TOWARD A STRONGER FISCAL CONVERGENCE AND DISCIPLINE FOR EUROPE – HOW FAR ARE WE?

Florin-Alexandru Macsim[1], Florin Oprea [2]
[1]*PhD Student, Doctoral School of Economics and Business Administration, "Alexandru Ioan Cuza" University of Iași, Iași, Romania*
[2]*Department of Finance, Money and Public Administration, Faculty of Economics and Business Administration, "Alexandru Ioan Cuza" University of Iași, Iași, Romania*
florin.macsim1@yahoo.ro
foprea@uaic.ro

Abstract: *Economies frequently pursue policies that tend to lead to fiscal crises, usually sustained by deficits and high public debt levels. First, states borrow in order to sustain their economies, thus accumulating debt and deficits, then are submitted to fiscal rules as constraints and are obliged to adopt restrictive policies. This circle can be brought to an end through fiscal discipline, applicable common rules strengthening the fiscal convergence. Our goal was to quantify fiscal convergence for the EU and the Eurozone, by using a methodology that implies calculating an average score for the degree of fiscal convergence, and placing a specific group of countries or regions in one of the chosen classes. We used in our analysis a number of 12 quantitative and qualitative variables that covered key aspects of both fiscal discipline and fiscal convergence. Both the EU and the Economic and Monetary Union scored 1.6 points on our scale, placing them in class B regions, which present some degree of converge and discipline, but are still far from achieving full converge and high discipline levels as commitment to existence fiscal rules as constraints. So, as it would seem, although there are fiscal constraints implemented through signed treaties, EU's fiscal discipline is far from outstanding, even if good and applicable mechanisms are available for usage.*

Keywords: fiscal convergence; fiscal discipline; European Union; Economic and Monetary Union; quantification

JEL classification: E61; H62; H63

1. Introduction

Contemporary times are significantly marked by globalization and its effects on society, economies and financial and fiscal policies. We can easily compare globalization with convergence, as most of countries tend to resemble more and more which each other.

The key problem for us is that states tend to converge not only on positive aspects, but also on the negative ones. For example, states tend to borrow more money than their economies and economic predictions allow them to, promoting pro-cyclical fiscal policies, thus creating a bubble of debt that eventually blows and disrupters the economic cycle. Fiscal policies are becoming more and more characterized by instability, using more discretionary measures instead of improving the automatic stabilizers, attracting non-confidence from investors and the general public, paving the path for crises as the Greek one. These negative effects can be easily overrun through fiscal discipline, by proposing a singular set of rules (mainly constraints) for governments to respect.

Nevertheless, some key steps were made in the EU through treaties such as the Maastricht Treaty, the Stability and Growth Pact, and the more recent Fiscal Compact (Treaty on Stability, Coordination and Governance in the Economic and Monetary Union). The existence of rules does not necessarily mean that they are respected without any deviation. In our point of view, it is not enough to have fiscal discipline only on paper, but also in the real world. The lack of a dedicated supranational institution with strict duties such as imposing a supervising compliance to rules makes new steps to full fiscal convergence become heavier.

Our objective for this paper is to quantify fiscal convergence as a step-by-step process, by introducing a specific set of variables related to fiscal convergence and fiscal discipline, in order to appreciate the current level of convergence from a macroeconomic standpoint for the EU and the Eurozone, although our methodology could be easily applied for other regions as well.

Our hypothesis is that the Euro area is more integrated and more disciplined than the EU, because of the lower level of heterogeneity and the existence of the monetary union.

2. Literature Review

Fiscal policy is one of the most vital mechanisms used by governments to pursue their goals, aiming to propel economies and bring stability on the long-run. The influence of policy-makers within an economy or more is expressly visible via their policy incentives (Branch and Adderley, 2009). In current times, this kind of incentives when designed need to overcome some conditions in order to become effective. One of this conditions, especially in the EU region, is to comply with the fiscal convergence criteria in order to maintain stability and sound public finances.

The interdependence between fiscal policies, and in particular public deficits in the EU was investigated by Giuliodori and Beetsma (2008). According to them, there are a number of potential reasons why fiscal policies could be independent, such as direct externalities, yardstick competition and tax competition. But, as the authors discovered, fiscal policies are more interdependent than independent, although the interdependence is rather asymmetrically disturbed: fiscal plans of larger countries affect the fiscal plans of smaller countries, but the reverse isn’t valid.

Same authors distinguish two types of fiscal policy spillovers in order to clarify the concept of fiscal interdependence: economic spillovers of fiscal policies (as the interest rate in an integrated capital market – the EU – and the spillovers via international trade) (Giuliodori and Beetsma, 2005; Beetsma et al., 2006), and pure fiscal policy spillovers (through relevant macro-economic determinants of fiscal policy) (Case et al., 1993; Baicker, 2005).

In order to avoid spillovers as those described by mentioned authors, states will comply to a set of fiscal rules that act as constraints on fiscal policies and governments. Some of the authors (Warin, 2005; Wyplosz, 2006) have argued that despite all reasons for imposing fiscal rules for EMU without a centralized budget (mainly a fiscal union), the so far stated fiscal rules have undermined economic growth in EU countries. Same authors state that EU rules reduced the margin of maneuver of member states in the face of symmetric shocks, not conducting to economic growth. But, it was never the purpose of fiscal rules to enhance economic growth, mainly because they are constraints with the sole purpose of enhancing fiscal discipline and the soundness of public finances. As so, as we've proven on another occasions (Macsim and Oprea, 2015a), fiscal rules do not always have a positive impact, mainly because they can lead to higher public debt levels for EU countries. The higher number of supervising institutions also had a negative impact on public debt levels, as more institutions mean less power and responsibility for each one of them. Also, stronger fiscal rules tend to conduct to an increase in government debt levels, while reducing the deficit levels (Macsim and Oprea, 2015b).

While most of the authors analyzed the impact of fiscal rules, as a key part of fiscal convergence and discipline, on public investments and growth (Gali and Perroti, 2003; Artis and Onorante, 2006), others studied the effects of fiscal rules on budgetary positions as a mean to reach long-term economic growth (Von Hagen, 2003; Fatás et al., 2003).

Nevertheless, as Castro (2011) states, there is a no consensus in the literature regarding the positive or negative influence of fiscal rules: some authors claim that fiscal rules as those traced in the SGP can have a negative impact on EU member states, others state the rules are absolutely necessarily in order promote fiscal discipline and consolidation in order to maintain stability on the European continent. Same author proved, by enhancing previous methodologies, that fiscal rules as those in the Maastricht Treaty and the SGP weren't harmful to GDP growth.

Although rules do not necessarily induce negative effects on GDP growth, states complied with them in only half of the years since they were introduced, as proved by Reuter (2015). Same author states that the introduction of a fiscal rule leads to a twice as strong reaction of the fiscal variable to high levels or non-compliance with the fiscal rule. Still, the existence of rules, although not always respected, makes policy-makers more conscious of the need to maintain sound public finances. Hiraga (2016) suggests that governments strengthen the fiscal stances if they hope to stabilize government debt levels. Also, as another disadvantage for high public debt levels, the process of reduction of reached levels requires fiscal adjustments that need to be maintained for a long period of time. The main compromise is to ensure a fair distribution of the economic consolidation effect, in order to avoid hard to manage tensions or distortions (Gherman and Ștefan, 2013).

The fact that countries do not always or completely comply with fiscal rules is the reason why we have introduced in our analysis variables as number of countries which have implemented an automatic correction and sanction mechanism and number of countries which benefit from the existence of an independent monitoring body. For example, Hiraga (2016) concludes a significant result: the stabilization rule is not a sufficient condition for the sustainability of the government debt. The lack of fiscal discipline reflects after all in bond yields (De Grauwe and Ji, 2013; Szarowská, 2014), that tend to increase when investors don't trust the so called discipline of governments.

In order to prevent future shocks on the fiscal battlefield, the convergence through fiscal discipline must continue. Also, as remarked by Kocenda, Kutan and Yigit

(2008), there is need to design further policies to improve fiscal performance. EU policy-makers may take into consideration the adoption of fiscal policy rules rather than counter-cyclical fiscal policies. Modern EU needs to step up its public finance management quality, by addressing the structure of taxation and public spending, as well as mechanism to maintain a high level of efficiency of government actions and fiscal rules (Ketners and Zvidriņa, 2008).

3. Data and Methodology

In order to cover most of the fiscal aspects and components of fiscal discipline as a mean to reach fiscal convergence, we used in our analyses a number of 12 variables that taken together indicate the degree of fiscal convergence from a discipline standpoint for a group of countries or regions. In this regard, we have taken into consideration aspects such as:

- fiscal policies: *V6* - Number of countries in which the growth rate of public expenditures < rate of growth of the GDP, *V4* – number of countries which have a public debt level ≤60% of the GDP, *V2* – number of countries which have a public deficit level ≤3%;
- fiscal constraints: *V1* - number of countries which have implemented at a national level a public budget balance rule (BBR), *V3* - number of countries which have implemented at a national level a public debt rule, *V5* - number of countries which have implemented at a national level a public expenditures rule, *V7* - number of countries which have implemented at a national level a public revenue rule, *V8* - number of countries which have an independent enforcement body for fiscal constraints as the BBR, *V9* - existence of sanctions for non-compliance regarding the BBR, *V10* - at least one independent monitoring body for the implementation of fiscal constrains as the BBR, *V11* - existence of an alert mechanism regarding the BBR, *V12* - existence of an automatic correction and sanction mechanism regarding the BBR).

Most of our data for the analyses was collected from Eurostat and the European Commission's website. By using specific information from the mentioned website and database we were able to analyze and provide results for all our elected variables for the year 2014.

As proposed method for quantifying the fiscal convergence process viewed from the fiscal discipline point of view, we used a similar methodology as Cigu and Oprea (2012). In this regard, we used for our analysis 12 quantitative and qualitative indicators that can be viewed as variables depending on a range of variation, reflecting the degree of fiscal convergence and the path to stronger fiscal discipline in the EU, the Eurozone and other parts of the world.

We gave each variable an importance factor, denoted by Wi (a share, subjective probability and their sum is equal to 1). As all our variables are significant, the literature emphasizing the importance of each one, we propose a similar importance for each one of them (0.05). The maximum score that can be achieved (giving that we chose 12 variables) is 2.4. Reaching a score above 2 means that a particular group of countries is highly disciplined from a fiscal standpoint, having introduced a set of fiscal rules that are implemented, supervised and respected.

Placing an indicator in a particular group variation is measured by a score denoted

by s, which takes values from 1 to 4. Level 1 corresponds to pour or reduced convergence on that particular variable, and Level 4 corresponds to almost or full convergence.
Fiscal convergence as fiscal discipline is measured by the average score (I_{FI}) based on the relation:

$I_{FI} = \sum_{i=0}^{n} Si * Wi$

where:

- I_{FI} = indicator of the degree of fiscal integration;
- Si = score obtained on each variable;
- Wi = coefficient of importance.

Indicator score for the degree of fiscal integration (I_{FI}) is analyzed using classes groups of fiscal integration. For 1 ≤ I_{FI} ≤ 2.4, we established four classes to measure fiscal integration.

Table 1: Classes to measure fiscal discipline and convergence

Score	Classes groups of discipline and convergence
≤ 1,00	C
1.01 – 2.00	B
≥ 2	A

Source: Author's vision

where:

- Class A includes states or regions that are highly disciplined from the fiscal standpoint;
- Class B includes states or regions that are well enough disciplined, and should continue on the path of fiscal convergence;
- Class C includes states or regions that present a small degree of discipline, and are still far from the point being fully convergent and disciplined.

Variation of average score (I_{FI} ≥ 2) specific to class A of fiscal discipline and convergence means that states or regions have implemented similar fiscal rules as constrains, accept an respect them, under the supervision of independent institutions by using specific mechanisms (alert mechanism, existence of sanctions for non-compliance and independent monitoring bodies).
Class B for measuring fiscal convergence as fiscal discipline includes a variation indicator 1.01 ≤ I_{FI}≤ 2.00. For this class, states or regions are enough integrated and disciplined, but have some deficiencies related to their fiscal arrangements or constraints. For example, regions in this class may lack independent institutions for supervision and implementation, or have implemented most of the rules but there isn't compliance.
Class C for measuring fiscal convergence includes a variation indicator ≤ 1.00. In this class, groups of regions or countries have some common fiscal rules, and are possibly at the beginning of the convergence process. Unfortunately, regions in this class present some issue regarding fiscal discipline, lack of fiscal rules and independent monitoring and sanction institutions and mechanisms.

Table 2: Method of determining the degree of fiscal convergence from the fiscal discipline standpoint

Variables	w_i	Score			
		s = 1	s = 2	s = 3	s = 4
(v1)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v2)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v3)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v4)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v5)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v6)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v7)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v8)	0.05		[25%;49%]	[50%;75%]	≥76%
(v9)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v10)	0.05	None	One institution which is independent	One institution independent/ one not independent	Two independent institutions
(v11)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%
(v12)	0.05	≤24%	[25%;49%]	[50%;75%]	≥76%

Source: Author's vision

4. Analysis and results

With our established method of determining the degree of fiscal convergence and discipline in mind, we will continue in properly analyzing the degree of convergence for two proposed regions: European Union and the European Economic and Monetary Union.

Table 3: Indicator of the degree of fiscal convergence and discipline for the European Union for 2014

Variable	Score	Wi	Points
(v1)	4	0.05	0.2
(v2)	3	0.05	0.15
(v3)	3	0.05	0.15
(v4)	2	0.05	0.1
(v5)	4	0.05	0.2
(v6)	3	0.05	0.15
(v7)	1	0.05	0.05
(v8)	2	0.05	0.1
(v9)	2	0.05	0.1
(v10)	4	0.05	0.2
(v11)	2	0.05	0.1
(v12)	2	0.05	0.1
Total			**1.6**

Source: Author's calculations

Table number 3 depicts or analysis for the European Union. As expected, due to some degree of heterogeneity and the recent crisis, the score obtained by the EU (1.6 points from a maximum of 2.4 points) for the year 2014 is not near 2 points or even above. So, the European Union is approximately 67% converged and disciplined from the fiscal point of view. Given the obtained score, we place the EU in Class B regions, which are enough integrated and disciplined, but lack some key aspects that need to be fully fulfilled.

While it scored high with variables such as the number of countries which have implemented at a national level a budget balance rule, and expenditure rule and the existence of an independent monitoring body regarding the implementation of the BBR, it scored low at complying with the rule that states that countries should not achieve a public debt level higher than 60% of the GDP. Also, EU countries lack independent enforcement bodies for fiscal constraints as the BBR, existence of sanctions for non-compliance regarding the same rule and lack of countries which have implemented at a national level a revenue rule.

Table 4: Indicator of the degree of fiscal convergence and discipline for the Eurozone for 2014

Variable	Score	Wi	Points
(v1)	4	0.05	0.2
(v2)	3	0.05	0.15
(v3)	3	0.05	0.15
(v4)	3	0.05	0.15
(v5)	3	0.05	0.15
(v6)	3	0.05	0.15
(v7)	1	0.05	0.05
(v8)	2	0.05	0.1
(v9)	2	0.05	0.1
(v10)	4	0.05	0.2
Variable	**Score**	**Wi**	**Points**
(v11)	2	0.05	0.1
(v12)	2	0.05	0.1
Total			**1.6**

Source: Author's calculations

Table Number 4 depicts our specific analysis for the Economic and Monetary Union. As the EU, the Eurozone obtained the same score, meaning 1.6 points from a maximum a 2.4 points. The only difference is that the Eurozone scored better (0.15 points) at the number of countries which have a public debt level lower than 60% of the GDP (between 50 and 75% of the countries), and lower at the number of countries which have implemented at a national level a public expenditure rule (0.15 points – the EU scored 0.2 points).

Unfortunately, our key hypothesis that the Eurozone is more converged and disciplined than the EU has not been confirmed. As the EU, the monetary union lacks independent enforcement bodies for fiscal rules as the BBR, existence of sanctions for non-compliance, alert and automatic correction mechanisms regarding the BBR. Also, the key constraints regarding fiscal discipline, a maximum public deficit of 3% of the GDP and a maximum allowed level for public debt of 60% of the GDP, are not fully respected by all members, although the rules are adopted by all countries and were reaffirmed since the Maastricht Treaty on three occasions: Stability and Growth Pact in its initial form, Stability and Growth Pact reformed and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (Fiscal Compact). As it would seem, the problem is not necessarily in rules, but more in the way that they apply and the way that countries manage their own responsibility in maintaining fiscal order and discipline.

5. Conclusions

Convergence and discipline are two of the most common words that come to economists and politicians minds when talking about the EU and EMU. Going further with the process of European integration means taking further steps on multiple plans: economic, social, financial, fiscal and monetary. On this occasion, we have focused our attention on the fiscal side of European integration, analyzing and quantifying the degree of fiscal converge for the related regions while taking into consideration mainly discipline aspects as fiscal rules, constrains and institutions.

Our methodology consisted in giving each of the 12 chosen variables an importance factor and score, and quantifying the score for each one in order to obtain a single key result that would indicate how far are the EU and EMU gone so far regarding fiscal discipline and convergence.

Both regions obtained a 1.6 points score from a maximum possible of 2.4 points, good but still far from what we have expected. For the year 2014, we can state that the two selected regions are only approximately 67% disciplined and fiscally converged. Top scores were obtained for the implementation at a national level of a budget balance rule, existence of an independent monitoring for the implementation of the rules, number of countries which have adopted and implemented at a national level expenditure and debt rules as fiscal constraints. Most of the points were lost for high public debt levels (more than the rule allows), lack of an independent enforcement body for the BBR (budget balance rule), existence of sanctions for non-compliance and the lack of existing alert and sanction mechanism.

Although rules exist and are implemented, mainly through treaties as we discussed in the article, the main problem is keeping the rules respected by policy-makers and sanction the ones who don't comply with the help of independent institutions and related mechanisms. The existence of rules doesn't necessarily imply that they are respected, as we've seen for the debt rule (most of the countries had in the year 2014 a public debt level higher than 60% of their GDP).

Nevertheless, if the EU and EMU want to achieve full discipline and convergence, in order to obtain the desired fiscal stability and soundness of public finances, not new arrangements are need, but more compliance to the existent structure of rules, a new way of rethinking the importance of fiscal alignment as a mean not to repeat the Greek experience and not to jeopardize the future of the United States of Europe as a dream that brought us till today as a union. As George Terborgh's (1981) stated, what is needed, obviously, is a fiscal philosophy that condemns the budgetary indiscipline we have been indulging, and that carries with it an operational standard to prevent its recurrence.

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