ORIGINAL ARTICLE

Citation: Wildowicz-Giegiel, A. (2019). The role of independent fiscal councils in improving fiscal performance of the European Union countries. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 14(4), 611–630. doi: 10.24136/eq.2019.029

Contact: a.wildowicz@uwb.edu.pl; University of Białystok, Faculty of Economics and Finance, ul. Świerkowa 20 B, 15-328 Białystok, Poland

Received: 13.12.2018; Revised: 11.08.2019; Accepted: 7.09.2019; Published online: 28.12.2019

Anna Wildowicz-Giegiel

University of Białystok, Poland

orcid.org/0000-0003-1871-5621

The role of independent fiscal councils in improving fiscal performance of the European Union countries

JEL Classification: H30; H60; H62; H63; H87

Keywords: public finance; independent fiscal councils; fiscal performance

Abstract

Research background: Independent fiscal councils are an example of new fiscal institutions, the number of which has rapidly increased around the world, including the EU countries since the global financial crisis of 2008–09. A further deterioration of public finance has provoked many economists to intensify disputes regarding the optimal shape, functions and effectiveness of fiscal councils responsible for promoting sound fiscal policy. Given this, a research focus on independent fiscal councils, active in the public debate in Europe, seems intellectually attractive.

Purpose of the article: This article aims to explore the impact of Independent Fiscal Councils on fiscal performance, paying particular attention to their mandate, tasks and institutional models which can strengthen the achievement of fiscal discipline in the EU countries. In connection with this, the question arises about the effectiveness of fiscal councils, especially in the case of institutions that were compulsorily created under the external pressure (at the European level) and found no strong political support in national parliaments.

Methods: Descriptive analysis along with panel data analysis were implemented to show the role of fiscal councils in enhancing fiscal discipline in the EU countries in years 2006–17 on the basis of data collected by the European Commission.

Findings & Value added: The improvement in fiscal performance and better macroeconomic and budgetary forecasts can be achieved thanks to well-designed fiscal councils supported by appropriate fiscal rules. The conducted analysis confirms that independent fiscal councils are the useful mechanism introducing indirect social control over government revenues and expenditures. This means greater fiscal transparency and lower fiscal illusion between the government and the electorate. Due to the increase in the transparency of public finance, it is possible to reduce the ‘partisan’ deficit bias that contributes to public debt growth. The empirical research extends the existing knowledge on the role of fiscal councils and their impact on fiscal performance.

Introduction

There is a growing interest in the independent fiscal councils (IFCs) the number of which has increased more than threefold since the global financial crisis of 2008–09. The problem of deterioration in fiscal performance, in particular the deterioration in the total budget balance along with the rapidly growing debt to GDP ratio, has been observed in the euro area and most EU–28 countries after 2007. This has forced the governments to introduce additional institutional arrangements, such as Fiscal Councils, to restore the credibility and sustainability of fiscal policy without undermining its support for macroeconomic stabilization.

The research aim of the presented article is to show the importance of Independent Fiscal Councils in promoting sustainable fiscal policy, which, as a result, can help prevent excessive fiscal deficits and unstable debt dynamics. In the empirical part, the author tried to explain the impact of IFCs on fiscal performance in the EU countries. For this purpose, the econometric model was used.

Both descriptive method and panel data analysis were conducted to show the need for fiscal institutions that may positively influence fiscal performance if certain conditions are met. The literature devoted to fiscal councils explains their role in enhancing fiscal discipline, mainly through fighting against excessive deficits in good times, which contributes to the increase in fiscal space necessary to conduct countercyclical policy during a recession. In the empirical analysis cross-country data from the European Commission were used, referring to public finance and IFCs.

The paper is structured as follows. Section 1 presents arguments for Independent Fiscal Councils implementation, focusing on key features, particularly the objectives, mandates and institutional forms of fiscal councils. In section 2 the overview of recent empirical results is done regarding the fiscal councils impact on fiscal outcomes, along with the presentation of measurement methodology. Section 3 describes the results of panel data analysis, which aimed to assess the influence of IFCs on fiscal performance. Finally, sections 4 and 5 summarizes the conducted research in the context of the previous empirical research, suggesting possible avenues and some limitations of the applied approach.

Literature review

The arguments for implementation of Independent Fiscal Councils

It is worth asking the question why institutional remedies in the form of independent fiscal bodies should be created. The first argument that can be recalled concerns the problem of deficit and pro-cyclicality biases in fiscal policy observed in most modern democracies. The literature provides several explanations for the deficit and procyclicality bias. First, there is electoralism and political polarisation resulting from the short-sightedness and selfishness of policymakers who initiate deficit-augmenting spending or tax-cutting programmes in the interest of re-election (Persson & Svensson, 1989; Alesina & Tabellini, 1990, 2007; Alt & Lasen, 2006; Calmfors & Wren-Lewis, 2011; Wren-Lewis, 2013; Beetsma *et al.*, 2018). If government faces uncertainty over re-election prospects, the propensity to myopic and opportunistic behaviour increases, which negatively affects budgeting policy. To put it another way, the current government's effective discount rate is higher than socially desirable, as the potential implications caused by future tax increases or expenditure cuts have not been taken into account (Hagemann, 2011, p. 80). The manifestations of the deficit bias are: over-optimistic revenue forecasts, unrealistic spending estimates or any attempts to circumvent fiscal rules through creative accounting (IMF, 2013). Taking it into consideration, IFCs seem to be necessary to produce unbiased macroeconomic forecasts, monitor and evaluate government fiscal policy.

The second argument is asymmetric information between the government and the electorate (Beetsma & Debrun, 2016). Voters are not completely conscious about both long-run consequences of fiscal policy and government's competency. Information problem concerns both the government and the electorate. This may be due to fiscal illusion, i.e. insufficient understanding of the government's intertemporal budget constraints. The phenomenon of fiscal illusion is associated with the misperception of the fiscal burden or the amount of tax paid. Taxpayers regard their tax burden smaller than it actually is or adversely perceive their tax burden heavier than it is in fact (Buchanan, 1967; Oates, 1988). Moreover, in the case of fiscal policy the agency problem also appears. The voters play the role of principals, and policymakers are their agents, but only the latter have full information about the activities they perform. It causes that fiscal policy is always suboptimal, since the decisions made by politicians often do not arise from macroeconomic reasons and are mainly dictated by the willingness to "please" voters. As a result, voters force the government to pursue

procyclical fiscal policy which results in growing deficits (Alesina & Tabellini, 2005).

Another cause of deficit bias arises from the so-called “common pool” problem. It is well known that public spending is usually targeted to specific groups of voters. In the case of fiscal redistribution, those who benefit from certain government spending are not those who pay for it. What is more, a group of taxpayers is larger than the group of potential beneficiaries. There is a significant difference between the benefit of a particular group of beneficiaries and the benefit of general public. Policymakers are willing to overestimate the social benefits of fiscal policy when they focus only on beneficiaries, whose interest they represent, with the exception of costs in the form of taxes imposed on all taxpayers. Such a phenomenon is called “common pool” problem, which leads to an increase in government expenditures, especially those that bring local benefits. At the central level, different groups may lobby for specific types of government expenditures that benefit them, without taking into account long-run costs of the deficits that may result, as these costs are shared with other groups in society (Shepsle & Weingast, 1981; Tabellini & Alesina, 1990; von Hagen & Harden, 1995; Perotti & Kontopoulos, 2002). Since various interests of different groups of voters can result in excessive expenditure and, as a consequence, excessive budget deficit, fiscal councils may reduce the common pool problem through preparing analysis of short and long-run implications of current fiscal policy and issuing public recommendations (von Hagen, 2013; Calmfors, 2014).

The next potential reason for the deficit and procyclicality bias is time-inconsistency of fiscal policy. *Ex ante* fiscal policy is in line with public interest, but *ex post* seems to be less desirable by policymakers when electoral or regional interests dominate. This means that the government is often tempted to change its policy from that was promised at an earlier date. In practice, the time-inconsistency of fiscal policy is manifested in the temptation to over-use fiscal deficits as a tool to raise aggregate demand, although results of such fiscal policy do not bring both output and employment benefits. The problem of time-inconsistency additionally arises when the government saddles its successors with a large debt burden, leaving less fiscal space due to the sustain of existing programmes (Hagemann, 2011, p. 79). The contemporary interpretation of time inconsistency problem is related to the time inconsistency of optimal policy rules (Kydland & Prescott, 1977; Fischer, 1980). Following Kydland and Prescott (1977), who introduced the concept of dynamic inconsistency of sequentially-determined optimal plans, it has to be noticed that policymakers operating with complete discretion at each moment in time might *not* obtain the best possible

long-run outcome. For this reason, it is acknowledged that numerical fiscal rules, along with Fiscal Councils help avoid suboptimal results in fiscal policy, as these institutions limit discretion in fiscal policy.

The last argument refers to fiscal rules, which are an insufficient remedy for deficit bias. It seems that fiscal rules can promote fiscal discipline limiting the deficit bias and, what is more, the effect of fiscal rules on public deficits or debt has been proved by many empirical findings (Debrun *et al.*, 2008; Nerlich & Reuter, 2013; Badinger & Reuter, 2015, 2017; Heinemann *et al.*; 2018). However, one cannot ignore the fact that numerical fiscal rules suffer from several weaknesses and they may result in procyclicality. Especially, first generation rules introduced before the global financial crisis did not have adequate enforcement mechanisms and the rules were too rigid and complicated (IMF, 2018, pp. 8–11). In the face of debt explosion after the global financial crisis in 2008, there has been a need to establish independent fiscal bodies (IFCs) to enhance the impact of fiscal instruments on fiscal policy.

The characteristics of Independent Fiscal Councils

Fiscal Councils can be defined as independent institutions financed from public funds that have a mandate (established mainly by constitutional or organic laws) to carry out independent analyses, forecasts and advice on fiscal policy (OECD, 2014). According to Debrun *et al.* (2013), IFC is a permanent agency with a statutory or executive mandate to publicly and independently assess the partisan impact on government's fiscal policy, plans and performance against macroeconomic objectives referring to the long-term sustainability of public finances, short-medium-term macroeconomic stability, and other official objectives. Apart from that, Fiscal Councils may: a) have an impact on the use of unbiased macroeconomic and budgetary forecasts during the process of budget preparation b) facilitate the implementation of fiscal rules c) evaluate new policy initiatives along with the identification of sound fiscal policy options and formulation of recommendations.

Based on the IMF Fiscal Council Dataset, at the end of 2016, 39 institutions identified as Fiscal Councils were in the IMF Member States (Debrun *et al.*, 2017). The oldest of them were established in the EU countries, such as: the Netherlands (1945), Belgium (1959), Denmark (1962) or Austria (1970). The EU is seen at the forefront of the global trend, and many Member States established such institutions to fulfil requirements set out in European legislation after the financial crisis of 2008–09. Independent bodies or so-called “monitoring institutions” were created, particularly under the

influence of the Budgetary Frameworks Directive, the Two-Pack Regulation 473/2013 and the Fiscal Compact (The Treaty on Stability, Coordination and Governance) which was signed on 2nd of March 2012 and ratified as of 7th March 2018, entering into force for 25 Member States (Jankovics & Sherwood, 2017, p. 9). In general, European legislation left a lot of wiggle room for its Member States to make their national fiscal councils compatible with their domestic economic and political system, which in turn paved the way for the emergence of heterogeneous fiscal council models. Regardless of their institutional arrangement, the aim of IFCs is to provide objective information and adequate incentives to elected policymakers, to those they account to (voters), and to all other stakeholders in a country's public finance, including international or supranational institutions with a surveillance mandate, and investors (Debrun, 2019, p. 6). Moreover, it is currently argued that fiscal councils could foster fiscal discipline and fiscal literacy in the EU and even contribute towards tackling the rising threats to democracy stemming from populism (Teschke, 2019, p. 32).

It is worth to emphasize that in the majority of EU countries usually only one Fiscal Council exists. However, the tasks prescribed by the European legislation can also be performed by two different institutions, e.g. Belgium (Federal Planning Bureau and Public Sector Borrowing Requirement Section), Netherlands (Advisory Division of the Council of State and Bureau for Economic Policy Analysis) or Austria (Austrian Fiscal Advisory Council and Austrian Institute of Economic Research). Their institutional model can take both the form of the legislative budget office (Austria, Greece, Ireland, Italy) and audit institution (Finland, France, Lithuania).

Unlike independent central banks, independent fiscal councils are by nature more heterogeneous. While institutional model of IFCs remains highly country-specific (Calmfors & Wren Lewis, 2011), tasks which they perform can be assigned to three groups, such as: a) fiscal situation analysing and monitoring, b) macroeconomic and budgeting forecasting and c) consulting. On the basis of data presented in Table 1, it has to be said that FCs are mandated to perform many tasks in different areas. More than half of the EU FCs are engaged in preparing analyses of long-term fiscal sustainability. A vast majority of them assess the forecasts and evaluate the fulfilment of numerical fiscal rules. The FCs in the Netherlands, Austria, Ireland and Italy prepare forecasts for fiscal and budgetary indicators used in the budgetary process. The evaluation of costs related to fiscal policy is done by FCs in 6 Member States (the Netherlands, the UK, Slovakia, Italy, Ireland, Austria). Normative recommendations are made by FCs in Austria, Belgium, Denmark, Hungary, Greece and Sweden. In turn, only institutions such as *Office for Budget Responsibility* in the UK, *Scottish Fiscal Com-*

mission, and the Netherlands Bureau for Economic Policy Analysis make fiscal and macroeconomic forecasts.

Undoubtedly, institutional design of fiscal councils determines their effectiveness. It is said that FC should be institution completely independent from political influence, characterized by transparency of its actions with the official status of a supervisory authority responsible for monitoring fiscal policy discipline (Franek, 2016). Countries with IFCs that have legal guarantees under legislation or operational guarantees, supporting by well-qualified human resources, have on average better fiscal outcomes. Taking it into consideration, the OECD Council prepared the 22 principles for IFCs, which can be grouped under 9 broad headings, such as: local ownership, independence and non-partisanship, mandate, resources, relationship with the legislature, access to information, transparency, communication and external evaluation (Trapp *et al.*, 2016). The latest OECD list consists of 32 fiscal institutions operating in 26 countries, including 25 institutions in 20 EU Member States. The dataset also includes the European Fiscal Board as a separate institution. The European Commission has also recently started calculating the Scope Index of Fiscal Institutions (SIFI), that measures the breadth of tasks performed by fiscal institutions in the EU–28 (Jankovics & Sherwood, 2017, p. 15). The index includes 6 separate tasks: monitoring of fiscal policy and rules, macroeconomics/budgetary forecasting, policy costing, analysis of long-term sustainability of public finance, promotion of fiscal transparency and normative recommendations on fiscal policy. The value of SIFI for 30 fiscal institutions from the 27–UE countries (except the Czech Republic) is shown in figure 1.

Research methodology

The literature on the role of FCs is relatively abundant, although their effectiveness is not easily measurable. There are usually two approaches, case studies or statistical analysis, mainly panel data regressions. The nature of case studies is context-specific and limited to quantitative analysis, while statistical analyses try to quantify the overall impact of FCs or their particular features on the quality of forecasts underlying budget preparation and fiscal performance by exploring variations in resources and outputs across countries and over time. An overview of the empirical studies regarding the effectiveness of FCs is presented in Table 2.

The latest economic literature suggests that FCs help countries not only improve budget performance, but also improve budget forecasts for cyclically-adjusted government revenues and expenditures (Debrun *et al.*, 2009,

2013; Debrun *et al.*, 2017; Beetsma *et al.*, 2018). In the case of their impact on the budgetary process, the relative influence depends on the degree of government commitments to fiscal austerity (FRs in force), public acknowledgment of their significance and socio-political factors, including: government fragmentation, degree of leftism, decentralisation and voters' participation. What is more, experience in the area of FCs confirms that the FCs' structure, and especially their features are relevant for both the budget process and fiscal outcomes (Coletta *et al.*, 2015, p. 13). The literature indicates that the effectiveness of FCs is mainly determined by FC legal independence, FC staff number (high level), FC high-media impact, FC provision assessing, and FRs monitoring (see Calmfors & Wren-Lewis, 2011; IMF, 2013, Debrun *et al.*, 2013; Beetsma & Debrun, 2016; Horvarth, 2017). In addition, many authors postulate the integrated implementation of fiscal instruments, such as: FRs, MTBFs and IFCs, which on the basis of complementarity, will strengthen institutional framework of fiscal policy (Franek & Postula, 2019)

The review of empirical studies has helped in choosing the appropriate research methodology. For the purpose of the conducted analysis, annual time series for EU-27 countries (except the Czech Republic) were used. The analysis covers years 2006–17 and data comes from the databases of AMECO and DG ECFIN (both databases are provided by the European Commission). The available data enabled the construction of an econometric model which explains how the presence of IFCs can affect fiscal performance of EU countries.

According to the traditional fiscal equation, the fiscal policy can be expressed either in terms of actual budget balance (where β applies to both automatic stabilizers and endogenous change in discretionary fiscal policy) or as a cyclically adjusted measures (the parameter β captures the endogenous response of fiscal policy to the business cycle). In the analysis, the fiscal performance (dependent variable) was expressed by the absolute value of the planned variation of cyclically adjusted balance — CAB (data source: Ameco). The cyclically-adjusted balance is explained by the following independent variables:

- Debt – gross debt measured as a % of GDP, data source: AMECO,
- OG – output gap used as a control variable is the proxy of the economic cycle behaviour, data source: AMECO,
- FRI – Fiscal Rule Index (FRI),
- MTBF – Medium-Term Budgetary Frameworks Index, data source: European Commission,
- SIFI – Scope Index of Fiscal Institutions (SIFI), data source: European Commission,

- EURO – dummy variables (1 — if the country belongs to EMU, while 0 — if the country is not the member of EMU).

It should be mentioned that MTBF index is published for the years 2006–17. In the case of SIFI calculated on the basis of the surveys available on the EC web-site since 2006, but published only in 2015–17, it is expected that the responses of the institutions were not changed over time. At the same time, it can be assumed that the SIFI value remains almost unchanged. In addition, if there is more than one institution which may be considered an independent fiscal councils (e.g. Austria, Belgium, Luxembourg or Netherland), the SIFI value of only one institution was selected for analysis. This selection was dictated by whether this institution is also considered a fiscal council by the International Monetary Fund. The year of fiscal council establishment is taken into account as well.

At the next stage, the pooled ordinary least squares (OLS) model was implemented, which assumed that individual effect u_i (cross-sectional or time specific effect) does not exist ($u_i=0$). The obtained results of regression diagnostic tests were used to select the appropriate model, such as: F test (used to check if there are time-fixed effects), Breuscha-Pagana test (LM test), which examines random effects, and the Hausmann specification test, comparing a random effect model to its fixed counterpart. It is assumed that if the null hypothesis, regarding individual effects which are uncorrelated with the other regressors is not rejected, a random effect model is favoured over fixed effect model (Park, 2011). Based on the results of diagnostic tests, the pooled OLS method was finally chosen to estimate the model. The results of the diagnostic tests of regression are presented in Table 3.

Do IFCs affect fiscal performance?

The results of panel data analysis

The estimated model is a panel regression (Debrun *et al.*, 2012; IMF, 2013). As literature devoted to the fiscal policy suggests, regression with the fixed effects model is recommended. However, to check the best specification for the examined relationship, diagnostic tests were performed. Their results are shown in Table 3. The high p-value (above 0,05) obtained in both the Wald test and the Hausmann test indicates that — contrary to the previous assumptions — the pooled OLS model should be chosen and simultaneously the alternative hypothesis is rejected, assuming that the fixed-effects model and the random-effects model are more appropriate.

Since the aim of the empirical study is to analyse the impact of fiscal institutions (fiscal councils, augmented by fiscal rules and medium-term budget frameworks) on fiscal performance, the following model was finally specified:

$$\Delta CAB = \lambda + \beta_1 \Delta Debt + \beta_2 \Delta OG + \beta_3 FRI + \beta_4 SIFI + \beta_5 MTBF + \varepsilon_{it} \quad (1)$$

($u_i=0$)

where:

CAB – cyclically adjusted budget balance (independent variable),

$\alpha, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ – model parameters,

Debt – the gross debt,

OG – the output gap,

FRI – the index of fiscal rules,

SIFI – the scope Index of Fiscal Institutions,

MTBF – the medium-term budgetary framework index,

u_i – a fixed or random effect specific to individual country (i) or time period (t),

ε_t – random error.

The achieved result of RESET test on specification is: $F = 1,302885$, and value $p = P(F(2,279) > 1,30289) = 0,273$. The value of $p > \lambda = 0,1$ allows to accept the null hypothesis of correct specification.

The econometric model 1 and model 2 (with the added binary EURO variable) enable investigate the potential impact of institutional factors on fiscal performance measured by the absolute change in cyclically adjusted budget balance (ΔCAB). The results of the pooled OLS model are shown in Table 4. It turns out that fiscal instruments, such as: fiscal rules index (FRI), independent fiscal council index (SIFI) and medium-term budget frameworks (MTBFs) are significant in the estimated models and their coefficients have a positive sign. The strongest impact is observed in the case of MTBFs. These results proved that fiscal institutions contribute to the improvement of fiscal performance measured by the absolute changes in cyclically adjusted budget balance (ΔCAB). The estimator of output gap (OG) — used as control variable — is also significant in both models, and is also negative, as previously expected. According to the theory, the higher the output gap (understood as the difference between potential and real GDP), the poorer fiscal performance (measured by CAB). The conducted analysis confirms this relationship. Similarly, the results of model 2 indicate that absolute changes in debt level (DEBT) negatively affected fiscal performance in the analysed period. Nonetheless, this was not simultaneously confirmed by model 1. The EURO variable included in model 2 was

also statistically insignificant. This means that the fact of 19 countries' membership in the European Monetary Union does not have a significant influence on the results of their fiscal policy compared to the rest of the EU–28, although the strength of fiscal instruments differs a little in both analysed models. The quality of medium-term budget frameworks had a little stronger effect on the improvement in cyclically adjusted balance in model 1, compared to model 2. In turn, in model 2 the quality of independent fiscal councils measured by SIFI had a little stronger impact on cyclically adjusted budget than in model 1.

The obtained value of R-squared ($R^2=0,34$) in both models suggests that the variables, such as: fiscal rules index (FRI), independent fiscal council index (SIFI), and output gap (OG) explained above 30% of the total variability of the absolute change of CAB. In general, the square value of R is usually low in cross sectional data due to their heterogeneity. Furthermore, due to the problem with endogeneity of the explanatory variables, the alternative methods of estimation are also worth using in the future, such as: the instrumental variable method or the generalized method of moments (GMM) which are recommended to improve estimation efficiency.

Discussion

There is an ongoing debate on the effectiveness of fiscal institutional arrangements among academics and policymakers. In particular, a vivid subject of interest is the design of fiscal instruments that will be effective in the process of combating excessive government deficits. The research aim of the paper was to answer to the question whether established and recently developed Independent Fiscal Councils of the EU Member States indirectly contributed to the improvement of fiscal outcomes. It is commonly argued that these types of institutions may enhance fiscal discipline by reducing information asymmetry between the government and the electorate responsible for deficit bias, which should discourage politicians from discretion in fiscal policy.

The results of panel data analysis, which includes the EU–28 countries in years 2006–17, allow to confirm the hypothesis that the presence of IFCs along with another instruments, such as: fiscal rules, had a positive impact on fiscal performance. As a result, the increase in cyclically adjusted budget was observed. This is in line with previous empirical findings. For instance, Nerlich and Reuter (2013), Debrun and Kinda (2014), Coletta *et al.* (2015), Maltritz and Würste (2015), Postula and Franek (2019) indicated positive complementarity between fiscal rules and fiscal councils, which

together ensure stronger fiscal stability, restoring fiscal balance. Similarly, Beetsma *et al.* (2018) using panel regressions showed that the presence of IFI had a beneficial impact on the accuracy of fiscal forecasts, confirming early insights from Debrun and Kinda (2014). The abovementioned authors also suggest that only well designed fiscal councils provide better fiscal outputs and less biased forecasts.

Nonetheless, the role of IFCs in improving fiscal policy outcomes cannot be overstated, as experience with fiscal councils remains quite limited. After the financial crisis, many highly indebted Eurozone countries have been forced to strengthen their fiscal governance through fiscal rules, medium-term budgetary frameworks and independent fiscal institutions. The quality of these instruments is regularly measured by indexes constructed and calculated by the European Commission since 2006. Despite this, the value of SIFI for all EU Member States is only available for years 2015–17. According to the data presented in Figure 1, it turns out that institutions from the UK, Italy and Romania obtained the highest value of SIFI index in 2017, while the lowest values were observed in the case of institutions, such as: STATEC (Luxembourg), SAO (Poland) and IMAD (Slovenia). These results should be interpreted very carefully. Firstly, the functions of IFCs are common to more than one fiscal institutions in the following countries: Austria, Belgium, Luxembourg, the Netherlands or Slovenia. Secondly, the level of independence of fiscal institutions is not taken into account in the methodology for calculating SIFI. Therefore, the concept of measurement of Fiscal Council Independence has been further developed by Franek (2015) or von Trapp and Nicol (2018). The analysed index measures the scope of remits and tasks performed by IFCs, but does not include the degree of their operational independence from politics, which seems decisive for the effective functioning of IFCs. For this reason, the low value of SIFI in Luxembourg, Sweden and even Estonia can be misleading, especially if they are known for their sustainable fiscal policy. On the other hand, a relatively high value of SIFI occurs in the southern euro area countries, such as: Italy, Portugal, Spain and Greece, which have the highest level of debt to GDP ratio (higher than 90%).

To sum up, the results of empirical analysis must be interpreted very carefully. Both the review of theoretical and empirical literature raises some doubts as to whether the established institutions per se truly are able to alter the motivation of policymakers, leading to the desirable fiscal outcomes. It is worth noting that the IFCs existing in the EU cover a wide variety of possible institutional forms and are country-specific. It seems that the institutional properties of fiscal councils are important factors from the point of view their effective functioning, and therefore they should be

further explored. Moreover, it should be remembered that the effectiveness of fiscal councils cannot be examined separately from other fiscal instruments, in particular fiscal rules and medium-term frameworks, which reinforce each other, determining the quality of public finance.

Conclusions

The economic literature highlights the role of fiscal councils in enhancing fiscal discipline and budget performance. The creation of IFCs called fiscal watchdogs in most EU Member States seemed necessary due to the global financial crisis of 2008–09, which caused a deterioration in public finance. IFCs can protect against deficit bias by providing better information on actual deficits and their long-term consequences for voters and politicians. In line with this view, fiscal councils may mitigate the asymmetry of information and provide the media, voters and other players (e.g. political opposition) with unbiased information which decreases fiscal illusion, as the government and society are more aware of intertemporal budget constraints. Fiscal councils have an indirect impact on budgetary outcomes and promotion of sound fiscal policy by assessing or providing independent fiscal analyses, forecasts or opinions.

It should be noted, however, that fiscal councils vary across countries due to the large number of country-specific factors. They differ considerably in terms of their governance provisions, breadth of mandate, functions, leadership, staff arrangements or budget. Their certain features included in the OECD principles for IFCs, such as strict operational independence from politics, guaranteed access to information, strong presence in the public debate, fiscal rules monitoring and production or assessment of forecasts, have been recognized as the key features of effective fiscal councils (OECD, 2016).

It seems that empirical evidence regarding the impact of fiscal councils on fiscal performance is still very limited, which inspired the author to conduct research in this scope. The analysis contributed to filling the existing research gap, demonstrating that the presence of FCs, supported by fiscal rules, influences fiscal outcomes. Panel regression used in the empirical analysis confirmed that independent fiscal councils positively affected the fiscal performance of EU countries in years 2006–17. The results are fairly consistent with previous empirical studies that have been carried out so far. The author is simultaneously aware of some limitations of the applied method, because the study only assessed the overall influence of fiscal

councils, without analysing the impact of their specific features on improving fiscal performance.

In fact, no one should also expect too much from fiscal councils that may influence fiscal outputs only through their ability to inform the public debate on fiscal policy, because experience suggests that governments are often incline to interfere in their activities. Considering this, strong legal protection and operational independence of these institutions is recommended. Debrun (2019) in one of his latest studies also indicates the need for coordination among national fiscal councils, which ought to increase the effectiveness of EU fiscal framework, constraining discretion in fiscal policy and encouraging better fiscal outcomes.

References

- Alesina, A., & Tabellini, G. (1990). A positive theory of fiscal deficits and government debt. *Review of Economic Studies*, 57(3). doi: 10.2307/2298021.
- Alesina, A., & Tabellini, G. (2005). Why is fiscal policy often procyclical. *NBER Working Series*, 11600.
- Alt, J. E., & Lassen, D. (1996). Fiscal transparency, political parties, and debt in OECD countries. *European Economic Review*, 50(6).
- Asatryan, Z., Debrun, X., Heinemann, F., Horvath, M., Ódor, L., & Yeter, M. (2017). Making the most of the European Fiscal Board. *ZEW Policy Briefs*, 3.
- Badinger, H., & Reuter, W. H. (2015). Measurement of fiscal rules: introducing the application of partially ordered set (POSET) theory. *Journal of Macroeconomics*, 43.
- Badinger, H., & Reuter, W. H. (2017). The case for fiscal rules. *Economic Modelling*, 60.
- Beetsma, R., & Debrun, X. (2018). *Independent fiscal councils: watchdogs or loopdogs?* London: CEPR.
- Beetsma, M. W. R., J., Debrun, X., Fang, X., Kim, Y., Lledo, D. V., Mbaye, S., & Zhang, X. (2018). Independent fiscal councils: recent trends and performance. *IMF Working Paper*, 18/68.
- Beetsma, M. W. J., & Debrun, X. (2017). Fiscal councils: rationale and effectiveness. In L. Ódor (Ed.). *Rethinking fiscal policy after the crisis*. Cambridge: Cambridge University Press.
- Beetsma, M. W. J., Debrun, X., & Sloof, R. (2017). The political economy of fiscal transparency and independent fiscal councils. *IMF Working Paper*, WP/17/195.
- Buchanan, J. M. (1967). *Public finance in democratic process: fiscal institutions and individual choice*. Chapel Hill: The University of North Carolina Press.
- Calmfors, L., & Wren-Lewis, S. (2011). What should fiscal councils do? *Economic Policy*, October.
- Calmfors, L. (2014). The roles of fiscal rules, fiscal councils and fiscal union in EU integration. *IFN Working Paper*, 1076.

- Coletta, G., Graziano, C., & Infantino, G. (2015). Do fiscal councils impact fiscal performance? *Working Paper, Italy: Department of the Treasury, Ministry of Economy and Finance*, 1.
- Debrun, X. (2009). Independent fiscal agencies. *Journal of Economic Surveys*, 23(1). doi: 10.1111/j.1467-6419.2008.00556.x.
- Debrun, X., Moulin, L., Turrini, A., Ayuso-i-Casals, J., & Kumar, M. S. (2008). Tied to the mast? National fiscal rules in the European Union. *Economic Policy*, 23(54).
- Debrun, X., Hauner, D., & Kumar, M. S. (2013). Independent fiscal agencies. *Journal of Economic Surveys*, 23.
- Debrun, X., Kinda, T., Curristine, T., Eyraud, L. Harris, J., & Seiwald, J. (2013). The functions and impact of fiscal councils. *IMF Policy Paper*, July 16.
- Debrun, X., Zhang, X., & Lledó V. (2017). *The fiscal council dataset: a primer to the 2016 vintage*. IMF.
- Debrun, X., Eyraud, L., Hodge, A., Lledo, V., & Pattillo, C. (2018). Second-generation fiscal rules: from stupid to too smart. VoxEU- Article. Retrived from <https://voxeu.org/article/secondgeneration-fiscal-rules-stupid-too-smart>.
- Debrun, H. (2019). Independent fiscal institutions in the European Union: is coordination required? *MPRA Paper*, 93143.
- Debrun X., & Kilda, T. (2014). Strengthening post-crisis fiscal credibility: fiscal councils on the rise. *IMF Working Paper*, WP/14/58.
- Debrun, X., Moulin, L., Turrini A., Yuso-i-Casals, J., & Kumar, M.S. (2008). Tied to the mast? national fiscal rules in the European Union. *Economic Policy*, 23. *Fiscal rules database*. Retrived from: https://ec.europa.eu/info/publications/fiscal-rules-database_en (10.12.2018).
- Fischer, S. (1980). Dynamic inconsistency, cooperation and the benevolent dissembling government. *Journal of Economic Dynamics and Control*, 2(1).
- Franek, S. (2016). Measurement of fiscal council independence in the countries of the European Union. *Problems of Management*, 14/4(1). doi: 10.7172/1644-9584.63.1.
- Franek, S., & Postula, M. (2019). Measuring the strength of fiscal instruments and their effectiveness in improving the sustainability of public finances in European Union countries. *Materials and Studies*, Warsaw: National Bank of Poland, 334.
- Hagemann, R. (2011). How can fiscal councils strengthen fiscal performance? *OECD Journal: Economic Studies*, 1.
- Heinemann, F., Moessinger, M. D., & Yeter, M. (2018). Do fiscal rules constrain fiscal policy? A meta-regression-analysis. *European Journal of Political Economy*, 51. doi: 10.1016/j.ejpoleco.2017.03.008.
- International Monetary Fund (2013). *The functions and impact of fiscal councils*. Technical Report, August.
- Jankovics, L., & Sherwood M. (2017). Independent fiscal institutions in the EU member states: the early years. *Discussion Paper. European Commission*, 067.
- Kydland, F. E., & Prescott, E. C. (1977). Rules rather than discretion: the inconsistency of optimal plans. *Journal of Political Economy*, 85(3).

- Maltritz, D., & Wüste, S. (2015). Determinants of budget deficits in Europe: the role and relations of fiscal rules, fiscal councils, creative accounting and the Euro. *Economic Modelling*, 48(C). doi: 0.1016/j.econmod.2014.12.001.
- Nerlich, C., & Reuter, W. H. (2013). The design of national fiscal frameworks and their budgetary impact. *ECB Working Paper Series*, 1588.
- Oates, W. E. (1988). On the nature and measurement of fiscal illusion. In G. Brennan, B. Grewal & P. Groenewagen, (Eds.). *Taxation and fiscal federalism: essays in honour of Russell Mathews*. Sydney: Australian National University Press.
- OECD (2014). *Recommendation of the council on principles for independent fiscal institutions*. Paris: OECD Publishing.
- OECD (2016). *Designing effective independent fiscal institutions*. Paris: OECD Publishing.
- OECD (2018). *Independent fiscal institutions database*.
- Park, H. M. (2011). Practical guides to panel data modelling: a step by step analysis using Stata. *Tutorial Working Paper. Minamiuonuma: Graduate School of International Relations, International University of Japan*.
- Perotti, R., & Kontopoulos, Y. (2002). Fragmented fiscal policy. *Journal of Public Economics*, 86.
- Shepsle, K. A., & Weingast, B. R. (1981). Political preferences for the pork barrel: a generalization. *American Journal of Political Science*, 25.
- Tabellini, G., & Alesina, A. (1990). Voting on the budget deficit. *American Economic Review*, 80.
- Tesche, T. (2019). On the legitimacy of fiscal councils in the European Union: trustees or orchestrators of fiscal discipline? *Journal of Contemporary European Research*, 15(1). doi: 10.30950/jcer.v15i1.993.
- von Hagen, J., & Harden, I. (1995). Budget processes and commitment to fiscal discipline. *European Economic Review*, 39.
- von Hagen, J. (2013). Scope and limits of independent fiscal institutions. In G. Kopits (Ed.). *Restoring public debt sustainability: the role of independent fiscal institution*. Oxford: Oxford University Press.
- von Trapp, L., Lienert, I., & Wehner, J. (2016). Principles for independent fiscal institutions and case studies. *OECD Journal on Budgeting*, 2015/2.
- von Trapp, L., & S. Nicol (2018). *Measuring IFI independence: a first pass using the OECD IFI database*. VoxEU eBook, London: CEPR Press.
- Wren-Lewis, S. (2013). Aggregate fiscal policy under the Labour government. 1997-2010. *Oxford Review of Economic Policy*, 29(1).

Annex

Table 1. Functions of fiscal institutions in the selected EU–28 countries

MS	Name of Institution	Analysis of long-term fiscal sustainability	Role in macroeconomic or fiscal forecasts	Role in monitoring compliance with fiscal rules	Directly support legislature in budget analysis	Role in policy costing	Providing normative advices
AT	Fiscal Advisory Council	●	■	●	○	○	●
	Parliamentary Budget Office	●	○	○	●	●	●
BE	High Council of Finance	●	○	●	○	○	●
CZ	Czech Fiscal Council	●	■	●	○	○	●
DK	Danish Economic Council	●	□	●	○	○	●
EE	Fiscal Council of Estonia	○	○	●	○	○	○
	Performance and Fiscal Policy Audit Department	●	■	●	○	○	●
FI	Finnish Economic Policy Council	●	■	●	○	○	●
FR	High Council of Public Finance	○	■	●	○	○	○
	Independent Advisory Board to the Stability Council	○	■	●	○	○	●
DE	Parliamentary Budget Office	○	■	●	●	○	●
EL	Hellenic Fiscal Council	●	■	●	○	○	●
HU	Fiscal Council	○	■	●	○	○	●
	Irish Fiscal Advisory Council	○	■	●	○	○	●
IE	Oireachtas Parliamentary Budget Office	○	○	○	●	●	○
IT	Parliamentary Budget Office	●	■	●	●	●	○
LV	Fiscal Discipline Council	●	■	●	○	○	○
	Budget Policy Monitoring Department – National Audit	●	■	●	○	○	○
LT	Office of Lithuania	●	■	●	○	○	○
LU	National Council of Public Finances	●	■	●	○	○	○
NL	Netherlands Bureau for Economic Policy Analysis	●	●	○	●	●	○

Table 1. Continued

MS	Name of Institution	Analysis of long-term fiscal sustainability	Role in macroeconomic or fiscal forecasts	Role in monitoring compliance with fiscal rules	Directly support legislature in budget analysis	Role in policy costing	Providing normative advices
PT	Portuguese Public Finance Council	●	■	●	○	○	○
SK	Council for Budget Responsibility	●	○	●	○	●	○
SI	Slovenian Fiscal Council	○	○	●	○	○	○
ES	Independent Authority of Fiscal Responsibility	●	■	●	○	○	◐
SE	Swedish Fiscal Policy Council	●	■	●	○	○	●
UK	Office for Budget Responsibility	●	●	●	○	●	○
	Scottish Fiscal Commission	○	●	○	○	●	○

*●-Yes, ○-No, ◐-Other, ■ -assess forecasts only, □- prepare alternative forecasts

Source: OECD Independent Fiscal Institutions Database 2018.

Table 2. Summary of the recent empirical studies on the effectiveness of fiscal councils

Study	Sample	Method		Results
Debrun <i>et al.</i> (2012)	EU-15, 1990–2004	Dynamic estimation	panel	Positive and statistically significant effect of FCs media presence on the cyclically-adjusted balance (CAB)
Nerlich & Reuter (2013)	EU-27, 1990–2012	Dynamic estimation	panel	Evidence for an improved balance as well as reduced expenditure when fiscal rules are supported by FCs
Debrun&Kinda (2014)	58 countries (advanced and developing economies)	Dynamic estimation	panel	Positive and statistically significant effect of FCs high media impact, fiscal rules monitoring and costing of policy measures on the primary balance
Coletta <i>et al.</i> (2015)	EU-11, 2000–2011	Dynamic estimation	panel	Positive and statistically significant effect of fiscal councils index on the CAB
Maltritz & Würste (2015)	EU-27, 1991–2011	Dynamic estimation repeated sections	of cross	Positive and statistically significant effect on the primary balance of the interaction effect between fiscal rules and FCs

Table 2. Continued

Study	Sample	Method		Results
Debrun <i>et al.</i> (2017)	7 EU, 2003–2010	LSD approach and pooled OLS	dummy and	Positive impact of FCs strong media presence on fiscal forecasting (CAB)
Beetsma <i>et al.</i> (2018)	EU–27,	Panel approach	fixed	Positive effect of the presence of FCs on fiscal forecasts accuracy and fiscal rules compliance
Franek & Postula (2019)	EU–28	Panel approach	Fixed	Positive effect of fiscal instruments strength index on general government balance.

Source: own elaboration on the basis Coletta *et al.* (2015), Asatryan *et al.* (2017), Beetsma *et al.* (2018), Franek and Postula (2019).

Table 3. Results of diagnostic tests

Dependent variable	Wald test		Hausmann test		LM test	
	F	p-value	Model 1 H	p-value	LM	p-value
ΔCAB	F(26, 255) = 0,264467	0,99	H = 7,70697	0,17	LM=26,76	0,14
	Model 2		Model 2		Model 2	
	F(26, 254) = 0,258712	0,99	H = 7,56437	0,27	LM=26,9	0,17

Table 4. The results of panel regression

Variables	Model 1		Model 2	
	Coefficient	p-value	Coefficient	p-value
Const	–4,15713	0,0084***	–4,19917	0,0073***
DEBT	–0,00802346	0,1179	–0,00902471	0,0900*
OG	–0,153713	0,0001***	–0,156579	0,0001***
SIFI	2,15071	0,0828*	2,35621	0,0652*
MTBF	3,35864	0,0293**	3,33853	0,0259**
FRIndex	1,11408	<0,0012***	1,05270	0,0032***
EURO (binary variable)			0,459699	0,3921
R-squared	0,34		0,34	
no. of observation	297		297	

Dependent variable (Y): ΔCAB; standard errors (robust HAC); ***, **, * - statistical significance at the level of 1%, 5% and 10% threshold respectively.

Figure 1. Scope Index of Fiscal Institutions (SIFI) in 2017

Note: The abbreviations for 30 IFIs from UE-27 countries are as follows: PL- Supreme Audit Office, SI- Institute of Macroeconomic Analysis and Development, NL(1)- The Council of State-Advisory Division, NL(2)- Netherlands Bureau for Economic Policy Analysis, AT(1)- Austrian Institute of Economic Research, AT(2)- Austrian Fiscal Advisory Council, BE(1)- Federal Planning Bureau, BE(2)- High Council of Finance-Section "Public Sector Borrowing Requirement", HU- Fiscal Council of Hungary, LV- Fiscal Discipline Council, BE(2) - Federal Planning Bureau, DK- Danish Economic Council, LU(1)- National Council of Public Finance, LU(2)- National Institute Of Statistics And Economic Studies Of The Grand Duchy of Luxembourg, LT- National Audit Office (Budget Policy Monitoring Department), EE - Estonian Fiscal Council, FR - High Council of Public Finances, HR- Commission on Fiscal Policy, CY- Fiscal Council, FI- National Audit Office (Fiscal Policy Evaluation Function), SE- Swedish Fiscal Policy Council, SK- Council for Budget Responsibility, SI(1)- Institute of Macroeconomic Analysis and Development, SI(2)- Fiscal Council, DE- Independent Advisory Board to the Stability Council, IE- Irish Fiscal Advisory Council, IT- Parliamentary Budget Office, BG- Fiscal Council, EL- Hellenic Fiscal Council, MT- Malta Fiscal Council, PT- Public Finance Council, RO- Fiscal Council, ES - Independent Authority for Fiscal Responsibility, UK- Office of Budget Responsibility.

Source: Fiscal Institutions Database, https://ec.europa.eu/info/publications/fiscal-institutions-database_en.