaluated. The Government will also be delegating to the Fiscal Council the risk assessment task, by revising the Fiscal Responsibility Act."[2]	Partially addressed
35	Focus greater attention on developments in the structural balance	The Ministry considers that this is already the case as the fiscal rules in the FRA are in terms of the structural balance, but it points out that "as long as the MTO is exceeded, the fiscal rules targeting the structural balance are less binding from a legal perspective, though the Government remains committed to continue to consider further improvements in the structural balance".	Not addressed, but subject to further consideration
36	Ensure technical issues are adequately addressed before announcing changes to tax or expenditure policies	"The Ministry takes note of this recommendation."	Not addressed
37	Evaluate the economic efficiency of the tax framework	"The invitation is noted but the Government considers that this recommendation goes beyond the requirements of the Fiscal Responsibility Act and the matter is considered a Government prerogative."	Not addressed

Table AXXXVIII: Malta Fiscal Advisory Council's recommendations and Ministry for Finance's reactions (cont.)

Malta Fiscal Advisory Council's Recommendations		Ministry for Finance's reactions	Status[1]
38	Ensure feasibility of expenditure restraint targets	"expenditure projections shall continue to be compiled as reliably as possible, based on the information made available"	Not addressed
39	Focus more attention on the expenditure benchmark outlined in the Stability and Growth Pact	The Ministry referred to Article 41(2)(e) of the FRA which requires that in the Annual Report the budget outcome is explained in the context of the SGP obligations and stated that "hence the Ministry confirms that it can comply with this recommendation"	Not addressed
40	Consider reacting publicly to the recommendations made by the MFAC	The Ministry forwarded its official response which was included in the MFAC Annual Report for 2017	Addressed
41	Establish clear guidelines on cash holdings	The Ministry highlighted that its strategy aims to "minimize the level of cash balances and at the same time meet expenditure when it falls due".	Not addressed
42	Maintain close monitoring and control on the Extra-Budgetary Units' activities which have fiscal implications	"The Ministry for Finance remains committed to monitor closely the situation related to Extra-Budgetary Units to ensure that budgetary targets are adhered to"	Not addressed, but subject to further consideration
43	Address revenue arrears more strongly	The Ministry stated that it agrees with this recommendation and referred to the relevant annex included in the Financial Estimates and reported upon in the mid-year assessment.	Partially addressed
44	Provide updates on the performance of fiscal measures announced in the Budget	The Ministry will explore the feasibility of implementing this recommendation but considers that it should be limited to significantly large measures. "The recommendation could be implemented next year by including a small section in Chapter 2 of the Annual Report".	Not addressed, but subject to further consideration
45	Safeguard the efficacy of fiscal policy	"The Government believes that compliance with the fiscal rules is being done in a way which does not limit the efficacy and the meeting of fiscal policy objectives."	Not addressed
46	Explore options to improve fiscal accuracy	"The Ministry stresses that whilst providing for any in-year budgetary decisions that may need to be taken, and assuming that line ministries (including their departments and entities) remain compliant with their budget allocations during the year, the containment of expenditure remains a budget priority."	Not addressed
47	Assume stable elasticities unless justified by specific factors	"The Ministry uses an element of judgement and precise elasticity point estimates can be difficult to justify."	Not addressed
48	Maintain the MTO	Government agrees with this recommendation.	Addressed
49	Monitor closely population trends and their implications	The Ministry agrees with this recommendation.	Addressed
50	Prioritise productivity gains through transferring best practices across departments	The Ministry agrees with this recommendation.	Addressed

Table AXXXVIII: Malta Fiscal Advisory Council's recommendations and Ministry for Finance's reactions (cont.)

Malta Fiscal Advisory Council's Recommendations		**Ministry for Finance's reactions**	**Status[1]**
51	Introduce more effective medium-term policy framework	"The Fiscal Responsibility Act already allows for a rolling three-year Medium-Term Budget Framework."	Not addressed
52	Provide a more detailed account on the absorption of EU funds	"The Ministry will take action to ensure that the information provided is as comprehensive as possible, within timeframes prevailing and given resources, by consulting the EU funds managing authorities in this case."	Not addressed, but subject to further consideration
53	Ensure publication of the Half-Yearly Report by end July even when the Parliament is in recess	"An earlier submission by the Ministry of its Half-Yearly Report would undermine the objective of basing potential mid-year fiscal policy decisions on information covering the first six months of the year and/or would require a higher degree of provisional estimates."	Not addressed
54	Publish more background information on models used by the Ministry for Finance	The Ministry agrees with this recommendation as it is a legal requirement of the FRA and the SGP.	Addressed
55	Monitor closely revenues derived from the IIP	The Ministry agrees with this recommendation and monitors revenue from the IIP on a regular basis.	Addressed
56	Consider introducing direct reference to the expenditure benchmark in the legislation	"The Ministry prefers to wait for possible developments at the European level before making any legislative proposals in this respect."	Not addressed
57	Implement the necessary structural reforms	The invitation is noted by the government and reference was made to a number of structural reforms implemented in recent years, such as in the labour market and in relation to welfare benefits.	Addressed

Notes:
[1] Status categories:
'Addressed' indicates that the recommendation has been fully implemented.
'Partially addressed' indicates that some action has been taken in respect of the recommendation, but it has not been fully implemented.
'Not addressed, but subject to further consideration' indicates that the recommendation has not been implemented but the government is considering or plans taking action in the future.
'Not addressed' indicates that no action has been taken in respect of the recommendation. This also includes cases where the government does not agree with the recommendation, where the government considers that the recommendation is already being fulfilled and where the government considers that the recommendation goes beyond the requirements of the FRA.
[2] Implemented through the amendments of March 2018.

Source: Compiled by author from Malta Fiscal Advisory Council's (2018c) Annual Report and Statement of Accounts 2017: 33-43.

Table AXXXIX: Budget for 2017 – presentation, debate and approval by parliament

Date	Details	Documents	Remarks
17/10/2016	Budget Speech (2017) by Minister of Finance	Budget Speech 2017 Draft Financial Estimates for 2017 Economic Survey 2016 Proclamation No XVII of 2016 on the Bill to implement Budgetary Measures for 2017 and other administrative measures[1] Bill to Implement Budgetary Measures for 2017 and other administrative measures Statement by the Prime Minister and the Minister of Finance under the Fiscal Responsibility Act[2]	House resolves itself into a Committee of Supply to consider the General Estimates 2017[3] First Reading of Bill to Implement Budgetary Measures for 2017 and other administrative measures[4]
19/10/2016	Motion of Procedure for Budget Debates on General Estimates 2017	-	Schedule for parliamentary budget debates is agreed to.
24/10/2016	Reply to Budget Speech by Leader of Opposition	-	
25/10/2016	Reply by Prime Minister	-	
26/10/2016 27/10/2016 28/10/2016 31/10/2016 1/11/2016 2/11/2016	Budget debates by Ministry and Vote	-	Intensive debate schedule with morning, afternoon and evening sessions on most days. For each Vote, the Government proposes the expenditure allocation as indicated in the Financial Estimates. On its part, for each Ministry, the Opposition requests an amendment to decrease Minister's salary by one Euro (line item: holders of political office), as a signal of its disagreement with government. Voting does not take place in these sessions but is postponed to a later stage.

Table AXXXIX: Budget for 2017 – presentation, debate and approval by parliament (cont.)			
Date	**Details**	**Documents**	**Remarks**
7/12/2016	Approval of the budget	Appropriation (2017) Bill	For each Vote, members of parliament first vote on the Opposition's amendment to decrease one Euro from the Minister's salary and then on the allocation of expenditure for that particular Vote. This procedure involves the House resolving into Committee of Supply and back again for each Vote. The voting on the Budget for 2017 took around three hours. The session involved only procedural motions and voting, with no discussion taking place. After the voting by Ministry, the Minister of Finance presented the Resolution for aggregate expenditure allocation from the Consolidation Fund for 2017 and the Appropriation (2017) Bill for first reading. The second reading, committee stage and third reading of this Bill are carried out in this session, with voting taking place in each step. Again this involved no discussion and took only around 15 minutes.
7/12/2016	Supplementary Estimates for 2016	Second Appropriation (2016) Bill	The same procedure as for the First Appropriation (2017) Bill is followed, including the House resolving into Committee of Supply and the second reading, committee stage and third reading, with voting taking place in each step. No discussion took place and the process took only around 10 minutes.

Notes:
[1] Article 73 of the Financial Administration and Audit Act requires that money bills must be recommended by the President of Malta.
[2] Article 17 of the Fiscal Responsibility Act requires that the Prime Minister and the Minister of Finance sign a statement attesting to the consistency of the annual budget with fiscal responsibility principles, the fiscal rules, the medium-term fiscal strategy and other requirements in the Act, and that this is presented to Parliament.
[3] To discuss the financial estimates, the House resolves into a Committee of Supply as provided in Article 71 of the Standing Orders of the House of Representatives.
[4] This Act was discussed in parliament between 10 January and 14 March 2018 and approved in April 2018 (Bill No. 174 Budget Measures Implementation Bill).

Source: Compiled by author from minutes of parliamentary sittings (plenary sessions) Nos. 427 to 447 (17 October to 2 November 2016) (Parliament of Malta 2016b) and No. 460 (7 December 2016) (Parliament of Malta 2016c)

Table AXXXX: Budget variation

	2014	2015	2016	2017
General government balance (Eur millions)	**-13.3**	**4.1**	**166.7**	**379.5**
Total Revenue (Eur millions)	**149.6**	**131.6**	**165.0**	**444.9**
Total Revenue (% change)	4.7	3.7	4.5	11.0
of which (Eur millions):				
Taxes on production and imports	28.3	34.0	-12.8	85.6
Current taxes on income and wealth	83.6	64.0	70.0	75.9
Social Contributions	0.9	1.4	13.5	24.4
Total Expenditure (Eur millions)	**162.9**	**127.5**	**-1.7**	**65.0**
Total Expenditure (% change)	4.9	3.5	0.0	1.6
of which (Eur millions):				
Compensation of employees	58.0	34.0	12.1	7.5
Social benefits and social transfers in kind	-8.0	-6.6	15.0	28.0
Gross fixed capital formation	57.5	59.8	-72.2	-44.1

Note:
Budget variation corresponds to the difference between forecast (in Stability Programme published in April of that year) and first estimate for the year (in Stability Programme published in April of the following year).

Source: Malta Annual Reports 2014-2017 (Ministry for Finance 2015a, 2016a, 2017a, 2018b)