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Is the European economic governance framework too "complex"? A critical discussion

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Abstract

Among the many subjects of discussion within the European Fiscal Rules’ debate, the topic of “complexity” has become common over the past decade, both in policy circles and the academic literature. Nonetheless, arguments about complexity and how it affects the usefulness and enforceability of the rules are not very specific. It is common in the academia and media to mention “complexity” as a key to the debate, while keeping its definition vague, and to attach a negative connotation to the term. Based on a database of more than 200 academic papers, we argue that it is useful to group references to “complexity” along three axes: “framework set-up”, “compliance”, and “enforcement”. This classification also allows us to better identify simplification proposals in the literature and assess their strengths and weaknesses. Using this framework, we evaluate the recent legislative proposal by the European Commission for the reform of fiscal rules. Overall, our assessment indicates that the proposal simplifies elements along the first axis, but provides less clear gains in terms of complexity along the two other ones. Finally, we draw lessons for the debate at hand from some branches of the scholarly literature that argue that “complexity” can arise endogenously in certain instances: in particular, more complexity can be the result of aiming at vertical tax equity (taxation literature), appear as result of the market responses to previous regulations (literature on international trade and health regulations), or be a way to create entry barriers for outsiders (theories of bureaucracy).

Keywords: complexity; fiscal rules; economic governance framework; European Union.

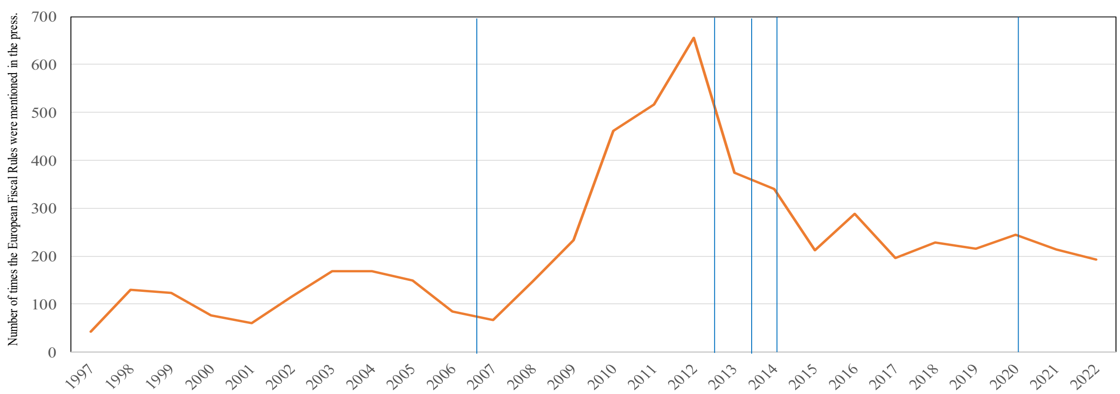
JEL codes: H6, H87.

[1] The opinions expressed in this paper are those of the authors and do not necessarily reflect those of the Banco de España, the Europan Central Bank, or the Eurosystem.

1. Introduction

Since the birth of the European Monetary Union (EMU) with the Maastricht Treaty in 1992, the Economic Governance Framework of the European Union has guided, or attempted to guide, the fiscal behavior of Member States. As economic shocks like the Global Financial or the European Sovereign Debt crises, hit European economies, the Framework has been reformed to adapt to new realities and accommodate new circumstances. A review to guide a new reform was launched just before the COVID-19 pandemic, and a specific legislative proposal was put forward by the European Commission in early 2023. The discussion over the European fiscal rules and its shortcomings has shaped these reforms and reform proposals, as illustrated in Figure 1.

Figure 1: Mentions in newspapers of "fiscal rules".

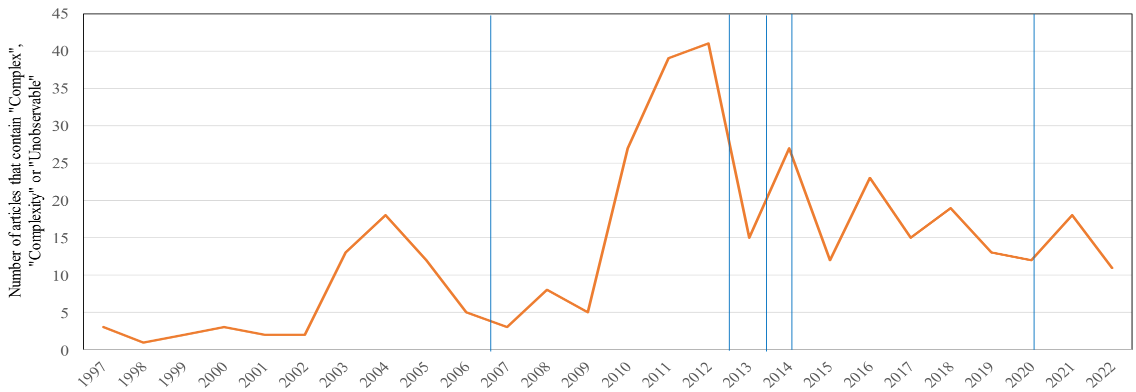


Notes: Own elaboration using Dow Jones' Factiva. This graph displays the number of times the European Fiscal Rules are mentioned in the following press sources: Bruegel, Euronews, BBC, Economist, Economist Intelligence Unit, Eractiv, Financial Times, Wall Street Journal, CEPR, Europa Press, European Centre for International Political Economy, Euromoney. The reference lines indicate, from left to right, the inclusion of the "structural terms" in the Framework (December 2005), the adoption of the Six Pact (November 15, 2011), the entry into force of the Fiscal Compact (January 1, 2013), the adoption of the Two Pact (November 20, 2013), and the start of consultations for the Framework reform by the European Commission (December, 2019).

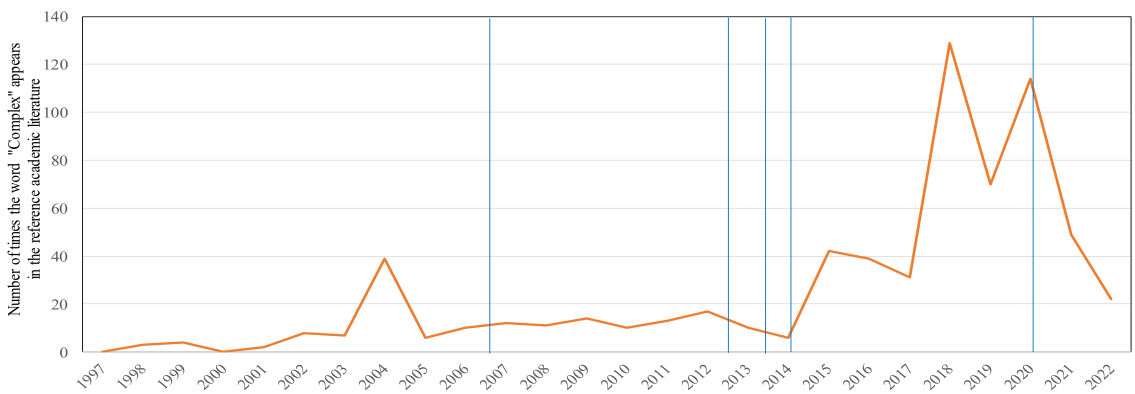
Among the many subjects of debate within the European Fiscal Rules, the topic of "complexity" has become very common over the past decade, both in policy circles and the academic literature (see Figure 2). However, both academic and policy arguments about complexity and how it affects the utility and enforceability of the rules are not very specific. On the one hand, measuring the complexity of a legislative piece is a difficult task over which there does not seem to be a clear consensus. It is common in the academia and newspaper articles to mention complexity as a key to the debate, without providing a concrete measure of it. At best, it has sometimes been measured using the length, in pages, of the Vade Mecum[2] as a proxy. On the other hand, clear explanatory mechanisms on how complexity affects compliance, enforceability, or any feature related to the success of the framework are lacking, and the proposed ones vary greatly across authors. The debate over complexity seems to be, in sum, rather complex.

Figure 2: Mentions to "fiscal complexity" in newspapers and academic papers.

Panel 2a. Newspapers



Panel 2b. Academic literature



Notes, Panel 2a: Own elaboration using Dow Jones' Factiva. The Factiva query was constructed imposing a number of rules to guarantee that the selected news related to the debate on European fiscal rules. Firstly, the articles have two mention a minimum of two times the word 'fiscal' and at least once a word starting with 'euro' or EU, EEC, EMU, EC, EZ, EBC, among others. Moreover, they have to mention European rules or the Stability and Growth Pact (rules/SGP/etc.). The selected articles belong to one of the following sources: Bruegel, Euronews, BBC, Economist, Economist Intelligence Unit, Euractiv, Financial Times, Wall Street journal, CEPR, Europa Press, European Centre for International Political Economy, Euromoney. Finally, the topics were limited to Economic News, International Relations, International Sanctions, Regulation/Government Policy and to Europe.

Notes, Panel 2b: The graph displays the number of times the word "complex" appears in an academic repository that contains 207 papers and academic articles related to the European Economic Governance Framework and its fiscal rules from the year 1997 onwards. See Annex I for the complete list of references.

[2] "The Vade Mecum is a handbook that brings together all the relevant procedures and methodologies involved in the implementation of the EU's rules-based fiscal policy framework" (European Commission website).

The aim of this paper is to provide a conceptual approach to organize the discussion about "complexity" and its sources within the European debate, based on the existing literature on the topic. We identify complexity along three main axes: (i) the first one is due to how the framework is defined (the *"framework set-up"*); (ii) the second one has to do with the layers of complexity that arise when forcing *compliance* with the framework; (iii) the third one identifies the levels of complexity that arise when it comes to the *enforcement* of the framework. We use these three axes to discuss the main sources of complexity mentioned in the literature: sedimentation of reforms and the patchwork of rules it creates, the use of unobservable indicators, the existence of multiple exemptions and escape clauses, the length of the Vade Mecum, the proliferation of bilateral negotiations between Member States and the European Commission, the "Complete Contract Paradigm", and the use of more than one anchor. We also identify the main simplification proposals (a larger role of Independent Fiscal Institutions at the national level; a single fiscal anchor; a single operational rule; a general escape clause; changes in the institutional design; a medium-term fiscal framework), and look at them through the lenses of our conceptual guidelines.

As a natural follow up to the previous discussion, we use our conceptual approach to assess the "complexity" of European Commission's proposal for a renewed European economic governance architecture.[3] Overall, our assessment indicates that the proposal simplifies elements along the first axis, but provides less clear gains in terms of complexity along the two other ones.

Finally, we provide some tentative ideas on the reasons underlying the complexity of European fiscal rules on the basis of a related literature. Given the lack of references dealing with that in the remit of fiscal rules, we have explored other scholar areas such as taxation, the theory of bureaucracy, and international trade and health regulations, in order to search for likely explanations. We draw lessons for the debate at hand from these branches of the scholar literature that argue that "complexity" can arise endogenously in certain instances: in particular, more complexity can be the result of aiming at vertical tax equity (taxation literature), appear as result of the market responses to previous regulations (literature on

[3] Published on April 26, 2023; see Commission proposes new economic governance rules fit for the future.

international trade and health regulations), or be a way to create entry barriers for outsiders (theories of bureaucracy).

The basis of our analysis is a database with over 200 academic articles and institutional papers for the period 1997-2022 (provided in Annex I), that allow us to identify "complex" elements and simplification proposals (direct quotations from the papers are provided in Annex II). This is complemented by a symmetric analysis of press articles from the same period, published in economic and financial written and online media (the results are included in Annex III).

This article is structured as follows. In Section 2 we identify the sources of complexity of the economic governance framework using the relevant literature on the topic, and outline our conceptual approach, based on three main axes that generate such complexity. Then, in Section 3 we analyze the proposals made by economists and policy makers to decrease complexity through the lenses of the three identified axes. In turn, in Section 4 we move on to evaluate the European Commission's legislative proposal. In Section 5 we provide some tentative explanations to understand why the complexity of the framework has grown up over time. Finally, in Section 6 we offer some concluding remarks.

2. Sources of complexity

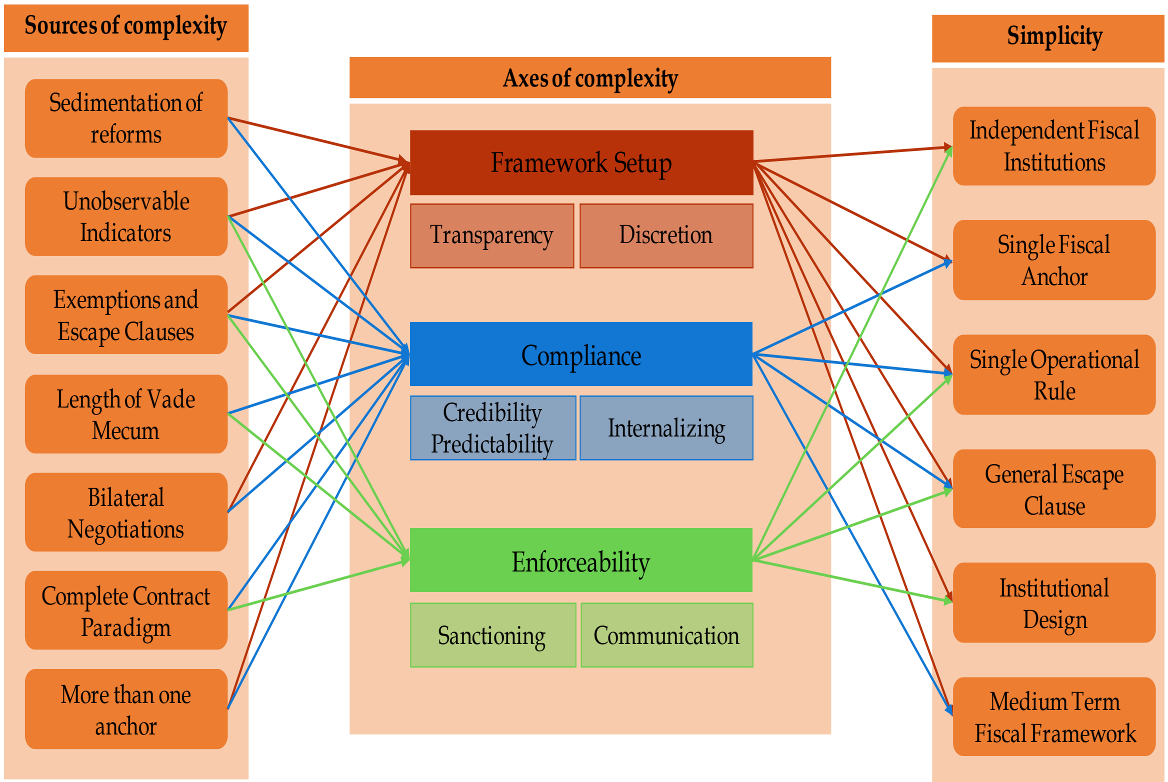
The definition of "complexity" has been loosely established by different authors and has been adapted to very context-specific situations. This section aims at identifying complexity from the existing work by academics and professionals working on the European Economic Governance Framework (from now, the EGF). For such purpose, we build an identification benchmark based on three axes. These axes characterize the concept of complexity based on the mechanisms that cause it, and give solid meaning to the term, with which we work along this article. The first axis contains the sources of complexity based on the "Framework set-up": transparency and discretion. The second one builds on "Compliance": credibility, predictability, and internalization. The third one contains all elements and mechanisms of "Enforceability": sanctioning and communication. All these terms are strongly related to, and direct causes of, complexity within the EGF, and their causal mechanisms work as follows (see Diagram 1 for an outline of our proposed conceptual approach).

The first axis (axis 1) has to do with the "Framework set-up": transparency and discretion. A clear incentive structure without scope for discretion, in which the procedures, each agents' interests, and their interactions, are clear, prevents the development of "opaque corners" to surveillance, and allows a simple understanding of the framework. Whenever agents perceive that the rules are being applied unevenly (Beetsma et al., 2018), or that there is an element of political discretion in surveillance (Thygesen et al., 2019; Beetsma and Larch, 2018), or there is a lack of clarity about who is to make corrective decisions and who is to enforce them (Kopits, 2018), that is when "opaque corners" arise, and the framework acquires significant complexity. The fact that no euro area country has to date been sanctioned for having deviated significantly from the adjustment path (Deutsche Bank, 2017) speaks to the room for discretion and lack of transparency that embody this axis of complexity.

The second axis (axis 2) is based on "Compliance": credibility, predictability, and internalization. From the predictability perspective, having clear expectations, being able to predict how other agents of the EGF will react to one's actions, and giving credibility to these reactions, allows a simple understanding of the system and facilitates fiscal planning and compliance with the rules. Based on past experiences, Member States expect *ad hoc* accommodations to fiscal deviations, which makes the whole EGF non-credible and unpredictable (Eyraud et al., 2018; Ilzetzki, 2021). Consequently, Member States cannot predict how the Commission and the Council will act according to their deficit nor plan accordingly. This makes the framework inherently complex.

A second pillar of the "Compliance axis" (axis 2) comes from the internalization perspective. The inability to understand the system, be it because the set of rules is too long or contradictory, or because the incentives or future actions are unclear, prevents national fiscal policymakers, politicians, analysts, and the general public from understanding the EGF (Darvas et al., 2018), follow the rules and assess the country's development with respect to it. This lack of internalization prevents ownership and appropriate action, and symbolizes complexity.

Diagram 1: Sources of complexity, axes of complexity, and proposals for simplicity.



Notes: Own elaboration.

The third axis (axis 3) has to do with the enforceability of the EGF: sanctioning and communication. On the one hand, the enforcers (European Commission and Council) need to be able to impose sanctions and rewards for compliance with the framework (Vade Mecum, 2019). A system in which enforcers are, for whatever reason, unable to enforce the rules and guide the members towards compliance through sanctions and rewards is not only ineffective but also becomes complex as the lack of enforcement becomes codified in regulation changes, a mismatch is created between proceedings and reality, and this behavior is "excused" by exceptions or any other means by the inoperative enforcer.

On the other hand, public oversight by the media and the public constitutes another key pillar for the enforcement of the EGF. A system in which the public opinion, or generalist and specialized media cannot exert an effective analysis and assessment of the framework, is lacking clear and effective communication. This situation compromises the understanding and public scrutiny of the ESG, and makes it complex.

Following the principles posed around the three axes, we now turn to the analysis of the main sources of complexity identified by scholars and policy makers in the literature. These sources are: sedimentation of reforms and the patchwork of rules it creates, the use of unobservable indicators, the existence of multiple exemptions and escape clauses, the length of the Vade Mecum, the proliferation of bilaterality of member states with the European Commission, rather than multilateral negotiations, the "Complete Contract Paradigm", and the use of more than one anchor.

4.1. Sedimentation of Reforms

Over the years, a succession of reforms and specifications has taken place with relation to the Economic Governance Framework. Some of these reforms were institutionalized as a way to respond to crises, such as the Two-Pack, the Six-Pack, and the Fiscal Compact, while others were ad hoc changes included to accommodate specific situations. This has become a key source of complexity for the framework (Kamps and Leiner-Killinger, 2019; Wieser, 2018; Eyraud et al., 2018). Moreover, an attempt to make it more sophisticated and adaptable to specific national circumstances has reduced its transparency, especially since many measures included are hard to measure and subject to large corrections (Regling, 2022; Gaspar, 2020; Eyraud et al., 2018). This reduced transparency is observed in the conflicting signals given by the multitude of indicators added to the framework in successive reforms. There is no guidance on what indicators are prioritized by the European Commission to determine whether an Excessive Deficit Procedure should be launched. As Beetsma et al. (2018) frame it, the assessment of compliance is a judgement-based approach that weighs the pros and cons of the different indicators.

On the other hand, the constant addition of reforms and exceptions may have given an unintended message of political compromises being the driver of reforms, rather than improving fiscal policy-making or tackling economic contingencies (Ilzetzki, 2021; Beetsma and Larch, 2018).

The results of both mechanisms are the creation of "an increasingly complex maze of fiscal rules" (Raudla and Douglas, 2021), which makes the framework hard to internalize for the general public, politicians, and policymakers (Carnot et al., 2018; Darvas et al., 2018) and a complete loss of transparency (Regling, 2022), both of which affect axes 1 and 2 of complexity: reduced transparency, scope for discretion by the European Commission at a bilateral level, and low internalization by policymakers. Furthermore, constant sedimentation of reforms conveys to Member States the idea that fiscal rules are not credible because they can be reformed to adapt them to their concrete circumstances. At the same time and for this very reason, they become unpredictable. Consequently, agents have no incentive to abide by the rules of the framework and complexity increases through the mechanism of axis 2.

4.2. Unobservable Indicators

The introduction of indicators of the government deficit based on structural measures reliant on the output gap (Darvas et al., 2018; Kopits, 2018), was an attempt to make the framework more flexible, adaptable and countercyclical (Kamps and Leiner-Killinger, 2019). However, as Eyraud et al. (2018), Christofzik et al. (2018), and Jankovics and Sherwood (2017) claim, making the framework flexible has often come at the cost of complexity.

The output gap, one of the necessary elements for calculating the structural deficit, is not measurable in real time, and only estimations can be made on a contemporary manner. These estimations are subject to largely significant revisions (Feld et al., 2019; Schuknecht, 2004). The existence of such measurement problems is a catalyzer for the complexity of the system (Beetsma et al., 2018; Thygesen et al., 2019) for three main reasons. Firstly, the European Commission cannot credibly impose a sanction on a country through an Excessive Deficit Procedure if the measure of the deficit is provisional and subject to future revision (de Castro et al., 2013), while imposing sanctions for a years-old deviation is politically unappealing (Marinheiro, 2021) (axis 3). Secondly, the unobservability of indicators represents an easy pretext for noncompliant Member States to excuse their deviation from the target deficit (Bundesbank, 2017) (axis 2). Thirdly, the use of unobservable variables increases the margin of discretion of the Commission in determining which deficits are excessive and which are not (axis 1).

Moreover, the uncertainty created by unobservable variables makes the EGF unpredictable, since any action taken by member states, the European Commission, or the European Council is taken on the basis of provisional measures, and the procedures established by the set of rules, laws and reforms composing the framework are not fully adapted to it. This source of complexity reinforces axis 2 of credibility and predictability.

Communicating decisions, sanctions, and legal procedures to the general public (axis 3), which is already an intricate task, becomes even more complex when such decisions and procedures are based on provisional measures, calculated using mathematical models and formulas that are periodically subject to revisions (Raudla and Douglas, 2021).

4.3. Exemptions and Escape Clauses

The introduction of reforms to increase the flexibility of the framework in the last decades has brought an increase in the number of exemptions and escape clauses added for the same objective. These clauses cover a broad range of circumstances and allow thresholds to be adjusted, certain types of reform -and investment- related expenditures to be exempted, and numerical limits to be made more flexible (Eyraud et al., 2018; Carnot et al., 2018; Feld et al., 2019; Kopits, 2018; Darvas et al., 2018). The proliferation of escape clauses builds on the three axes of complexity, since the margin for discretion in the application of rules is subject to one more contingency (namely existing or prospective escape clauses); the lack of predictability of plausible sanctions given the abundance of escape clauses increases complexity from the compliance side; and the pressure of the Commission and Council to impose sanctions is higher in the absence of clauses to use as escape ways (Schuknecht, 2004; Christofzik et al., 2018).

Many of the added escape clauses are meant to accommodate national circumstances of specific Member States. This adds on the discretion component of axis 1, since Member States gain some margin to negotiate reductions in their fiscal requirements (Beetsma et al., 2018) with the Commission, that systematically codifies specific decisions into the general rulebook, the "Vade Mecum" (Thygesen et al., 2019).

4.4. Length of Vade Mecum

Since the birth of the EGF, the European Commission has followed a tendency of codifying country-specific decisions and exceptions into the rulebook that "enhances the clarity of the strengthened fiscal and economic governance toolbox" that is the Vade Mecum (Thygesen et al., 2019; Darvas et al., 2018; Carnot et al., 2018; Feld et al., 2019). The Vade Mecum, which is published yearly, varies in its length between more than 100 and over 240 pages long (Izetzki, 2021; Kopits, 2018; Christofzik et al., 2018).

The first and clearest mechanism through which the length of the Vade Mecum increases the complexity of the framework is through the difficulty it poses to civil servants and policymakers to internalize, understand and apply the EGF (axis 2) as regards measurements, estimations and decisions related to public spending (Carnot et al., 2018; Izetzki, 2021; Kopits, 2018). Wieser (2018) successfully summarizes this point as "Granularity does not increase discipline".

Additionally, the length of the technical notes, methodology, exemptions, and rules precludes an effective oversight of compliance with the framework by the media and the general public (Christofzik et al., 2018), which obstructs communication and increases complexity through axis 3.

4.5. Bilateral Negotiations

While the EGF was intended to be based on clear, straightforward, numerical rules, combined with multilateral peer pressure to comply at the European Council, the reality has diverged from that idea. The multiplicity of flexibility arrangements mentioned above (see parts 2.1 and 2.3) allows member states to negotiate reductions in their fiscal requirements (Beetsma et al., 2018) with the European Commission. This surge in bilateral implementation of the Framework can be seen as the most serious concern regarding discretion in its implementation and lack of transparency -axis 1- (Thygesen et al., 2019). Zettelmeyer (2022) qualified bilateral agreements as "not an acceptable way of figuring out the optimal compromise between fiscal adjustment, output stabilization, and investment".

Complementing the lack of transparency is the sentiment by some Member States of inequality in the treatment –both real and perceived- by the European Commission with different countries (Bundesbank, 2017). The German Government stated in a public communication in late 2022 that "bilaterally negotiated individual arrangements are not the way forward [to make the EGF] more effective, binding, and transparent". Moreover, the arbitrary interpretations and endless debates between national authorities and the European Commission (Coricelli, 2004), undermine the credibility and predictability of the framework, enhancing complexity through axis 2.

4.6. Complete Contract Paradigm

The Complete Contract Paradigm, as defined by Beetsma and Larch (2018) and Carnot et al. (2018), is the fallacy that all details and special circumstances can be codified with sufficient predictability into a single framework. This tendency to cover every conceivable situation through detailed rules creates endless contingencies that do not adapt to the future (Blanchard et al., 2021; Wieser, 2018). In terms of complexity, this has a similar effect to that of the extended Vade Mecum, as it undermines enforceability and public oversight (axis 3), as well as internalization by policymakers (axis 2). Blanchard's diagnosis takes the extreme to represent the fault of the fallacy and source of complexity: "Any fiscal rule that specifies ex-ante some formulae or quantitative criteria is likely to be inadequate ex-post" (2021).

4.7. More than one anchor

The current EGF, which counts with two anchors, can occasionally offer conflicting signals: a structural adjustment and a target for debt reduction (Beetsma et al., 2018). When there is overlap between the 3 percent deficit rule and the 60 percent debt rule, countries have to comply with the most binding rule each period (Eyraud et al., 2018). This is, on the one hand, tricky and suboptimal; and on the other hand, opaque when it comes to making the decision. These occasional conflicts harm the credibility and predictability of the Framework (axis 2) and allow for discretion when deciding what measures to prioritize (axis 1).

3. Proposals to reduce complexity

There exists an ongoing debate about the direction in which simplification of the EGF should go. From the German Bundesbank (2017), who proposes to keep all structural measures, to Blanchard et al. (2021), which defend the derogation of all numerical rules in favor of laxer "fiscal standards", many recipes for a simplified framework have been proposed. In what follows we identify the measures proposed by different academics and governmental/EU sources, and also assess how they could reduce complexity from the point of view of the three axes previously established. This allows for a systemic identification of the strengths and weaknesses of each proposal, as well as the assessment of their plausible success in reducing complexity.

The main proposals are a larger role of Independent Fiscal Institutions at the national level, a single fiscal anchor, a single operational rule, a general escape clause, changes in the institutional design, and a medium-term fiscal framework.

4.1. Independent Fiscal Institutions at the national level

National Fiscal Councils, also known as Independent Fiscal Institutions (IFIs), are non-partisan, independent public bodies aimed at promoting sustainable public finance by monitoring compliance with fiscal rules, producing or endorsing macroeconomic forecasts for the budget, or advising the government in fiscal matters, among others. While some were created previously, most IFIs in the EU Member States were established as regulated by the Two-Pack and the Fiscal Compact in 2013. Their initial purpose was to foster compliance with, and ownership of, the Fiscal Rules included in the Framework. Nowadays, at least one IFI exists in all Member States, except for Poland.

In the last decade, different IFIs have enjoyed varying levels of success in their objectives, with those of Spain and Portugal being fully independent and issuing binding endorsements of yearly budgets (OECD, 2019; OECD, 2017), while others have not had a significant effect on monitoring or compliance (Christofzik et al., 2018).

IFIs have constituted an opportunity for enhancing the simplicity of the Framework through different mechanisms. Firstly, with respect to our first axis of complexity, IFIs bring transparency to the process of budget drafting and public spending (Gaspar, 2020). They can take on the role of analyzing, from a nonbiased point of view, whether fiscal rules have been followed by a member state or not, and be clear in their conclusions (Eyraud et al., 2018). Hence, the process of determining compliance loses most of its opacity. Moreover, transferring the surveillance to an entity that is well-equipped, well-staffed, and fully independent removes the discretional component of the assessments (Darvas et al., 2018; Wieser, 2018). IFIs make use of public processes and measurements to provide prudent estimations of revenues and expenses, and provide a rigorous evaluation.

Secondly, with respect to the third axis of complexity (enforceability), IFIs can increase the accountability of Member States vis à vis the European Commission, the Council, and the general public (Caselli et al., 2022). By taking the job of translating the technical set of rules, IFIs can communicate clear, summarized, nonbiased statements of compliance to the public (Ilzetzki, 2021), which makes governments more accountable (Schuknecht, 2004), increases the reputational cost of noncompliance (Governments of the Netherlands and Spain, 2022), and eases the task of communicating the state of the Framework. Furthermore, IFIs increase ownership of the framework by Member States, by lessening the usual "Brussels-shaming" on the grounds of "imposed rules" (Darvas et al., 2018; Kamps and Leiner-Killinger, 2019).

These mechanisms, while widely agreed by the literature, are heavily contingent on IFIs being fully independent. This is not the case for some countries, where appropriate legal independence safeguards and robust access-to-information clauses are still needed (Jankovics and Sherwood, 2017). It is not enough with having IFIs, as it is necessary to ensure their independence and guarantee that these are well equipped to carry out their functions.

4.2. Single Fiscal Anchor (Debt)

The current EGF relies on two fiscal anchors of equal importance and occasional conflicts: the 3% yearly structural deficit anchor and the 60% public debt anchor. A common proposal among the literature has been to remove the structural deficit anchor and keep only the public debt one. The rationale behind this proposal follows from axes 1 and 2.

From the perspective of the *framework set-up*, removing the deficit anchor would eliminate occasional overlaps and conflicts between the anchors. It would also set a clear, single target to direct fiscal efforts (Kopits, 2018), which would ease transparency. Moreover, eliminating structural measures in the calculations of fiscal rules compliance would make transparency and simplicity increase drastically (Eyraud et al., 2018; Kamps and Leiner-Killinger, 2019; Gaspar, 2020).

Also, removing structural calculations and focusing efforts towards a single anchor would facilitate understanding and internalization by governments and public administrations, which would increase simplicity through the channel of compliance (axis 2). In order to keep some accommodation to business cycles, the expenditure benchmark could provide the countercyclical component (Bénassy-Quéré et al., 2018; Darvas et al., 2018), as will be shown in the next section.

4.3. Single Operational Rule: Expenditure Benchmark

Using an expenditure rule as the single operational rule could bring numerous benefits for the EGF in terms of simplicity. An adequate expenditure benchmark would consist of the restriction of "nominal expenditures [to] not grow faster than long-term nominal income" (Darvas et al., 2018). Besides getting rid of structural measures and hence being less prone to measurement errors and revisions (Bénassy-Quéré et al., 2018), an expenditure benchmark increases transparency vis à vis the structural deficit anchor. This is because primary expenditures are easy to measure and are not subject to (large) revisions. At the same time, it would keep the countercyclical component that allows for output stabilization, since cyclical changes in revenue do not need to be offset by changes in expenditure (Bénassy-Quéré et al., 2018). These mechanisms would greatly reduce complexity through the channels of axis 1, namely increasing transparency and reducing discretion.

Symmetrically to the single anchor, the elimination of structural measures helps public administrations internalize the rules and operate around them since they become methodologically easier (Kamps and Leiner-Killinger, 2019). Also, the absence of future revisions and clarity of the threshold (long-term nominal income growth) increases predictability for Member States (Eyraud et al., 2018). These channels enhance simplicity through the compliance channel (axis 2) (Gaspar, 2020).

The lack of measurement errors and easiness of assessment makes the EGF easier to enforce (Governments of the Netherlands and Spain, 2022): the determination of whether a Member State has deviated from the rule and exceeded the threshold can be timely made, and the simplicity in its communication to the public increases oversight and pressure to impose sanctions. This reduces the complexity of the framework from the enforcement side (axis 3). In addition to the decrease of complexity, Coricelli (2004) argues that an expenditure rule adapts better to the heterogeneity of an enlarged EU than the 3% structural deficit anchor.

4.4. General Escape Clause/Well Defined Clauses

The substitution of the multiplicity of escape clauses by a general escape clause (or a combination of a few well-defined clauses) would, in a straightforward way, get rid of the complex system of waivers and flexibilities in place and enhance simplicity in the EGF (Beetsma et al., 2018; Thygesen et al., 2019). With clear established criteria for their use (German Government, 2022), including extraordinary events outside of governments' control (Governments of the Netherlands and Spain, 2022), escape clauses provide the necessary flexibility for the EGF to function. The current, excessive use of escape clauses harms the transparency of the system (Christofzik et al., 2018) and the constraints of the European Commission and Council to enforce the rules, increasing complexity through axes 1 and 3. Feld et al. (2019) get to the claim that "just two escape clauses would be necessary: one for natural disasters and one for exceptionally severe economic crises". Furthermore, including clear procedures for activating and deactivating them, would increase predictability for Member States, simplifying the EGF through the compliance channel (axis 2).

4.5. Institutional Design

The reform of the institutional design of the EGF is a commonly mentioned point of reform on which there lacks a vast agreement on the direction of the reform. While the common objective remains the simplification of the EGF through a reduction in discretion and bilaterality, proposals range from redrawing the balance between the Commission and the Eurogroup through the nomination of a full-time president who is not a politician, to giving more autonomy to the Commission's experts (DG ECFIN) or the EFB (Thygesen et al., 2019).

The common underlying measure in all proposals is the establishment of a clear and effective incentive system in which the "watchdog" in charge of surveillance and the decision maker are clearly separated, which would define the currently blurred line between the European Commission and the European Council. This could be done by "moving the watchdog out of the house [European Commission]" (Wieser, 2018; Blanchard et al., 2021) through the EFB and IFIs (Christofzik et al., 2018), or by ensuring the independence of the watchdog within the Commission (Bénassy-Quéré et al., 2018; German Government, 2022).

In any scenario, this would facilitate enforcement for the institution in charge and foster transparency through reduced discretion for the watchdog, since it should no longer make decisions regarding sanctions. Hence, complexity is reduced through the axes of the framework set-up (axis 1) and enforcement (axis 3).

4.6. Medium-Term Fiscal Framework

By taking a medium-term look, rather than a yearly-based look into the EGF, it becomes simpler to include cyclical fluctuations into the assessments of Member States' performance. That is, the issue with structural measures loses importance since a cycle-wide view is less subject to revisions and allows for a clearer identification of gross deviations from the rules. Hence, a medium-term fiscal framework strikes a better balance between flexibility and credibility. By making the assessment clearer through the medium-term view, the EGF becomes more credible for Member States, which reduces complexity through axis 2. At the same time, the lower need for revisions reduces the discretion margin, simplifying the EGF through axis 1.

4. The legislative proposal by the European Commission

In February 2020, the European Commission launched a round of consultations to draft a proposal for reform of the EGF. This process was interrupted during the COVID-19 pandemic and resumed thereafter. In November 2022, the Commission issued a Communication with a set of "orientations for a reform of the EU economic governance framework", and on April 26th 2023, a complete legislative package proposal modifying both the preventive and corrective arms of the EGF (from now on, the proposal) was released for debate and approval.

This proposal, which is now subject of debate among European institutions and national Governments, comprises a set of reforms to, among other objectives, make the EGF simpler, as complexity has become a common rallying cry when talking about the EGF (Carnot et al., 2018).

The European Commission's communication is based on a set of legislative documents repealing and reforming past Council directives and legislations. This section dissects the proposal into its different components and analyzes each of them through the axes of complexity, to give a comprehensive evaluation of the simplifying capacity of the prospective reform.

4.1. Anchors of 60% of debt and 3% of deficit over GDP

A determinant feature of the proposal is that it keeps the Maastricht principles untouched. As such, the proposal leaves the 60% debt-to-GDP and the 3% deficit-to-GDP anchors unchanged. The focus of the reform is to redirect efforts towards a downward primary expenditure path which would, in the long run, bring public debt back to the anchor of 60%. The net growth of primary public expenditure would need to guarantee that public debt is on track to converge with the anchor. Consequently, the 1/20th debt reduction rule is removed and substituted by a plausibly downward path of the debt ratio. Assessment and surveillance would be carried out, according to the proposal, by the European Commission, which could not only start Excessive Deficit Procedures (EDP), but also debt-based EDPs. These are similar to traditional EDPs, but focus on breaches of the 60% debt anchor. This signals a stronger focus on the debt anchor, rather than the deficit anchor.

In terms of complexity, the removal of the 1/20th rule would remove a source of procyclical bias in public finances, that has posed enormous problems on the enforcement side. Hence, its removal would improve the simplicity of the EGF.

While some authors, like Beetsma et al. (2018), argue that simplicity can be enhanced while keeping both anchors (debt and deficit), an overwhelming majority of them advocate a single fiscal anchor, as explained in section 3. Keeping both anchors gives more leeway for the European Commission in its determination of when EDPs are launched, while decreasing transparency and blurring the principles of compliance for Member States.

In terms of the relationship between the two anchors, the proposal's removal of the structural balance in the MTO as a bridge between expenditure and debt, could moderately reduce complexity (Bénassy-Quéré et al., 2018), and establish a simpler path in operational terms. However, the proposal leaves the door open to using the structural balances in some cases, such as for Member States that exceed the 3% and 60% references.

Notwithstanding, the constant repetition of the deficit anchor in the proposal contrasts with the lack of operational element associated to it. This leaves the deficit anchor in an unclear situation with respect to the debt anchor, and leaves the question for simplicity partly unanswered: if the deficit anchor is effectively put aside and attention is directed towards the debt anchor and its operational rule, the proposal can bring simplicity to the system through axes 1 and 2. If the deficit anchor is kept in use for the European Commission's convenience, then this element of the EGF would mostly leave the level of complexity unchanged.

4.2. Medium-Term Approach

A central component of the proposal is the medium-term view of fiscal developments and compliance with the anchors and expenditure rule. This medium-term view, included in holistic fiscal-structural plans for each member state, allows for a broader view of how investment and business cycles affect the deficit and debt.

As claimed by most academics, the assessment of the EGF with a medium-term look is an effective way of enhancing simplicity (see section 3) through axes 1 (framework set-up) and 2 (compliance), since it reduces the number of revisions of structural measures and keeps a balance between flexibility and credibility.

In the medium-term, reforms and public investment can be included in the assessment of plans, which has been more complicated to execute on a yearly basis. Including a broader view, as well as giving forward guidance and making commitments clearer, are some of the advantages that make this component of the proposal beneficial for the EGF in terms of complexity.

Nonetheless, monitoring the implementation of medium-term targets, in particular when deviations occur, and given the usual time-consistency problems of fiscal planning (see Leal et al., 2008), pose a challenge for policy-makers and the public in general as regards their intertemporal implementation. Thus, complexity through axis 3 (enforcement) is likely to increase. We elaborate further on this point in the next subsection.

4.3. Individualized Plans

The proposal's "cornerstone" is the design by Member States of national medium-term fiscal-structural plans. These plans would provide multi-year expenditure patterns, including on critical investments, and structural reforms. They should be in line with Country Specific Recommendations (CSR) by the European Commission. The main requirements for these plans to be approved would be the two anchors to be complied with, while allowing for the promotion of sustainable and inclusive growth. The medium-term plans would be incorporated into annual budgets to make them effective.

Prior to submission, plans would have to be "negotiated" with the Commission through an "in-depth technical dialogue". Once analyzed by the Commission, it would issue an opinion on it, and the plan would have to be adopted by the European Council upon discussion in its multilateral committees. Monitoring would be carried by the European Commission on the basis of the annual reports submitted by the Member States in the context of the European Semester. This process would be based on the agreed multiannual net primary expenditure path to ensure progress in terms of the debt anchor.

Moreover, the plans are designed for an adjustment period of four years, which could be extended to the length of the national legislature or up to 3 three more years if they include significant investments. However, should a member state wish to submit a revised plan to the Commission before the end of its adjustment period, either due to a change in government or objective circumstances preventing the implementation of the original plan, they could request to do so to the European Commission. While this increases flexibility and adapts to member states' heterogeneity, it also fosters complexity and discourages compliance with the medium-term plans.

The main element of novelty of these plans is the institutionalization of bilaterality in negotiations between member states and the European Commission. Some institutions, like the International Monetary Fund (2022), see this change as an opportunity to accommodate a great deal of heterogeneity across countries. However, as explained in section 2.5, an overwhelming majority of academics argue that bilateral agreements increase complexity through the framework set-up and the compliance channels (axes 1 and 2). This is because the institutionalization of bilateral plans opens the door to an even greater deal of discretion for the European Commission than it already has, being able to determine Member States' compliance with the EGF on a case-by-case basis. For this reason, the EGF becomes dependent on the Commission's specific decisions, which makes it less credible or predictable. Moreover, there are no estimations or past experiences to determine by how much simplicity would change through the implementation of bilateral plans, and there is a great concern among some member states about the possibilities for inequality of treatment.

On a positive note, Beetsma et al. (2018) state that the only way of preventing ex-post revisions to unexpected deviations would be to increase national ownership of the EGF, which could be achieved through medium-term plans. This could help reduce complexity by enhancing the compliance channel (axis 2). Conclusively, medium-term plans seem to entail minor differences when compared to the current, complex situation, and hence are very unlikely to be an agent for complexity reduction. Only if the focus is set on national ownership while increasing transparency and coherence in decision-making across member states, does the proposal stand a chance to reduce complexity in the Framework.

4.4. Expenditure Rule

The expenditure rule represents, in combination with the individualized plans, the core of the proposal. The Commission has proposed a single operational benchmark, directly related to the debt anchor, that is fully in control of the governments and allows for the stabilization of debt in the medium-to-long term.

The operational indicator would be built on nationally-financed net primary expenditures of the government, that is, excluding discretionary revenue measures, unemployment and interest expenditures, and expenditures fully matched by EU funds. This measure allows to exclude cyclical components as well as those out of the control of the government. This measure entails some relevant characteristics like the lack of need for structural measures or revisions of observations; the independence from business cycles; and the easiness of observation and measurement. All these characteristics make the use of net primary expenditures a simplification of the EGF through the three channels: by increasing its transparency and reducing the scope for discretion by the Commission; by increasing its credibility and predictability given the lack of necessary revisions; and by making communication of matters related to the framework easier.

The operational indicator would be related to the debt anchor through a fiscal adjustment path in their medium-term plan. When the public debt is above 60%, the Commission puts forward a technical trajectory for net expenditure with the aim of putting their debt to GDP ratio on a downward path towards the 60% anchor. The agreed adjustment path would work as a more feasible benchmark than the 1/20th rule, and a simple point of comparison for the determination of deviations. This would enhance enforceability and simplicity through the third axis.

Moreover, the proposal specifies the methodology that the Commission shall use to assess the plausibility of the project public debt ratio brought forward by member states in their medium-term plans. These assessments should also be made public, together with their underlying data. This enhances transparency and reduces the scope of discretion of the European Commission. With such a simplified design and implementation, and with the agreement of a relevant mass of the literature (Bénassy-Quéré et al., 2018; Darvas et al., 2018; Kamps and Leiner-Killinger, 2019; Beetsma and Larch, 2018), the operational indicator based on net primary expenditure paths could serve as a key tool of simplification of the EGF through the three channels of complexity.

4.5. Independent Fiscal Institutions

The expansion in the roles, functions, and funding of IFIs has been claimed to be a successful tool for simplifying the EGF and improving the institutional setup (Darvas et al., 2018; Ilzetzki, 2021; Eyraud et al., 2018). A truly independent Fiscal Council can take on different roles to support the simplification of the Framework. From an ex-ante perspective, it can help design medium term fiscal plans by testing the assumptions on which predictions of the plans are made. Moreover, it can monitor compliance with the plans, analyze the sustainability of public finances, and enhance communication of the EGF to the greater public. Other significant effects of enhanced IFIs would be the increase in national ownership of the EGF and transparency at national level.

The proposal includes these roles among the multiple functions attributed to Independent Fiscal Institutions and praises their utility in improving the effectiveness of the EGF. Moreover, it specifies requirements to guarantee their independence and access to data, as well as the essential functions to be executed by them. It also aims to guarantee their relevance in the public debate and foster national ownership of the plans. Conclusively, it can be stated that the proposal's consideration for IFIs has the potential of turning them into one of the strongest simplifying components of the EGF.

4.6. Multilateral Discussions

A recurrent element in the proposal is to enhance dialogue, commitment, and multilateral discussions. These would happen in the different committees of the Council as well as with relevant stakeholders such as social partners and would help ensure compliance through "peer pressure". In terms of complexity, this component is not beneficial for the EGF.

Multilateral peer pressure has demonstrated the risks to turn into an exchange of favors among countries and has shifted surveillance from a multilateral to a bilateral dimension (Thygesen et al., 2019). This set of bilateral negotiations, as opposed to open multilateral peer pressure to comply, is a catalyzer of complexity through the channel of the framework setup, since it reduces transparency significantly. Moreover, the proposal claims that the Council "is expected to, as a rule, follow the recommendations and proposals of the Commission or explain its position publicly", which bounces the margin of discretion back to the Commission. It also does not include any specific mechanisms to guarantee that surveillance stays multilateral, and that the mistakes of the current framework don't happen again.

In conclusion, there is enough evidence and too little innovation in this component of the proposal to confidently state that it would not reduce complexity in the EGF.

4.7. Escape clauses

The proposal includes a reform to the current Framework in terms of escape clauses. In contrast to the current scheme of exceptions and escape clauses, the Commission proposes "a general escape clause to deal with a severe economic downturn of the EU as a whole" allowing for a temporary deviation from the fiscal path, and a clause allowing for deviations in the case of "exceptional circumstances outside the control of the government […]".

This proposal keeps the existing successful elements like the general escape clause, which facilitated national fiscal responses during the COVID-19 crisis, while removing the credibility-eroding patchwork of exceptions that have been accumulating with time. As Feld et al. (2019), Christofzik et al (2018), and Beetsma et al. (2018) argue, this reduction in escape clauses would simplify the EGF through the 3 axes of complexity, by enhancing credibility, predictability, enforceability, and transparency. Hence, this component of the proposal is likely to enhance simplicity in the Framework.

4.8. EDP

The Excessive Deficit Procedure, as the main corrective mechanism in the current EGF, is kept in the proposal as such, with some modifications and expansions. The EDP, as the process launched when a country exceeds the 3% deficit anchor, is carried by the Council upon Commission recommendation, and its functions comprise the diagnosis of reasons behind deviations, the set of sanctions and/or corrective mechanisms to be applied, and the procedures and timeline for returning to track and abrogating the EDP.

However, there has historically been significant discretion in the launch of any EDP (Blanchard, 2021; Darvas et al., 2018) and no financial sanctions have, to date, been imposed (Kamps and Leiner-Killinger, 2019; Deutsche Bank, 2017). This has had to do, mostly, with enforceability issues (axis 3 of complexity) as the Commission resorted to the creation of ad hoc exceptions to the rules rather than the imposition of sanctions based on measures subject to revisions and the chance of the Council's disapproval of those sanctions. While there is some evidence to state that the existence of the EDP influenced member states' behavior positively even in the absence of actual enforcement (Eyraud et al., 2018), the objectives of the EDP, which is to ensure the 3% deficit anchor is abided by, have systematically been unfulfilled.

The main concern in terms of the complexity of the proposal is a direct consequence of this situation. For the most part, the proposal leaves the deficit-based EDP unchanged, but at the same time the deficit anchor is no longer the main one to keep track of, since the primary expenditure path takes on that role. Thus, there is no reason to believe that the EGF will become credible and enforceable overnight. Hence, the reform of the EDP, or lack thereof, is likely to maintain the current level of complexity.

Additionally, a new procedure is created. The debt-based procedure, which would function in a similar way to the existing EDP, would be activated when Member States with debt above 60% of GDP deviate from the agreed fiscal paths. In these situations, the Commission could impose sanctions and reforms to the Member State. This seems it could lead to a situation that is similar to the current one, as it gives the Commission ample room for discretion and maneuver in the determination of those circumstances, which increases the complexity of the framework setup (axis 1). Notwithstanding, the Commission aims to "strengthen the medium-term memory of the system" by using notional control accounts to keep track of cumulative deviations, which could, to some extent, increase accountability in the process.

In conclusion, the proposal aims to maintain a somewhat dysfunctional tool and replicate it for the debt anchor, keeping (and enhancing) the same factors that cause complexity in the EGF but in a duplicated manner. This component of the proposal is likely to increase complexity overall.

4.9. Sanctions

The proposal includes a realistic set of two measures to reform the sanctioning system. In light of the experience, where no country has ever been sanctioned though an EDP (Blanchard et al., 2021; Beetsma et al., 2018; Christofzik et al., 2018; Darvas et al., 2018), it is safe to state that the existing sanctioning EGF is not functional, and hence increases complexity. This has been due to a range of reasons, especially the fact that sanctioning a country in a situation of excessive budget deficit would further increase its deficit, and that imposing sanctions based on measures subject to revisions is technically (and politically) troublesome.

The measure suggested in the proposal with respect to sanctions is the reduction in the amounts of financial sanctions, which would go from 0.2% of GDP yearly plus a variable component, to 0.05% of GDP for a six-month period plus a variable component, based on effective action taken by the member state to return to the plausible, downward path. This would ease the process of sanctioning and enhance the corrective mechanism since lower sanctions are higher than the current de facto lack of sanctions. A system of enhanced credibility and a stronger, enforceable sanctioning system can enhance simplicity through channels 2 and 3. Conclusively, the Commission's proposals in terms of sanctions are specific, effective, and evidence-based, which sets a good start in terms of enhancing simplicity of the EGF.

However, they could go a step further by implementing reputational sanctions, such as the requirement for ministers of Member States to present in the European Parliament the explanations for their deviation and the measures to comply with the EDP recommendations. This type of sanctions, which was included in the November 2022 communication but do not appear in the legislative proposal, strongly increase the credibility of the EGF, as argued by the Bundesbank (2017) and Kopits (2018).

4.10. Institutional design

The proposal makes modest changes in terms of the institutional architecture of the EGF, especially with regards to IFIs. However, these are not enough to counter the complexity that the current institutional arrangements add to the EGF.

One of the most relevant current issues in terms of complexity is, as mentioned in Section 3, the duality in functions of the European Commission: on the one hand, it is in charge of monitoring compliance with the EGF; while on the other hand, it determines whether Member States have breached the rules of the EGF and ought to be sanctioned. This overlap of functions gives the Commission a great deal of discretion that allows it to change its evaluations of compliance to avoid negative assessments of compliance, which at the same time arises the feeling of inequality of treatment among member states. The proposal does not make significant changes in terms of separating these two functions. Furthermore, the final approval by the Council, which is also subject to political dynamics, is kept in the proposal. This increases complexity through all channels 1 and 2: by increasing the scope for discretion in the framework, and by making enforcement and sanctioning weaker.

It has been widely claimed that, in order to separate the "watchdog" from the "punisher", it would be helpful to give National Fiscal Councils and the European Fiscal Board a bigger say in determining whether countries have deviated from the established rules or not (German Government, 2022; Blanchard et al., 2021; Feld et al., 2019). While the proposal does that to a large extent, it still fails to make IFIs conclusions and determinations binding for the national governments and the Commission. This would increase national ownership of the EGF while at the same time "tie the Commission's hands". Nevertheless, the increased role of IFIs under the current proposal can still help reduce the Commission's margin of discretion to some extent.

In short, keeping the blurred line between surveillance and enforcement among the Commission and the Council makes any change in the institutional design of the EGF almost cosmetic. Due to the clearly defined competences and requirements of Independent Fiscal Institutions, the EGF may experience a moderate enhancement in simplicity. However, functional clarity and separation of roles for the European Commission and Council are still desirable and hold strong potential for simplicity.

To conclude, the legislative proposal has the potential to reduce the complexity of the EGF, mainly through the axis 1 channel, while opposing forces operate when it comes to the potential simplification through channels 2 (compliance) and 3 (enforcement). In spite of the discretion allowed by individualized plans, multilateral discussions, multiplicity of anchors, the unchanged EDP, and an unclear institutional arrangement, several pieces of the legislative proposal such as the medium-term focus, the increased ownership, the introduction of the operational indicators base on expenditures, the strengthening of IFIs, the simplified escape clauses and the reduced sanctions will contribute to the simplification of the EGF, and a better internalization of the rules at the national level.

5. Some tentative explanations

So far, we have identified the main sources of complexity in the design and application of the EGF and, particularly, that regarding the fiscal rules. This complexity goes through three axes adopting different dimensions. This Section attempts to provide some tentative explanations about the underlying causes of complexity. As expected, and given the novelty of the topic addressed here, to the best of our knowledge there are no previous contributions in the literature dealing with the broad topic of fiscal rules/governance. Consequently, we explore potential factors determining the complexity of fiscal rules using as basis other branches of the academic literature, namely in the areas of taxation, the theory of bureaucracy and international trade and health regulations.

A first avenue for explaining why the complexity has flourished in the EGF comes from the concern of taxation for vertical equity. As a matter of fact, a fundamental issue to give a rational for complexity in taxes is the gap between the desired redistribution to be achieved after applying the tax system and the actual distribution of taxable income (Paul, 1997). Indeed, the legislators are rather willing to include so many provisions as necessary in the tax code if they help to deal with heterogeneity in a more equitable manner. In other words, complexity is the price to be paid when the aim is to tax differently those who are different from an economic view, that is, the price for vertical tax equity (Kaplow, 1996).

A potentially relevant factor can be therefore identified as explanation of the complexity of European fiscal rules, namely, the purpose of managing with equity as many different economic and institutional situations as those of the Eurozone countries. Although the business cycles of the European economies are highly synchronized, the heterogeneous impacts with which affect economic activity is a kind of stylized fact across these countries (Mazzola and Pizzuto, 2020).

A number of differential features of Eurozone countries in terms of fiscal issues may well be taken into account in the design and application of EGF to guarantee some equity considerations. We are referring, for example, to the particular paths of fiscal adjustment according to the specific conditions of the countries (if bad, normal or good times); to the need for controlling the performance of automatic stabilizers in each country and the position of the economy with respect to the potential GDP, which involves complex technical estimations; to the national initiatives of structural reforms and/or investment efforts, that allow deviations from the MTOs and smooth out the fiscal adjustments required.

The consideration of all these particular issues as a way of dealing with the natural heterogeneity across Eurozone countries, in an attempt to guarantee some equitable treatment, might add complexity. But it is worth noting that such a purpose has at least two positive implications. One is that tailoring the fiscal surveillance and compliance to the specific conditions of the countries supports the feasibility of the fiscal efforts, making them affordable (Della Posta and Tamborini, 2022); otherwise, a common and simple design of fiscal consolidation processes would have high probabilities of being doomed to failure.

The other positive by-product of dealing with heterogeneity of participants in currency unions when fiscal rules are at play has been already discussed in the literature on tax complexity. Indeed, when tax complexity is not only related to administration and compliance costs (increasing them) but also to the political benefits of a better fit between tax capacity and tax liability, more tax complexity can be desirable in a context of political competition, looking for political acceptance of sacrifices (Warskett et al., 1998). As tax complexity is better accepted when the payment of taxes is defined appropriately, given the heterogeneity of taxpayers (Carnes and Cuccia, 1996), the fiscal rules involving public spending cuts and/or tax increases may be better tolerated for the political elites and the general public if some positive perceptions on its vertical equity spread over the affected ones. Although the price in terms of complexity increases.

A second avenue for finding causes of complexity in the EGF may well also applied to taxation but involving a more general interpretation in line with theory of bureaucracy (Niskanen, 1994). The central idea is that government organizations are managed not only according to the criteria of incumbent politicians but also critically by the behavior of the so-called *bureaucrats*, who are highly skilled officers with remarkable influence on the design and application of legislation.

As long the remuneration of such *bureaucrats* is not closely linked to their marginal productivity, their incentives to perform their jobs clearly aligned with the political and/or social goals of the governments are weak. Consequently, the behavior of these public officials is substantially oriented to increase their power and influence inside the organization.

In this context, the civil servants working on fiscal governance for the European Commission, Independent Fiscal Institutions and ministries of Finance in Member States are good candidates to become *bureaucrats* as those described by the theory of bureaucracy. The technical complexity of the fiscal rules concedes them a monopolistic power over the management of information and outcomes from the EGF that will be accordingly and rationally used. A way of restricting the access to this limited knowledge is to create barriers to entry in the form of complexity.

Moreover, this behavior is fairly complemented by academics through what Paul (1997) called “the cultural taste for complication”. Indeed, the elegant and elaborated theoretical models for the analysis of the fiscal policy often bring about complicated frameworks of fiscal governance, which fit accurately the need for complexity from the policy-makers. Schuck (1992) has argued that complication and technicalities appeal aesthetic for the legal scholars, and we would add for the economists as well. The current interest for the debt sustainability analysis models and their consideration for the new European fiscal rules is a recent example of that.

A third approach to the causes of complexity in the EGF can be related to the practice of (and continuously repeated) iterative process of reform in which EU’s fiscal rules have been involved in the last twenty-five years. The analogy can be found in issues such as environmental or health regulations or tariffs on imports in international trade (Krueger and Duncan, 1993).

In these areas, the complexity in legislation comes as result of the market responses to previous regulations. When specific goods and services are regulated and subject to legal provisions, markets tend to find alternative products as substitutes in order to avoid the government controls. This reacts with new regulations to cover the new businesses and their developments, aimed at improving and generalizing their fulfilment. Examples of that are the expansion of regulations in the Indian system of import licenses from consumption goods to capital goods or the extension of the Multifiber Arrangements in the mid of 1980s to new textiles and clothes.

Translating this to the case of the EGF, we start from the original idea of creating the euro. Then and now, this kind of founding moments can be considered as a top historical experiment with many unknowns since its inception. In a sense, its constitution might be addressed as a trial-and-error method. And the aforementioned market responses can be assimilated with the government reactions to the new requirements in terms of public finances.

Indeed, the reform of the Stability and Growth Pact in 2005 came after the debate on whether the non-compliances of France and Germany should be sanctioned. That was not the case and the fiscal governance was reformed. And the sense of the changes adopted, although reasonable, consisted of adding more flexibility with new legal provisions dealing with national-specific features that obviously made more complicated the EGF.

In the span 2011-2013 a new round of reforms took place, mainly aimed at accommodating the impact of the Great Recession on European public finances. These reforms, again, were not only an attempt for making the fiscal governance more effective in terms of sustainability but also a way of treating with the frequent non-compliances of participants. In a sense, the multiple deviations from the normative framework can be partially interpreted as the search of substitutes and market responses above mentioned for avoiding regulations. The reaction by the legislators and the policy-makers had, again, a direct consequence: a clear increase in the complexity of fiscal rules.

Nowadays, we are involved in a new wave of reforms. Once again, one of the underlying reasons is to enhance the fulfilment of the EGF. This time might be different because the legislators and the European Commission are aware that their response to an EGF that is generally regarded as not having worked, does not have to be a more complicated framework. One of challenges, however, is that this aim is placed in a context of remarkable uncertainty, and it is well known that the attempts to reduce it usually feed the complexity of regulations (Paul, 1997).

Having put on the table some potential explanations behind the complexity of EGF, one of the interesting questions that arise is how, if any, the optimal level of complexity can be reached. Certainly, a theoretical model would be needed for addressing this issue. While this is out of the scope of this paper, we can provide some insights on some of its key pieces.

One is that, although complexity has costs that spread over a number of dimensions, it is also associated with benefits related to the reduction of uncertainty or the differential treatment of specific cases and situations. The marginal costs and benefits linked to both circumstances will be functions of the level of complexity, with likely non-linear patterns driving the relationships.

The other issue to be taken into consideration when analyzing the optimal level of complexity is how dependent this optimality is from the supranational dimension in which the EGF is framed. In other words, one may wonder to what extent the complexity of the framework would be higher when taking the national level as the reference point (as in April's legislative proposal by the European Commission) compared to an alternative in which supranational elements would have been introduced (such as an EU-wide cyclical fiscal capacity). While

6. Concluding remarks

The issue of complexity within the EGF has got popular with time, as different reforms were passed and accumulated. Since the post-Sovereign Debt Crisis, there has been a common claim among the academia and the media that complexity in the EGF is too high, what is making it increasingly ineffective.

This article has built on the existing work regarding complexity in the EU EGF to shed some light on the question of how to simplify it. We have built a method of defining and analyzing complexity based on three "axes of complexity", one related to the Framework Setup: transparency and discretion; one related to the compliance side: credibility, predictability, and internalization; and one related to the enforcement side: sanctioning and communication. In section 2, the main sources of complexity have been extracted from a database of more than 200 papers, and assessed along the conceptual approach of the three axes. Section 3 has analyzed the different proposals for the simplification of the EGF, and Section 4 has dissected and assessed the April 2023 legislative proposal by the European Commission. Section 5 has offered some tentative rationalizations taken from other areas of research to explain why the complexity has flourished in the EGF.

After considering the three axes, and how different proposals increase complexity, we can state that all possible reforms fall short in terms of simplifying the framework through the compliance axis: while a reduction in transparency and improvement of sanctioning and communication seem feasible with the proposals at hand, more needs to be done in terms of enhancing credibility, predictability, and internalizing of the rules by policy makers. Otherwise, any reform of the EGF will be incomplete in what comes to tackling complexity.

The legislative proposal by the European Commission represents an opportunity to relaunch the EGF and simplify it. This would have positive effects on its effectiveness, transparency, enforcement, and compliance. While some of its current components are steps in the right direction, more efforts remain to be done, especially with relation to the institutional design of the EGF, the structural deficit anchor, Excessive Deficit Procedures, the enforcement of medium-term targets, or the role of bilateralism and discretion. Overall, our assessment indicates that the proposal simplifies elements along the first axis, but provides less clear gains in terms of complexity along the two other ones.

The success of this reform is crucial for the continuation of the integration process of the European Union. As the COVID-19 crisis and the Russian invasion of Ukraine, among other recent events, have highlighted, a fully functional fiscal governance at the European level and the possibility to launch a European Fiscal Policy will be key for enduring common shocks, fixing spatial inequalities, facing the digital and green transitions, and working with the challenge of a rapidly aging population, while guaranteeing the prosperity of the continent and its people.

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ANNEX II: Direct quotations from the literature on "complexity".

SEDIMENTED REFORMS - PATCHWORK OF RULES

- "policies are monitored using a multitude of indicators, which inevitably cause conflicting signals; the assessment of compliance is therefore a judgement-based approach that weighs the pros and cons of the different indicators." (Beetsma et al., 2018)
- "result of several reforms throughout the years, which gradually increased the complexity of the rules" (Beetsma et al., 2018)
- "the present rules-based system of the Stability and Growth Pact (SGP) has become nearly unmanageable due to its complexity, and the constant addition of exceptions, escape clauses, and other factors. This complexity makes the fiscal framework non-transparent and difficult for policymakers to internalise, which in turn has contributed to non-compliance. This has become the norm, while fiscal policy both in member states and at EU level became increasingly pro-cyclical" (Darvas et al., 2018)
- "European fiscal rules have become overly complex, which hinders their internalisation by policymakers and their acceptance by the wider public." (Darvas et al., 2018)
- "The relatively simple initial structure of the SGP later underwent substantial revisions that increased its complexity. The first such reform, carried out in 2005, introduced the concept of "structural balances" and extended the deadline for correcting excessive deficits." (Regling, 2022)
- "In 2015, further changes made fiscal adjustment requirements more flexible. As a result of the increasing degree of sophistication of the SGP – driven by the desire to make the framework more adaptable to countries' specific circumstances – the rules have become more complex, which has reduced the overall transparency of the framework." (Regling, 2022)

- “the patchwork of rules and exceptions, resulting from the political compromises of the past two decades, have made the fiscal framework confusing, subjective, and arbitrary in its enforcement.” (Ilzetzki, 2021)
- “Improved real-time properties and avoidance of revenue windfalls being spent in good economic times was the idea behind the introduction of the expenditure rule with the six-pack regulations in 2011. However, as this rule came on top of the structural balance and was accompanied by an overall assessment that provided a large scope of discretion, the fiscal framework became even more complex.” (Kamps and Leiner-Killinger, 2019)
- “The present rules-based system of the Stability and Growth Pact (SGP) has become nearly unmanageable due to its complexity, and the constant addition of exceptions, escape clauses, and other factors.” (Wieser, 2018)
- “The outcome is an excessively complex set of rules that few understand and where the many elements of discretion are less used to tackle economic contingencies, but to solve problems that lie outside the realm of fiscal policy making.” (Beetsma and Larch, 2018)
- “Past reforms have usually focused on improving individual fiscal rules, taken in isolation and in circumstances where specific aspects of the framework were deemed counterproductive. Such a process of incremental and partial amendments creates overlaps, inconsistencies, and confusion. It also undermines the credibility of the framework by fueling the perception that rules can be changed whenever they are inconvenient. The problems associated with the multiplication of rules have been widely documented in the context of the European fiscal framework.” (Eyraud et al., 2018)
- “Since overly simple rules are too rigid, provisions were progressively added for various contingencies, such as adjusting the rules for the economic cycle. But this enhanced flexibility made rules more difficult to enforce.” (Eyraud et al., 2018)
- “The rules were repeatedly violated, however, arguably because they were too stringent in some settings (such as forcing a country to consolidate in the middle of a recession), and not stringent enough in others (e.g., failing to sufficiently contain expenditure rises during the economic boom of the 2000s). A sense that

the rules were both not sufficiently contingent and hard to enforce led to a series of modifications and steadily more complex rules." (Blanchard et al., 2021)

- "In essence, the reformed version consists of four fiscal rules that are meant to clear up ambiguities in the initial version: besides the deficit reference value, the structural budget balance or surplus specified as a medium-term objective, the path of convergence to the debt reference value, and the expenditure benchmark. However, the revised rules seem excessively fine-tuned and overidentified, far beyond requirements of objectivity and automaticity" (Kopits, 2018)
- "The current European framework implemented a complicated system of adjustments to the excessive deficit procedure– so-called alpha- and beta-corrections – in an attempt to take this into account. This has increased the complexity of an already cumbersome system even more." (Feld et al., 2019)
- "Over time, the fiscal rules in Europe have become more complex and opaque. The evolution process followed a long and winding road. Changes to the original setup of the fiscal framework were frequent and substantial." (Gaspar, 2020)
- "An evident reason for this complexity is sedimentation over time. The present Pact is a legacy of successive reforms which have added new features incrementally." (Carnot et al., 2018)
- "Moreover, the lack of simplicity generated by this over-specification turns against its proclaimed objective of predictability." (Carnot et al., 2018)
- "While the intention of these reforms was to increase the efficacy of the SGP, they triggered a strong increase in complexity and flexibility in implementation, hence, effectively counteracting its initial motivation. The multitude of coexisting rules which were not necessarily enforced to the same degree and the continuous addition of exemptions to the SGP resulted in a very low level of transparency." (Christofzik et al., 2018)
- "the increasingly complex maze of fiscal rules" (Raudla and Douglas, 2021)

UNOBSERVABLE INDICATORS

- “the transparency of the framework has decreased. The use of multiple indicators, some of which unobservable, has increased the scope for discretion and judgement” (Beetsma et al., 2018)
- “The first source of complexity is the reliance on unobservable indicators of fiscal performance” (Thygesen et al., 2019)
- “Furthermore, the rules suffer from substantial measurement problems. While the structural budget balance is a nice theoretical concept, it is not observable and its estimation is subject to massive errors. Structural balance measurement depends on output gap (the difference between actual output and potential output) estimates, which are themselves very uncertain.” (Darvas et al., 2018)
- “As we have argued, a large part of this increased adaptation of the rules over the years relates to a more or less persistent dissatisfaction with the structural balance and the underlying measurement of the output gap as the core variable of EU fiscal surveillance” (Kamps and Leiner-Killinger, 2019)
- “estimates of the (unobservable) output gap, which are based on a methodology commonly agreed between the European Commission and EU Member States, have proven to be relatively unreliable, despite continuous methodological amendments. They are often strongly revised ex post and tend to be procyclical” (Kamps and Leiner-Killinger, 2019)
- “Moreover, the relevant calculations are extremely complex and, in conjunction with the structural balance, tend to provide additional possibilities of exculpation.” (Deutsche Bundesbank, 2017)
- “A case in point is the structural balance rule, which was introduced in Chile in 2001 and in the European supranational fiscal framework in 2005. The rule is meant to provide more policy room during cyclical downturns (by making the constraint less binding) but it is more difficult to operate and implement. In addition, prior to the GFC, enforcement and monitoring procedures were relatively underdeveloped.” (Eyraud et al., 2018)
- “On simplicity, the operational debt rule is superior in design, replacing the three SGP rules, obviating real-time estimates of potential GDP and of the output gap, as well as of tax and expenditure elasticities, to calculate the structural budget

balance. Greater transparency obtains not only by eliminating the uncertainty surrounding such estimates" (Kopits, 2018)

- "The rule has a clear theoretical rationale. The key idea is that public finances should be close to balance over the cycle. Yet, it is admittedly difficult to implement in year by-year monitoring due to complexities in measurement." (Feld et al., 2019)
- "assessment often changes when the perspective changes from real-time data to ex-post data. This phenomenon reflects its reliance on output-gap estimates. They are indispensable for calculating the structural deficit, but unfortunately they are typically prone to large revisions as better data become available. Consequently, assessments based on the concept of the aggregate output-gap can lead to significant policy errors." (Feld et al., 2019)
- "the growing focus on cyclically adjusted balances (CAB) intended to deal with the criticism that nominal budget targets alone can promote unduly pro-cyclical policies. But the result of addressing this criticism has been a new problem: conflicts over the measurement of the CAB and of adjustment efforts" (Schuknecht, 2004)
- "The design of the expenditure rule matters as well. As will be shown, the EB does not present the characteristics of being simple, transparent, consistent and enforceable that an ideal fiscal rule should contain according to (Kopits and Symansky 1998). There is already some evidence of the EB's design and governance flaws: not a single significant deviation procedure was launched due to non-compliance with the EB, despite some euro area member states showed deviations from the required benchmark larger than the significance threshold, even after some ad hoc changes made in the calculation of the benchmark by the Commission in the recent years." (Marinheiro, 2021)
- "the structural balance estimates are frequently revised, which has led to an increasing criticism on its use for fiscal surveillance purposes." (Marinheiro, 2021)

- “To ensure some consistency between such two indicators the EB calculation had to include elements of the SBB estimation, including non-observable components at the cost of increasing complexity” (Marinheiro, 2021)
- “This holds true especially at the European level, where the fiscal framework has been extended substantially with more rules, while existing rules have become increasingly complicated. In particular, this is due to the consideration of cyclically adjusted figure and the introduction of a multitude of flexibility and escape clauses.” (Christofzik et al., 2018)
- “Due to the conceptual and methodological complexity that underlies the calculation of structural balance, we would expect difficulties in communicating the information related to structural balance to the general public.” (Raudla and Douglas, 2021)
- “Complexity manifests itself when it comes to the treatment of structural balance figures. It is critical for IFIs to fully comprehend the national and/or EU methodology used to produce such figures as well as their relative strengths and weaknesses, in order to take an informed stance in the interpretation of the underlying fiscal developments. Beyond the methodological issues raised by the cyclical adjustment, in a number of cases, the unambiguous identification of one-off measures also adds to the difficulty of the exercise.” (Jankovics and Sherwood, 2017)

DISCRETION BY THE EUROPEAN COMMISSION

- “the rules are too complex and this has hampered their effectiveness; indeed, there is a common perception that the rules are applied unevenly” (Beetsma et al., 2018)
- “The criterion of fragility introduced an element of economic judgement, which in the current context opened the door to more political discretion” (Thygesen et al., 2019)
- “The Commission has added to its scope for discretion in taking particular national circumstances into account. The accumulation of the increasingly specific decisions has been codified into an extended rule book.” (Thygesen et al., 2019)

- “elaborates on the complexity of rules that “as the European Commission has recognised, the ad-hoc 'flexibility' introduced since the euro crisis has made the SGP too complex to be an accountability rule, not only because it's more difficult to assess compliance, but also because makes the SGP even less credible.” (Ilzetzki, 2021)
- “the EU fiscal framework has become more complex over the years with the Commission’s and the Council’s intention of “filling gaps in surveillance, providing stronger economic underpinnings, strengthening enforcement and adapting the rules to new circumstances”” (Kamps and Leiner-Killinger, 2019)
- “the Commission has, on several occasions in recent years, refrained from proposing financial sanctions in cases in which the sanctions regulation foresees such sanctions as a rule. Drawing on its leeway, for example, the Council effectively did not sanction Portugal and Spain in 2016 even though these countries had previously been assessed as not having taken effective action in response to the EDP recommendations.” (Kamps and Leiner-Killinger, 2019)
- “The possibilities to conform with the rules while deviating substantially and lastingly from the budgetary objective are considerable, and the Commission has broad discretionary leeway in this respect. Thus, no euro area country has to date been judged to have deviated significantly from the adjustment path not even when the structural deficit ratio increased.” (Deutsche Bundesbank, 2017)
- “The outcome is an excessively complex set of rules that few understand and where the many elements of discretion are less used to tackle economic contingencies, but to solve problems that lie outside the realm of fiscal policy making.” (Beetsma and Larch, 2018)
- “In the quest for greater flexibility, a number of exemptions, wide open to interpretation by the European Commission, now qualify the rules. Thus the initial division of roles between the Commission as the technical arm, charged with analysis and monitoring compliance, and the European Council as the political decision-maker, responsible for exercising moral suasion and levying sanctions for non-compliance, has been blurred. Yet violations of the rules

without penalty continue unabated. All told, greater complexity has led to diminished transparency and weaker enforcement." (Kopits, 2018)

- "The discretion applied by the Commission in autumn 2003 by making the correction of excessive deficits contingent on growth also arose from economic arguments (as discussed in more detail below). But this step resulted in conflicts, confusion and growing doubts about the constraining effect of fiscal rules as it was felt that correcting excessive deficits was increasingly becoming an issue of discretion rather than automaticity" (Schuknecht, 2004)
- "In sum, these amendments to the SGP substantially increased the margin for discretion of the European Commission and reduced the transparency of the application of the SGP drastically. This is especially evident in the context of the exemptions for investment and structural reforms. While their economic rationale is to prevent reluctance to necessary reforms due to their fiscal costs, their inclusion into the SGP comes at the expense of imprecise definitions of key dimensions hereby permitting the circumvention of fiscal rules." (Christofzik et al., 2018)
- "The whole mechanism is extremely complex and ambiguous in its implementation (...) the application of the procedure of the SGP damages the credibility of national fiscal authorities, providing an improper assessment of their discretionary policy." (Coricelli, 2004)
- "When deciding whether to launch an EDP, the Council has substantial leeway to find special circumstances or accept a temporary breach, for example. And, obviously, the rules can be suspended, as has been the case since March 2020." (Blanchard et al., 2021)
- "Flexibility was also used to avoid opening an excessive deficit procedure (EDP) for high-public debt countries not complying with the 1/20th debt reduction rule. This rule should be met three years after closure of a previous EDP. Though Italy left its EDP in 2013 and Belgium its in 2014, these two countries did not meet the debt-reduction criteria when the three-year period after these dates elapsed. Even the May 2018 conclusion of the Commission concludes that the two countries continue to miss the debt reduction benchmark in 2018 and 2019 according to

both the fiscal plans of the respective governments and the forecasts of the Commission, yet the Commission did not propose applying the EDP to them." (Darvas et al., 2018)

EXEMPTIONS AND ESCAPE CLAUSES

- "complicated system of flexibility arrangements allows member states to negotiate reductions in their fiscal requirements" (Beetsma et al., 2018)
- "The Commission has added to its scope for discretion in taking particular national circumstances into account. The accumulation of the increasingly specific decisions has been codified into an extended rule book." (Thygesen et al., 2019)
- "the present rules-based system of the Stability and Growth Pact (SGP) has become nearly unmanageable due to its complexity, and the constant addition of exceptions, escape clauses, and other factors" (Wieser, 2018) also cited by Darvas et al. (2018)
- "Second-generation rules reflect efforts to enhance both flexibility and enforceability—at the expense of simplicity. Post-GFC reforms have greatly expanded the flexibility provisions already embedded in first-generation rules. For instance, new escape clauses tend to be more detailed, cover a broader range of circumstances, and provide some guidance on the path back toward the numerical limits." (Eyraud et al., 2018)
- "Complexity of more flexible rules. Countries have progressively moved away from simple rules expressed in nominal terms, toward more complex rules that include multiple clauses to allow thresholds to be adjusted in special circumstances. The trend toward complexity is not new but it has gained momentum during the past decade. The need to make rules more flexible has been the main factor behind their growing sophistication." (Eyraud et al., 2018)
- "While in general terms the design of each rule has its rationale, their interaction seems questionable, resulting in likely overidentification and inconsistencies. An added complication is the proliferation of exemptions—to accommodate structural reforms, pensions, investment, and expenditure related to refugees and

earthquakes or other unusual events—and country-specific circumstances that need to be resolved in implementation.” (Kopits, 2018)

- “There are many different rules in place at the national and supranational level, and affairs are made even more intricate by a multiplicity of exceptions and escape clauses” (Feld et al., 2019)
- “In the present Pact, there are multiple substantive rules (headline balance, structural balance, public expenditure, debt), mirrored by different indicators for measuring compliance with them and including several clauses allowing for derogations. The implementing procedures (preventive arm and corrective arms of the Pact, ex ante and ex post assessments) are equally complex.” (Carnot et al., 2018)
- “While understandable from a risk sharing perspective, more generous escape clauses that inevitably increase discretion under the excessive deficit procedure risk to make the 3% limit a moving target. Without clear time limit, the deficit limit would become non-credible, the anchor of expectations would be lost and sustainability would be perceived to be more at risk.” (Schuknecht, 2004)
- “This holds true especially at the European level, where the fiscal framework has been extended substantially with more rules, while existing rules have become increasingly complicated. In particular, this is due to the consideration of cyclically adjusted figure and the introduction of a multitude of flexibility and escape clauses.” (Christofzik et al., 2018)

LENGTH OF VADE MECUM

- “The Commission has added to its scope for discretion in taking particular national circumstances into account. The accumulation of the increasingly specific decisions has been codified into an extended rule book.” (Thygesen et al., 2019)
- “every presumed breaking of the fiscal rules has resulted in further refinement of the rules, reflected in the length of the Vade Mecum, which has grown to 220 pages.” (Darvas et al., 2018)

- “The complexity of the fiscal rule is perhaps best illustrated through the European Commission’s Vade Mecum (Handbook) on the SGP, meant to “enhanc[e] the clarity of the strengthened fiscal (and economic) governance toolbox,” but running to over 100 pages.” (Izetzki, 2021)
- “Every presumed breaking of the rule book has resulted in further refinement of our rules. The Vade Mecum now has 244 pages. Granularity does not increase discipline.” (Wieser, 2018)
- “In an effort to cover all possible cases of deviation from the basic rules, whether justified or not, the Pact has become so complex in both statutes and process that the Commission has been compelled to issue annually a 200-page technical manual for policymakers and analysts.” (Kopits, 2018)
- “The European Commission’s Vade Mecum, the official handbook on the European fiscal framework, needs more than 200 pages to explain the calculations employed to determine whether a country is complying with the rules (European Commission 2018).” (Feld et al., 2019)
- “However, a common rallying cry of the critics is excessive complexity. This feature is undeniable. Simply finger-pointing to the number of pages of legal and interpretative documents, which run to the several hundreds, has become the shortcut proof for this situation.” (Carnot et al., 2018)
- “the Vade Mecum on the Stability and Growth Pact (SGP), needs more than 200 pages to document and explain the application of the rules (European Commission, 2018). This precludes an effective oversight by the public and the media, which is essential to maximise the constraining effect of rules.” (Christofzik et al., 2018)

BILATERAL NEGOTIATIONS

- “complicated system of flexibility arrangements allows member states to negotiate reductions in their fiscal requirements” (Beetsma et al., 2018)
- “increasing bilateral implementation with the associated weakening of the transparency and the multilateral peer pressure element in the rules, supplied by

other Member States. We regard this source of complication as both a consequence of and as the most serious concern in the current implementation of the fiscal rules." (Thygesen et al., 2019)

- "bilateral deals between the European Commission and EU countries are not an acceptable way of figuring out the optimal compromise between fiscal adjustment, output stabilisation, and investment." (Zettelmeyer, 2022)
- "There is an impression that the interpretation of the rules is partly the outcome of a political negotiation process. The rules appear to be adapted to the fiscal policy of the individual countries, rather than the other way round." (Deutsche Bundesbank, 2017)
- "Bilaterally negotiated individual arrangements for applying the rules are not the way forward when it comes to improving the common fiscal framework in a way that increases its transparency, gives it more binding force, and makes it more effective." (German Government, 2022)
- "it clearly emerges that the current framework of evaluation of fiscal policy in the EU leaves ample room for arbitrary interpretations and endless debate between national authorities and the EC." (Coricelli, 2004)

COMPLETE CONTRACT PARADIGM

- "There may even have been at some stage a tendency to cover every conceivable situation through detailed rules, therefore putting national fiscal policies on something of an autopilot. The world does not work this way, politics even less so." (Wieser, 2018)
- "But even a complex rule is very unlikely to adequately capture the relevant contingencies, in part because many are impossible to predict ex ante." (Blanchard et al., 2021)
- "it seems unfeasible to codify all the possible future economic conditions into a rule. Thus, any fiscal rule that specifies ex-ante some formulae or quantitative criteria is likely to be inadequate ex-post" (Blanchard et al., 2021)

- “Some observers doubt simplification will work; they think simplification is an illusion, because there are too many details and special circumstances (the cycle, one-off measures, and much more) that need to be taken into account in order to produce sensible results and ensure strict cross-country consistency (Bini-Smaghi, 2018). The problem with this view is that it is stuck in the fallacious paradigm of the complete contract. (Beetsma and Larch, 2018).
- In order to capture all kinds of possible situations while maintaining a sufficient degree of predictability, the tendency has been to put in place incremental, detailed ex ante specifications in an elusive quest for a “complete contract” […] Moreover, the lack of simplicity generated by this over-specification turns against its proclaimed objective of predictability. (Carnot et al., 2018)
- “In an effort to cover all possible cases of deviation from the basic rules, whether justified or not, the Pact has become so complex in both statutes and process that the Commission has been compelled to issue annually a 200-page technical manual for policymakers and analysts.” (Kopits, 2018)

MORE THAN ONE ANCHOR

- “Anchors imply overlapping fiscal requirements that occasionally offer conflicting signals: a structural adjustment and a target for debt reduction.” (Beetsma et al., 2018)
- “inconsistency between the 3 percent deficit rule and the 60 percent debt rule in the European supranational framework. When there is overlap, countries have to comply with the most binding rule each period, which may be tricky and suboptimal.” (Eyraud et al., 2018)
- “In the present Pact, there are multiple substantive rules (headline balance, structural balance, public expenditure, debt), mirrored by different indicators for measuring compliance with them and including several clauses allowing for derogations. The implementing procedures (preventive arm and corrective arms of the Pact, ex ante and ex post assessments) are equally complex.” (Carnot et al., 2018)

INDEPENDENT FISCAL INSTITUTIONS AT NATIONAL LEVEL

- "Independent fiscal institutions provide additional checks and balances to promote greater accountability and transparency" (Caselli et al., 2022)
- "Transfer surveillance to well-equipped national fiscal councils, coordinated and overseen by a European Fiscal Council." (Darvas et al., 2018)
- "The fiscal framework we propose must be complemented by strong national and European institutions: economic analysis and monitoring should occur to a significant extent at the national level – by independent fiscal institutions – under the oversight of a euro-area fiscal institution. The fiscal debates should be partly renationalised in order to prevent the use by national governments of micromanagement by Brussels as a scapegoat and the continuous conflicts that pit governments against each other." (Darvas et al., 2018)
- "The primary argument for fiscal councils or norms was that fiscal rules have become increasingly complex and difficult to monitor. Councils would arbitrate whether countries either followed fiscal rules or more vaguely maintained good fiscal practices." (Ilzetzki, 2021)
- "Beyond this, the current practice of gauging the output gap based on a commonly agreed methodology could be amended by more country-specific information. This could enhance ownership among governments compared to the status quo. Where truly independent national fiscal Councils could be given a say on the measurement of output gaps and structural budget balances at the national level" (Kamps and Leiner-Killinger, 2019)
- "Monitoring compliance with the fiscal rule should be devolved to independent national fiscal watchdogs, supervised by an independent euro area-level institution, as elaborated below." (Bénassy-Quéré et al., 2018)
- "well-staffed institutions that increase critical transparency over national fiscal policies" (Wieser, 2018)
- "Strengthening national fiscal frameworks, including through a greater role of Independent Fiscal Institutions, could also help to bring fiscal rules closer to

citizens and thereby increase the reputational costs of non-compliance." (Government of the Netherlands and Government of Spain)

- "Fiscal councils can also mitigate the complexity inherent in certain rules through direct inputs, such as estimates of structural balances (for example, in Chile), or public assessment of compliance with over-the-cycle rules (for example, in Sweden)." (Eyraud et al., 2018)
- "Rather than inventing a complex system of rules to determine what is excessive, an independent body – either a national IFI or the EC, or both in sequence – should analyse the fiscal position of members using stochastic debt sustainability analysis, based on criteria and procedures laid out in EU secondary legislation." (Blanchard et al., 2021)
- "According to this logic, fiscal councils could be made fully independent. The European Fiscal Board could also be made fully independent and be placed at the center of a system of independent national fiscal councils. To repeat: this could be a good way to respond to the increased complexity arising from the constraints on policy interest rates and economic transformation associated with the green and digital transitions." (Gaspar, 2020)
- "There have also been proposals of independent fiscal councils at the national and/or EU level that provide information and an independent assessment (e.g., von Hagen/Harden, 1994, Fatas et al, 2003; Wyplosz, 2002). Such councils may be desirable as their assessments facilitate financial market and public monitoring of fiscal performance. Thereby, they would constitute an additional pressure point for compliance with the rules." (Schuknecht, 2004)
- "simplifying the indicator and taking into account the creation of Independent Fiscal Institutions (IFIs) in the Member States, simultaneously improving its transparency and enforceability." (Marinheiro, 2021)
- "The assessment of these escape clauses should rather be performed by independent monitoring institutions. Such institutions also have the purpose and responsibility to point out worrying developments. Especially the recently introduced national fiscal councils have considerable potential for increasing transparency and the accountability of governments. However, when comparing

their mandate, endowment with executive rights and their factual independence, they differ substantially.” (Christofzik et al., 2018)

- “Appropriate legal independence safeguards and robust access-to-information clauses are needed to ensure that IFIs can play an effective watchdog function in the domestic arena.” (Jankovics and Sherwood, 2017)
- “One of the main policy implications from the literature on the reliability of macroeconomic forecasting is that IFIs’ involvement in the process should contribute to less biased estimates […] the years with a functioning IFI could be characterised by a more prudent forecasting approach on average.” (Jankovics and Sherwood, 2017)

SINGLE FISCAL ANCHOR

- “The proposed new framework relies on a single fiscal anchor: the 60% reference value for the debt ratio.” (Beetsma et al., 2018)
- “We then present our main reform proposal of simplification: to move to a rules-based framework with one long-term anchor, one policy indicator and a general escape clause” (Thygesen et al., 2019)
- “Unlike the cyclically adjusted deficit, public expenditures are observable in real time and are directly controlled by the government. Furthermore, expenditure rules embed countercyclical stabilisation because cyclical revenue increases have no effect on the expenditure ceiling – inducing stronger fiscal discipline in good times compared to the current rules – and because they do not require cyclical revenue shortfalls to be offset by lower expenditure. This translates into a two-pillar approach, consisting of a long-term target debt level, such as 60 percent of GDP, and an expenditure-based operational rule to achieve the anchor.” (Darvas et al., 2018)
- “Such proposals – encompassing expenditure rules with a clear debt anchor – would indeed address many of the shortcomings related to the structural balance as the main surveillance indicator.” (Kamps and Leiner-Killinger, 2019)
- “Second, replacing the current system of fiscal rules focused on the ‘structural deficit’ by a simple expenditure rule guided by a long-term debt reduction target.

The present rules both lack flexibility in bad times and teeth in good times. They are also complex and hard to enforce, exposing the European Commission to criticism from both sides. They should be replaced by the principle that government expenditure must not grow faster than long-term nominal output, and should grow at a slower pace in countries that need to reduce their debt-to-GDP ratios. A rule of this type is both less error-prone than the present rules and more effective in stabilising economic cycles, since cyclical changes in revenue do not need to be offset by changes in expenditure." (Bénassy-Quéré et al., 2018)

- "Almost all proposals put forward in the recent past, including by the European Fiscal Board are organised around the same basic elements: one main objective (reducing government debt), one operational rule (capping expenditure growth, for example), and a parsimonious use of escape clauses (to account for unforeseen contingencies). Some observers doubt simplification will work; they think simplification is an illusion, because there are too many details and special circumstances (the cycle, one-off measures, and much more) that need to be taken into account in order to produce sensible results and ensure strict cross-country consistency. The problem with this view is that it is stuck in the fallacious paradigm of the complete contract." (Beetsma and Larch, 2018)
- "The system of rules should be anchored by a debt objective to preserve fiscal sustainability. The fiscal rule framework should define an explicit fiscal anchor in terms of a specific debt ceiling." (Eyraud et al., 2018)
- "A simpler model would be to rely on a debt rule serving as fiscal anchor" (Eyraud et al., 2018)
- "Ideally, the simplest approach should integrate all present rules into a single fiscal rule that aims at public debt sustainability, the ultimate goal of the Pact, and yet is under the operational control of the policymaker in real time." (Kopits, 2018)
- "Three main directions: first, consolidation of preventive and corrective arms, second, shifting to a single fiscal anchor and a single operational target, and third, establishment of a central fiscal capacity" (Gaspar, 2020)

- “Shifting to a single fiscal anchor and a single operational target could serve the dual objective of fiscal sustainability and simplicity.” (Gaspar, 2020)

SINGLE OPERATIONAL RULE

- “We then present our main reform proposal of simplification: to move to a rules-based framework with one long-term anchor, one policy indicator and a general escape clause.” (Thygesen et al., 2019)
- “that moving to a single and better-defined indicator would reduce the risk of making wrong policy calls” (Thygesen et al., 2019)
- “nominal expenditures should not grow faster than long-term nominal income, and they should grow at a slower pace in countries with excessive debt levels. Our simulations suggest that this rule would help reconcile fiscal prudence and macroeconomic stabilisation of the economy.” (Darvas et al., 2018)
- “Recent contributions advocate the introduction of a fiscal rule based on the growth rate of public expenditure.” (Darvas et al., 2018)
- “Such proposals – encompassing expenditure rules with a clear debt anchor – would indeed address many of the shortcomings related to the structural balance as the main surveillance indicator.” (Kamps and Leiner-Killinger, 2019)
- “Second, replacing the current system of fiscal rules focused on the ‘structural deficit’ by a simple expenditure rule guided by a long-term debt reduction target. The present rules both lack flexibility in bad times and teeth in good times. They are also complex and hard to enforce, exposing the European Commission to criticism from both sides. They should be replaced by the principle that government expenditure must not grow faster than long-term nominal output, and should grow at a slower pace in countries that need to reduce their debt-to-GDP ratios. A rule of this type is both less error-prone than the present rules and more effective in stabilising economic cycles, since cyclical changes in revenue do not need to be offset by changes in expenditure.” (Bénassy-Quéré et al., 2018)
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- "The transformation of medium-term objectives into a simple expenditure rule would also contribute to make rules more comprehensible, easier to enforce and more countercyclical, especially if coupled with well-defined escape clauses for extraordinary events outside of governments' control." (Government of the Netherlands and Government of Spain, 2022)
- "In principle, rules that bind ex post should concern fiscal indicators well under the control of policymakers, such as an expenditure growth ceiling." (Eyraud et al., 2018)
- "Three main directions: first, consolidation of preventive and corrective arms, second, shifting to a single fiscal anchor and a single operational target, and third, establishment of a central fiscal capacity" (Gaspar, 2020)
- "Shifting to a single fiscal anchor and a single operational target could serve the dual objective of fiscal sustainability and simplicity." (Gaspar, 2020)
- "we argued that a more suitable rule for an enlarged and more heterogeneous EU would be a simple expenditure rule, according to which expenditures would grow at the same rate as that of potential output." (Coricelli, 2004)

GENERAL ESCAPE CLAUSE

- "A general escape clause should replace the complex system of waivers and flexibilities currently embedded in the rules." (Beetsma et al., 2018)
- "We then present our main reform proposal of simplification: to move to a rules-based framework with one long-term anchor, one policy indicator and a general escape clause" (Thygesen et al., 2019)

- “Almost all proposals put forward in the recent past, including by the European Fiscal Board are organised around the same basic elements: one main objective (reducing government debt), one operational rule (capping expenditure growth, for example), and a parsimonious use of escape clauses (to account for unforeseen contingencies). Some observers doubt simplification will work; they think simplification is an illusion, because there are too many details and special circumstances (the cycle, one-off measures, and much more) that need to be taken into account in order to produce sensible results and ensure strict cross-country consistency. The problem with this view is that it is stuck in the fallacious paradigm of the complete contract.” (Beetsma and Larch, 2018)
- “The transformation of medium-term objectives into a simple expenditure rule would also contribute to make rules more comprehensible, easier to enforce and more countercyclical, especially if coupled with well-defined escape clauses for extraordinary events outside of governments’ control.” (Government of the Netherlands and Government of Spain, 2022)
- “Establish clear criteria for the potential future use of the general escape clause.” (German Government, 2022)
- “Specific criteria for invoking the general escape clause and clear procedures for (de)activating the clause would increase transparency and predictability for member states as well as market participants.” (German Government, 2022)
- “A useful distinction can be made between predictable events that invariably occur after some time—such as business cycle fluctuations—and unpredictable realizations of fiscal risk. The latter must be addressed with well-defined escape clauses, whereas the former can be handled with an adequate definition of the fiscal indicators subject to a numerical limit.” (Eyraud et al., 2018)
- “flexibility can be allowed in simpler ways, for example, by using clear escape clauses.” (Eyraud et al., 2018)
- “An appropriately designed rule would mean that no exceptions and just two escape clauses would be necessary: one for natural disasters and one for exceptionally severe economic crises. A decision on the latter could be based on a specific set of economic indicators.” (Feld et al., 2019)

- “Together with a significant reduction in exemptions and escape clauses as well as less discretion in the imposition of sanctions, the proposal increases transparency and efficacy of fiscal rules at the European level. Another important measure in this regard is the reduction of exemptions and escape clauses.” (Christofzik et al., 2018)

INSTITUTIONAL DESIGN

- “Two steps that would redraw the balance between the Commission and the Eurogroup would be to abandon the RQMV and to nominate a full-time President of the Eurogroup who is neither a national Finance Minister nor a member of the Commission.” (Thygesen et al., 2019)
- “by according more autonomy to the Commission’s expert staff in DG ECFIN in secondary legislation. Concretely, DG ECFIN would conduct a fully independent analysis accompanied by policy conclusions that would be made public.” (Thygesen et al., 2019)
- “An important institutional suggestion in the paper deals with separating the roles of ‘surveillance watchdog’ and political decision maker within the Commission, or even by moving the watchdog out of the house. (...) Most important is transparency of what the rules require in terms of adjustment to fiscal policies.” (Wieser, 2018)
- “The role of the watchdog (‘prosecutor’) should be separated from that of the political decision-maker (‘judge’) by creating an independent fiscal watchdog within the European Commission (for example, a special Commissioner) or, alternatively, by moving the watchdog role outside the Commission (though this would require an overhaul of the treaties).” (Bénassy-Quéré et al., 2018)
- “Review the possibility of making the EFB institutionally and organizationally independent from the European Commission. This could facilitate more consistent implementation of the rules.” (German Government, 2022)
- “Rather than inventing a complex system of rules to determine what is excessive, an independent body – either a national IFI or the EC, or both in sequence – should analyse the fiscal position of members using stochastic debt sustainability

analysis, based on criteria and procedures laid out in EU secondary legislation." (Blanchard et al., 2021)

- "the assessment about compliance and non-compliance should not be conducted by a political European Commission. Instead the European Commission could bind its assessment to the verdict of an independent fiscal council, like a reformed European Fiscal Board. The European Council would, as foreseen today, at the end still vote on the imposition of sanctions based on a reversed qualified majority. Increase transparency of the framework." (Feld et al., 2019)
- "Especially the independence from the European Commission would need to be ensured, which would also require an increase in the size of the staff and financial resources" (Christofzik et al., 2018)

MEDIUM-TERM FISCAL FRAMEWORK

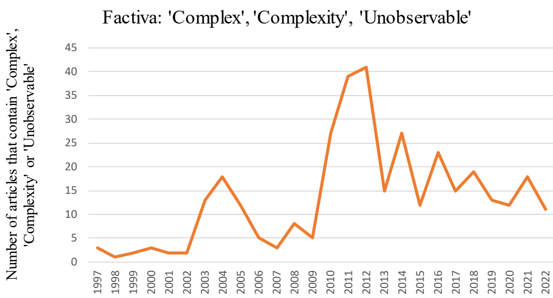
- "Relying only on numerical rules (…) will result in excessively complex and ineffective rules. (…) A medium-term fiscal framework that combines standards, rules, and strengthened institutions will strike a better balance between flexibility and credibility." (Caselli et al., 2022)
- "focus on medium-term budget plans would be more appropriate and less subject to revisions" (Thygesen et al., 2019)
- "We have noted that structural budget balance estimates are subject to large revisions, partly because of uncertain output-gap estimates. Based on that finding, one might argue that medium-term potential growth estimates, which are the basis of our proposed expendi¬ture rule, could be also subject to large revisions – but this is not the case." (Darvas et al., 2018)
- "This procedure would substantially mitigate the impact of real-time estimation errors, retain a balanced budget over the cycle as the medium-term benchmark." (Feld et al., 2019)
- "Since methods of cyclical adjustment are highly prone to error in real time but more reliable in the medium term, the proposal regards compliance with the structural balance rule as a medium-term target." (Feld et al., 2019)

ANNEX III: Analysis based on academic papers vs. newspapers

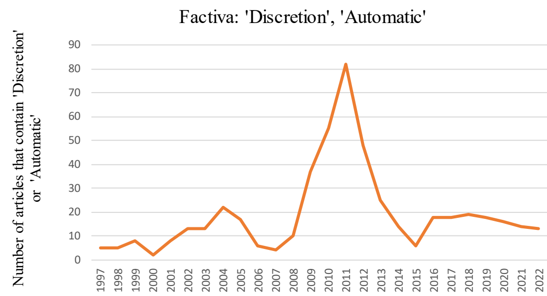
As mentioned in the Introduction, a text analysis of, on the one hand, academic literature based on a repository 207 papers and academic, and, on the other hand, press publications of economic and financial written and online media, both centered on the Economic Governance Framework and it fiscal rules from the year 1997 to 2022 was carried to complement the study of complexity.

Several words are used as different proxies for the debate on the complexity in the European fiscal framework. On the press, this debate was always magnified during the financial crisis, although this is mainly due to the general increase of concern surrounding the health of the public finances of the states after the sovereignty crisis. However, there is a common trend translated into an increase of articles related to the complexity of the framework after the crisis compared to the levels before it, especially with regard to the structural balance/budget.

In contrast, the academic literature worries on complexity have been mostly unaffected by the crisis. That does not mean that there is not an underlying trend: the debate on complexity has been unambiguously increasing over the years. The intensification of the debate proves the need of a systematic analysis, as here presented, of the literature to really disentangle the concept of "complexity", which is essential in order to learn how to address it.



NOTE: The Factiva query was constructed using a series of limitations. Firstly, the articles have two mention a minimum of two times the word 'fiscal' and at least once a word starting with 'euro' or EU, EEC, EMU, EC, EZ, EBC, among others. Moreover, they have to mention european rules or the Stability and Growth Pact (rules/SGP/etc.). The selected articles belong to one of the following sources: bruegel, euronews, bbc, economist, economist intelligence unit, euractiv, financial times, Wall Street journal, CEPR, Europa Press, European Centre for International Political Economy, euromoney. Finally, the topics were limited to a Economic News, International Relations, International Sanctions, Regulation/Government Policy and to Europe.
SOURCE: Factiva



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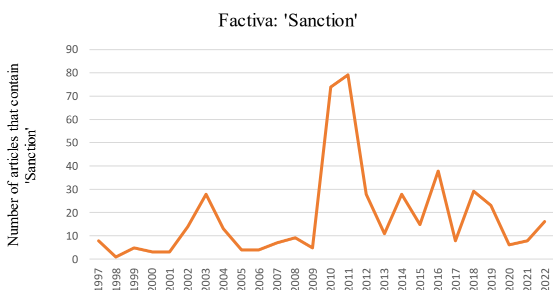

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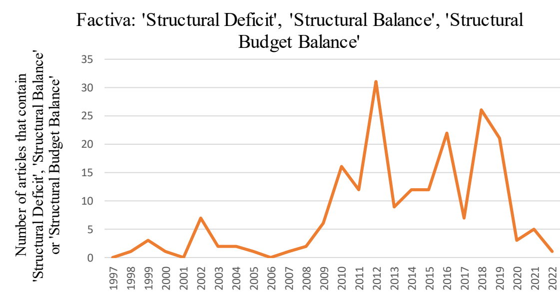

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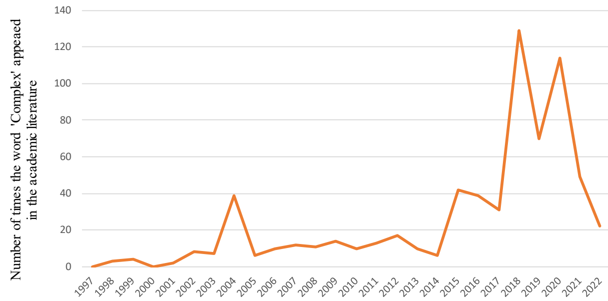
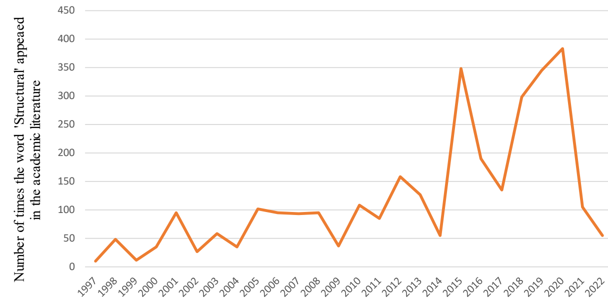
SOURCE: Factiva

Academic repository: 'Complex'



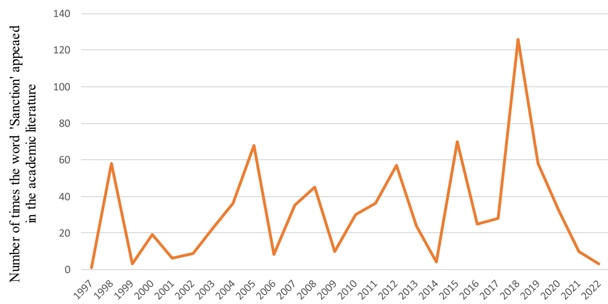
NOTE: This graph displays the number of times the word 'complex' appears in an academic repository that contains 207 papers and academic articles related to the European Economic Governance Framework and its fiscal rules from the year 1997 onwards.
SOURCE: Own elaboration

Academic repository: 'Structural'



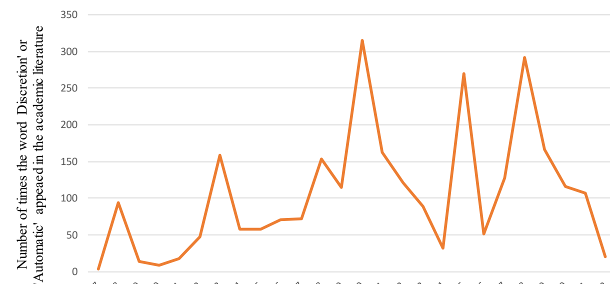
NOTE: This graph displays the number of times the word 'structural' appears in an academic repository that contains 207 papers and academic articles related to the European Economic Governance Framework and its fiscal rules from the year 1997 onwards.
SOURCE: Own elaboration

Academic repository: 'Sanction'



NOTE: This graph displays the number of times the word 'sanction' appears in an academic repository that contains 207 papers and academic articles related to the European Economic Governance Framework and its fiscal rules from the year 1997 onwards.
SOURCE: Own elaboration

Academic repository: 'Discretion', 'Automatic'



NOTE: This graph displays the number of times the words 'discretion' or 'automatic' appear in an academic repository that contains 207 papers and academic articles related to the European Economic Governance Framework and its fiscal rules from the year 1997 onwards.