

# AN ANALYSIS OF THE FISCAL CONVERGENCE CRITERIA IN THE EUROPEAN UNION IN TERMS OF THE SUSTAINABILITY

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## **Abstract**

*Although the convergence criteria in the Maastricht Treaty led to the creation of the EMU and the euro area has resisted more than some of its critics believed, in the context of major macroeconomic imbalances, the issue of nominal convergence has been the subject of numerous research. This paper aims to analyze the capacity of fiscal criteria to reflect the ability of EU Member States to achieve economic development for the integration in the EMU and to comply strict fiscal policy that governing its operation. In the context of certain technical deficiencies of fiscal criteria, we analyzed the developments of budget deficit and gross public debt in the EU during 2000 and 2012. The results show that until 2007 the EU economies were able, overall, to meet the budget deficit criteria, but due to the financial crisis and the prolonged slowdown in economic growth, the fiscal balance had an unfavorable evolution since 2008, while the evolution of the gross public debt has worsened increasingly. Due to this pressure situation on the sustainability of public finances, examining the adoption, application and enforcement of the fiscal policy rules expressed by the evolution of the Fiscal Rule Index for the period 2000-2011, the importance of rules in the fiscal management of the Union and especially of the euro area appears increasingly obvious.*

## **Keywords**

European Union; Euro Area; convergence criteria; fiscal deficit; gross public debt; fiscal policy; Stability and Growth Pact; sustainability; Fiscal Rule Index

## **JEL Classification**

E62; F15; F36; H6

## **1. Introduction**

As a result of the economic crisis that started in 2008 and led to the deterioration of worldwide public finances, the budget issues are on the agenda again. Fiscal deficits arising in this context cause the public debt to rise sharply. Moreover, the public debt of EU Member States stood at a high level even before the onset of the crisis.

In order to support countries affected by the European debt crisis, besides the financial aid from the International Monetary Fund (IMF), a temporary rescue mechanism was created on May 9, 2010 by the euro area Member States: the European Financial Stability Facility (EFSF). In October 2010, it was decided to create a permanent rescue mechanism, the European Stability Mechanism (ESM) which came into force on October 8, 2012. From this moment, the ESM will be the main instrument to finance new programs. In parallel with the ESM, EFSF will continue the ongoing programs for Greece, Portugal and Ireland. From July 1, 2013, the EFSF can no longer engage in new financing programs or enter into new loan agreements. ESM is now the only and permanent mechanism to meet new demands for financial assistance from the euro area Member States.

One fact is certain, that in the literature there is a consensus on the need for fiscal measures, both short and long term, on the one hand, in order to protect fiscal sustainability (fiscal rules inspired by neo-classical principles fall into this category) and, on the other hand, in order to stabilize the macroeconomic fluctuations (fiscal rules guided by the neo-Keynesian principles of fiscal management) (Marneffe et al, 2011).

The incapacity of Maastricht fiscal criteria, to reflect the ability of Member States in achieving the economic development for the integration in the EMU and to compliance strict fiscal policy that governing its operation, is the main reason of our intention to highlight some limiting aspects.

In the context of certain technical deficiencies of the fiscal criteria, based on the available data on Eurostat, we analyzed the developments of fiscal deficit and gross public debt of the EU-27 and EA-17 Member States, during the period 2000-2012. The results allow us to say that overall during the period of time 2000-2007, the EU-27 and the EA-17 failed to meet the budget deficit criterion, but due to the financial crisis that began in 2008 and the prolonged slowdown in economic growth, the fiscal balance had an unfavorable evolution so far. Meanwhile, gross public debt situation overall has worsened increasingly since 2008 until 2012. Because of this pressure on fiscal sustainability, analyzing the adoption, implementation and compliance of fiscal policy rule expressed by Fiscal Rule Index (FRI) for the period of time 2000-2011, the results on the evolution of this composite indicator highlights the increasingly importance of rules in the fiscal management of the EU and especially of the euro area.

This paper is structured as follows: Section 2 presents the fiscal framework in the European Union, giving the necessity for fiscal rules and the Stability and Growth Pact in the context of certain limiting aspects of the fiscal criteria set by the Maastricht Treaty. An overview of the fiscal position in the EU-27 and EA-17 is presented in Section 3. Given that fiscal sustainability of the EU Member States, and particularly of those of the euro area, is under stress in Section 4 we present an overview of fiscal management applied in these countries based on the adoption, implementation and compliance of fiscal policy rules expressed by a summary indicator of fiscal outcomes, Fiscal Rule Index. Section 5 contains the summary of our research and the main findings of our results.

## **2. Fiscal criteria – a stabilizing factor or a barrier to the sustainable economic growth in the European Union?**

### **2.1 The necessity of fiscal rules and the Stability Growth Pact**

Despite the European Economic Community initiative in 1975 to develop a series of measures of constraint for fiscal policy, were still needed seventeen years until the first set of binding supranational fiscal rules was introduced by the Maastricht Treaty in 1992. Thus, into the structure of *the nominal convergence criteria* along with the *monetary component* expressed by indicators reflecting price, exchange rate and long-term interest rate developments, there is a *fiscal component* too expressed by indicators reflecting the situation of gross public debt and budget deficit. Outlines conditions set specific limits which the acceding countries must demonstrate that they meet with a stable and sustainable basis.

Due to the Treaty on fiscal developments, second indent of Article 140(1) requires: *“the sustainability of the government financial position finances; this will be apparent from having achieved a government budgetary position without a deficit that is excessive as determined in accordance with Article 126(6)”*. Article 126(2) and (3) of

the excessive deficit procedure, states that if an EU Member State does not fulfill the requirements for fiscal discipline, the Commission shall prepare a report, especially if: “i. *the ratio of the planned or actual government deficit to GDP exceeds a reference value (set at 3% of GDP), unless the ratio has declined substantially and continuously and reached a level that comes close to the reference value, or if the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;*

ii. *the ratio of government debt to GDP exceeds a reference value (set at 60% of GDP), unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.*”

Given the experience of EU Member States joining the EMU, there are two approaches to the reference values for the criteria in the Treaty: *a flexible one* in order to facilitate some states insufficiently prepared to join the EMU, for political reasons (it is known that the policy objectives are not sufficiently convergent with the economic ones) and *a rigid one* in order to block the access of countries that do not meet the convergence conditions. As the EU expanded towards the Central and Eastern Europe, these criteria have been interpreted in increasingly strict order not to endanger the euro area. Thus, if the only criteria that have benefited from a strict interpretation are the monetary ones, we cannot say the same about the fiscal criteria, which were interpreted in a certain flexible way, although they are considered the most difficult to fulfill.

As there are benchmarks clearly stipulated in the Treaty, the excessive deficit procedure allowed a certain action space to the European Council. Therefore, although, unlike European Commission Report 1998, IME Report draws attention to the high levels of gross public debt in Italy in 1997 (121.6% of GDP) and in the same year in Belgium (122.2% of GDP), both documents were the basis for the Council decision on the introduction of the euro in 11 countries.

Also, due to the remarkable progress made by Greece, in the context of applying a restrictive fiscal policy, namely reducing the budget deficit from 3.1% of GDP in 1998 to 1.3% of GDP in 2000, and the downward trend of the gross public debt in the same period of time 1998-2000, well above the reference value, but lower than the level recorded by Belgium and Italy in 1997, the Council accepted its participation in EMU, based on Reports of the Commission and the ECB in 2000. Given repealed by the Council of some earlier decision on the existence of excessive deficits, the fiscal criterion was considered met.

Later in 2003, the Council, acting on a recommendation from the European Commission, said that both France and Germany had excessive deficits. Therefore, the Commission proposed to improve the procedure, making a new recommendation to bring back two of the Member States within the limits. But a qualified majority in the Council was not reached in favor of this recommendation, a situation that has led to an impasse with great uncertainty about the further application of European fiscal rules.

In this context and in response to international criticism, the Stability and Growth Pact (SGP) (entered into force in 1997), which should provide adequate guidance on limiting government borrowing contracted by EU Member States, has been revised in 2005 with the intention of eliminating the existing uncertainty caused by the situation in 2003.

*Firstly*, the new Pact introduced medium-term objectives appropriate to the circumstances of each Member State, taking into account gross public debt as a share of GDP and growth potential specific to each state. This implies that countries with low levels of debt and higher growth potential are allowed to maintain higher deficits in the medium-term (Deutsche Bundesbank, 2005). Furthermore, Member States with a relatively low level of public debt could follow a budgetary structural deficit of 1%

of GDP on the medium term, while the Member States with higher gross public debt should pursue a balanced budget or a small surplus. Moreover, Member States should advance annually by 0.5% of GDP towards achieving the medium-term objective and if the economic growth is higher than expected, the rate of advancement should not exceed half of one percent of GDP in order to allow low efforts during a possible recession. Thus, long-term debt as a percentage of GDP will decrease and eventually will approach zero.

*Secondly*, the reviews focus on structural and sustainable correction of the deficits. Since deficits depend on GDP growth, the business cycle has a major impact on them taking into account not only a possible decline in economic growth, but the duration of the economic crisis. Cyclical fluctuations are removed from the calculation of the structural deficits, thus providing a better picture of the real situation of public finances in a particular Member State (de Haan et al, 2003).

*Thirdly*, Member States are exempt from the excessive deficit procedure regardless of the rate of negative growth.

*Fourth*, the time span in which excessive deficits should be corrected has been extended from one to two years (Marneffe et al, 2011).

In general, it is considered that the supranational Pact was weakened, demonstrating its limitations in the context of the current climate, of severe and prolonged global and especially of European economic crisis, being a necessary but not sufficient tool for the harmonization of national economies. Eurosceptics in Denmark and Sweden often invokes the weakening Pact as a reason not to adopt the euro.

One of the main critical issues concerns *the sanctions of the revised Pact*, their impact being limited only in comparison to the threat of exclusion from the euro area. Moreover, they are the subject of a lengthy discretionary decision making process attended by even those countries (De Haan et al, 2003) and the imposition of a sanction may have a pro-cyclical effect that would worsen the situation of a country.

Another critical issue is *the increased flexibility of the revised Pact*, which involves considerable disadvantages (Buti, 2006). While a considerable series of factors is necessary to be taken into account in assessing whether a deficit is excessive, there are gaps and the judgment is quite complicated. Thus, fiscal rule is less transparency and simple (Alves & Afonso, 2007; Verde, 2006). Regarding public debt the Pact is clearly a step backwards comparing to the Maastricht Treaty due to the limited contextual approach, without specifying clear sanctions for breaching the reference value (de Haan et al, 2003). Finally, the numerical values of its objectives remain arbitrary and counterproductive in terms of countercyclical fiscal stabilizing policy (Marneffe et al, 2011).

## **2.2 Some technical deficiencies of fiscal developments**

As monetary criteria, the premises which underlie fiscal stability criterion are related, on the one hand, to the promotion of economic growth by reducing the uncertainty in economic activities and, on the other hand, to limiting the risk of destabilizing social conflicts in economic life.

Increasing budget deficits and gross public debt generates the crowding-out effect of private consumption and investment spending, limiting long-term growth opportunities. So the fiscal burden for households and businesses is maintained, with negative effects on economic efficiency and international competitiveness (Bukowski, 2006).

The introduction of this criterion contributed undoubtedly to the acceleration of fiscal reforms in the European Union, but studies and research in the field mentioned some *technical deficiencies* regarding *fiscal developments*.

For example, the reference values of fiscal rules were considered to be arbitrary and insufficiently supported by economic theory and practice. Maastricht Treaty refers in

a brief way to the average budget deficit and average gross public debt as shares in GDP of the European Community Member States in 1991, by 4.3% and 61.7% respectively. Since the average public investment within the EC was 3% of GDP during the period 1974-1991, the golden rule was associated with the reference value for the budget deficit (Buiters et al, 1993). The fact that in the 1990s, the EU countries average value of government debt to GDP could be at the level of 60% was reason to adopt this value as an index reference (de Grauwe, 2003). However, there is no justification for considering these values as optimal for the Union as a whole, and especially for the candidates, but rather they were adopted as a result of the insistence of Germany to prevent a situation where excessive growth budget deficit and gross public debt would lead to higher interest rates across the Union.

As regards gross public debt, the Treaty has not provided a contextual approach to the specific situation of each country on the level of the indicator, although countries with a higher debt as a share of GDP shows a threat with a much higher potential for affecting the Union stability. Moreover, research has shown more satisfactory results in the case of a rule concerning balanced budget expressed as a linear function of public debt, unlike the rule of a constant benchmark (Basci et al, 2007).

Also, a *budget deficit* and *gross public debt* above the reference values of 3% of GDP and 60% of GDP, regarded as having a negative connotation, does not imply automatically macroeconomic imbalances. Thus, while the budget deficit and/or gross public debt increase, even as the limits are exceeded, due to a process of intensification of government investment and reduce taxation, with beneficial effects on stimulating private initiative, this dynamic is considered to be a sustainable (Triandafil, 2011).

Noteworthy are unclear formulations reflected in Article 126(2) and (3) of the Treaty that mentions the excessive deficit procedure: firstly, “*substantially and continuously*”, not being specified a certain percentage, secondly, “*the excess over the reference value is only exceptional and temporary*”, not being exactly specified the exceptional conditions and a maximum period of time, and thirdly, “*the ration is sufficiently diminishing and approaching the reference value at a satisfactory pace*” not being precisely detached a certain value and a time horizon.

### **3. An overview of fiscal positions in the European Union and Euro Area**

Macroeconomic stability and balanced and sustainable economic growth in the European Union and especially in the euro area requires as a prerequisite the existence of solid and sustainable public finances as the single monetary policy cannot react to the specific situation for each country and the repercussions due to their unsustainable fiscal policies are more powerful, as clearly the current crisis demonstrated. All these require increased responsibility regarding fiscal developments in the Union Member States.

With the decreasing of the global economy and the current persistent financial tensions in the euro area, its Member States experienced various problematic situations generated by a brisk increase of the budget deficit and gross public debt as a share of GDP and also by the economic downturn, which highlight the restrictive nature of the two indicators. For their analysis we used the statistical data available on Eurostat for the period 2000-2012. We excluded Croatia (analysis (the 28<sup>th</sup> EU Member State from July 1, 2013) due to the unavailability of certain statistical data regarding the considered indicators.

Average share of budget deficit to GDP in the EU-27 and EA-17 have increased during the considered period from 0.6% in 2000 up to 6.9% in 2009, situation that will improve later, reaching down to 3.9% in 2012 (*Table 1*). We also note a broadly

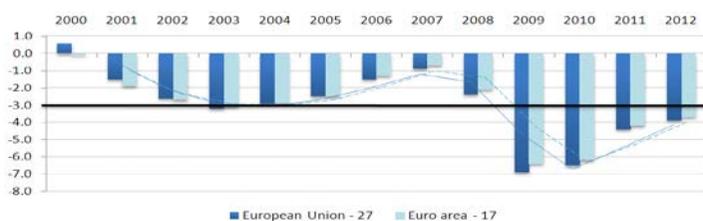
similar situation in the euro area, the share of budget deficit to GDP being much lower than the EU-27, which highlights the mismanagement of public finances including countries in the euro area.

**Table 1 Fiscal balance in EU-27 and EA-17, 2000-2012 (% of GDP)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	0.0	0.4	-0.1	-0.1	-0.1	-2.5	0.4	-0.1	-1.0	-5.6	-3.7	-3.7	-4.0
Bulgaria	-0.5	1.1	-1.2	-0.4	1.9	1.0	1.9	1.2	1.7	-4.3	-3.1	-2.0	-0.8
Czech Republic	-3.6	-5.6	-6.5	-6.7	-2.8	-3.2	-2.4	-0.7	-2.2	-5.8	-4.7	-3.2	-4.4
Denmark	2.3	1.5	0.4	0.1	2.1	5.2	5.2	4.8	3.2	-2.7	-2.5	-1.8	-4.1
Germany	1.1	-3.1	-3.8	-4.2	-3.8	-3.3	-1.6	0.2	-0.1	-3.1	-4.2	-0.8	0.1
Estonia	-0.2	-0.1	0.3	1.7	1.6	1.6	2.5	2.4	-2.9	-2.0	0.2	1.1	-0.2
Ireland	4.9	1.0	-0.3	0.4	1.4	1.6	2.9	0.2	-7.4	-13.7	-30.6	-13.1	-8.2
Greece	-3.7	-4.5	-4.8	-5.6	-7.5	-5.2	-5.7	-6.5	-9.8	-15.7	-10.7	-9.5	-9.0
Spain	-0.9	-0.5	-0.3	-0.3	-0.1	1.3	2.4	2.0	-4.5	-11.1	-9.6	-9.6	-10.6
France	-1.5	-1.5	-3.1	-4.1	-3.6	-2.9	-2.3	-2.7	-3.3	-7.5	-7.1	-5.3	-4.8
Italy	-0.8	-3.1	-3.1	-3.6	-3.5	-4.4	-3.4	-1.6	-2.7	-5.5	-4.5	-3.8	-3.0
Cyprus	-2.3	-2.2	-4.4	-6.6	-4.1	-2.4	-1.2	3.5	0.9	-6.1	-5.3	-6.3	-6.4
Latvia	-2.8	-2.0	-2.3	-1.6	-1.0	-0.4	-0.5	-0.4	-4.2	-9.8	-8.1	-3.6	-1.3
Lithuania	-3.2	-3.5	-1.9	-1.3	-1.5	-0.5	-0.4	-1.0	-3.3	-9.4	-7.2	-5.5	-3.2
Luxembourg	6.0	6.1	2.1	0.5	-1.1	0.0	1.4	3.7	3.2	-0.7	-0.8	0.1	-0.6
Hungary	-3.0	-4.1	-9.0	-7.3	-6.5	-7.9	-9.4	-5.1	-3.7	-4.6	-4.3	4.3	-2.0
Malta	-5.7	-6.3	-5.7	-9.0	-4.6	-2.9	-2.7	-2.3	-4.6	-3.7	-3.5	-2.8	-3.3
Netherlands	2.0	0.0	-2.1	-3.1	-1.7	-0.3	0.5	0.2	0.5	-5.6	-5.1	-4.3	-4.1
Austria	-1.7	0.2	-0.7	-1.5	-4.4	-1.7	-1.5	-0.9	-0.9	-4.1	-4.5	-2.5	-2.5
Poland	-3.0	-5.3	-5.0	-6.2	-5.4	-4.1	-3.6	-1.9	-3.7	-7.5	-7.9	-5.0	-3.9
Portugal	-3.3	-4.8	-3.4	-3.7	-4.0	-6.5	-4.6	-3.1	-3.6	-10.2	-9.8	-4.3	-6.4
Romania	-4.7	-3.5	-2.0	-1.5	-1.2	-1.2	-2.2	-2.9	-5.7	-9.0	-6.8	-5.6	-3.0
Slovenia	-3.7	-4.0	-2.4	-2.7	-2.3	-1.5	-1.4	0.0	-1.9	-6.3	-5.9	-6.3	-3.8
Slovakia	-12.3	-6.5	-8.2	-2.8	-2.4	-2.8	-3.2	-1.8	-2.1	-8.0	-7.7	-5.1	-4.5
Finland	7.0	5.1	4.2	2.6	2.5	2.9	4.2	5.3	4.4	-2.5	-2.5	-0.7	-1.8
Sweden	3.6	1.5	-1.3	-1.0	0.6	2.2	2.3	3.6	2.2	-0.7	0.3	0.2	-0.2
United Kingdom	3.5	0.4	-2.1	-3.5	-3.5	-3.4	-2.8	-2.8	-5.0	-11.4	-10.1	-7.7	-6.1
European Union - 27	0.6	-1.5	-2.6	-3.2	-2.9	-2.5	-1.5	-0.9	-2.4	-6.9	-6.5	-4.4	-3.9
Euro area - 17	-0.1	-1.9	-2.7	-3.1	-2.9	-2.5	-1.3	-0.7	-2.1	-6.4	-6.2	-4.2	-3.7

Source: Eurostat

In the context of an oscillatory evolution, we note that between 2007 and 2009 the share of fiscal deficit to GDP in the EU-27 and EA-17 is situated on a more pronounced negative trend. After that period until the present, amid a sustained fiscal consolidation, Member States have significantly reduced their deficits (*Figure 1*).

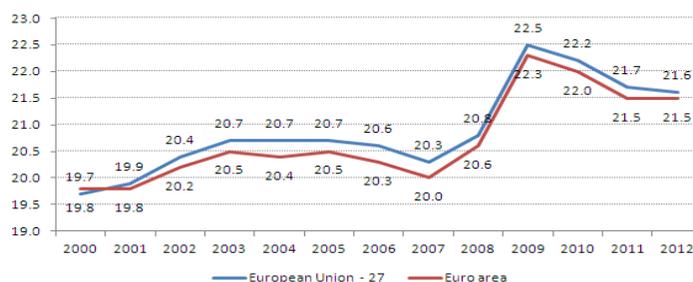


**Figure 1 Fiscal balance in EU-27 and EA-17, 2000-2012 (% of GDP)**

Source: Own calculations, based on the data available on Eurostat

The dominance government consumption expenditures below 20% of GDP in most of the states, and in the EU and the euro area (*Figure 2*), the recent developments in the countries of Central and Eastern Europe and, in particular, the collapse of euro area Member States caused by excessive level of public debt generated by the gradual accumulation of substantial budget deficits, demonstrate that if the level of debt and the share of negative budget balance to GDP increased in parallel with the recording

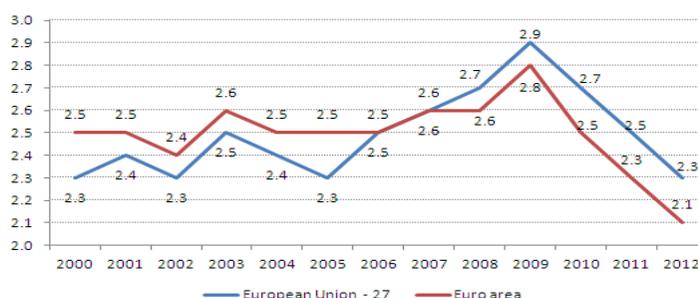
massive spending directed towards consumption, the macroeconomic imbalance is obvious.



**Figure 2 Government consumption expenditures in EU-27 and EA, 2000-2012 (% of GDP)**

Source: Own calculations, based on the data available on Eurostat  
 Note: Euro area: EA11-2000, EA12-2006, EA13-2007, EA15-2008, EA16-2010, EA17

Significant share of government consumption expenditures in GDP, in detriment of investment indicates a certain lack of discipline in the fiscal policy (*Figure 3*).



**Figure 3 Government investment expenditures in EU-27 and EA, 2000-2012 (% of GDP)**

Source: Own calculations, based on the data available on Eurostat  
 Note: Euro area: EA11-2000, EA12-2006, EA13-2007, EA15-2008, EA16-2010, EA17

Extremely high levels of debt and long-term impact of aging will probably cause pressure on public expenditures to persist beyond the current fiscal adjustment.

Regarding the gross government debt as a share of GDP (*Table 2*), its lowest level during the period 2000-2012, with an average of 5.5% of GDP in Estonia, state that joined the EU in 2004 and became member of EMU in 2010, followed by Luxembourg, with an average of 9.4% of GDP on the same period.

A rigorous management of public debt is seen in countries such as Denmark, Finland and Sweden, where the emergence of financial turmoil has led to an increase in debt over the imposed convergence criterion of 60% during the period. The majority states that joined the EU in 2004 and 2007, namely: Slovenia, Slovakia, Latvia, Lithuania, Poland, Czech Republic, Bulgaria and Romania, have a low level of government debt, in some of the countries being below the level of the states that joined the EU in the first waves.

Table 2 Gross government debt in EU-27 and EA-17, 2000-2012 (% of GDP)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
<b>Belgium</b>	107.8	106.5	103.4	98.4	94.0	92.0	87.9	84.0	89.2	95.7	95.7	98.0	99.8	96.1
<b>Bulgaria</b>	72.5	66.0	52.4	44.4	37.0	27.5	21.6	17.2	13.7	14.6	16.2	16.3	18.5	27.0
<b>Czech Republic</b>	17.8	23.9	27.1	28.6	28.9	28.4	28.3	27.9	28.7	34.6	38.4	41.4	46.2	29.9
<b>Denmark</b>	52.4	49.6	49.5	47.2	45.1	37.8	32.1	27.1	33.4	40.7	42.7	46.4	45.4	41.6
<b>Germany</b>	60.2	59.1	60.7	64.4	66.2	68.6	68.0	65.2	66.8	74.5	82.5	80.0	81.0	68.6
<b>Estonia</b>	5.1	4.8	5.7	5.6	5.0	4.6	4.4	3.7	4.5	7.1	6.7	6.1	9.8	5.5
<b>Ireland</b>	37.0	34.5	31.8	31.0	29.4	27.2	24.6	24.9	44.2	64.4	91.2	104.1	117.4	43.4
<b>Greece</b>	103.4	103.7	101.7	97.4	98.6	100.0	106.1	107.4	112.9	129.7	148.3	170.3	156.9	116.1
<b>Spain</b>	59.4	55.6	52.6	48.8	46.3	43.2	39.7	36.3	40.2	54.0	61.7	70.5	86.0	51.9
<b>France</b>	57.3	56.9	58.8	62.9	64.9	66.4	63.7	64.2	68.2	79.2	82.4	85.8	90.2	68.5
<b>Italy</b>	108.6	108.3	105.4	104.1	103.7	105.7	106.3	103.3	106.1	116.4	119.3	120.7	127.0	110.1
<b>Cyprus</b>	59.6	61.2	65.1	69.7	70.9	69.4	64.7	58.8	48.9	58.5	61.3	71.5	86.6	64.5
<b>Latvia</b>	12.4	14.1	13.6	14.7	15.0	12.5	10.7	9.0	19.8	36.9	44.4	41.9	40.6	18.7
<b>Lithuania</b>	23.6	23.0	22.2	21.0	19.3	18.3	17.9	16.8	15.5	29.3	37.8	38.3	40.5	23.6
<b>Luxembourg</b>	6.2	6.3	6.3	6.2	6.3	6.1	6.7	6.7	14.4	15.5	19.5	18.7	21.7	9.4
<b>Hungary</b>	56.1	52.7	55.9	58.6	59.5	61.7	65.9	67.0	73.0	79.8	82.2	82.1	79.8	66.4
<b>Malta</b>	53.9	58.9	57.9	66.0	69.8	68.0	62.5	60.7	60.9	66.5	66.8	69.5	71.3	63.8
<b>Netherlands</b>	53.8	50.7	50.5	52.0	52.4	51.8	47.4	45.3	58.5	60.8	63.4	65.7	71.3	55.2
<b>Austria</b>	66.2	66.8	66.2	65.3	64.7	64.2	62.3	60.2	63.8	69.2	72.3	72.8	74.0	66.6
<b>Poland</b>	36.8	37.6	42.2	47.1	45.7	47.1	47.7	45.0	47.1	50.9	54.9	56.2	55.6	46.8
<b>Portugal</b>	50.7	53.8	56.8	59.4	61.9	67.7	69.4	68.4	71.7	83.7	94.0	108.2	124.1	72.0
<b>Romania</b>	22.5	25.7	24.9	21.5	18.7	15.8	12.4	12.8	13.4	23.6	30.5	34.7	37.9	21.3
<b>Slovenia</b>	26.3	26.5	27.8	27.2	27.3	26.7	26.4	23.1	22.0	35.2	38.7	47.1	54.4	30.3
<b>Slovakia</b>	50.3	48.9	43.4	42.4	41.5	34.2	30.5	29.6	27.9	35.6	41.0	43.4	52.4	39.3
<b>Finland</b>	43.8	42.5	41.5	44.5	44.4	41.7	39.6	35.2	33.9	43.5	48.7	49.2	53.6	42.9
<b>Sweden</b>	53.9	54.7	52.5	51.7	50.3	50.4	45.3	40.2	38.8	42.6	39.4	38.6	38.2	45.5
<b>United Kingdom</b>	40.5	37.3	37.1	38.7	40.3	41.7	42.7	43.7	51.9	67.1	78.4	84.3	88.7	50.5
<b>European Union - 27</b>	61.8	60.9	60.3	61.9	62.2	62.7	61.5	58.9	62.2	74.5	80.0	82.4	85.2	66.7
<b>Euro area - 17</b>	69.2	68.2	68.0	69.2	69.6	70.3	68.6	66.4	70.2	80.0	85.4	87.3	90.6	73.7

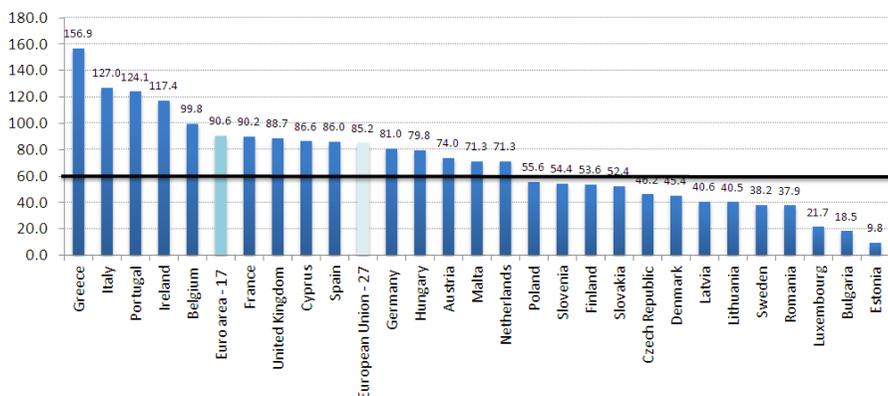
Source: Eurostat

If until the onset of financial imbalances countries such as Ireland and the UK have failed to show adequate control of public finances, accounting indebtedness below the reference value of 60%, once the financial crisis hit, their level shows an alarming increase reaching up to 117.4% in Ireland in 2012 and up to 88.7% in the UK in the same year. Under the impact of the financial crisis, government debt to GDP increased in Belgium, France, Germany, Portugal, reaching in 2012 values higher than the limit set, of 99.8%, 90.2%, 81.0% and 124.1%.

With of poor management of government debt to GDP in the period before the financial crisis, the emergence of financial turmoil generated unprecedented inflammation indebtedness in Greece and Italy. Greece appears as the state with the highest level of budget deficit over the period 2000-2012, reaching in 2011 the value of 170.3% of GDP. Like Greece, Italy has a high degree of fiscal indiscipline that even in the period before the financial turmoil experienced debt ratios to GDP of over 100%. For Italy, this situation is in opposition to the that of the fiscal balance, with some exceptions, was kept within the convergence criterion limit, not recording sharp slippage under the impact of the financial crisis, which cannot be said for Greece.

Also, we find that in 2012 more than half of EU Member States exceed the limit imposed by the Treaty (*Figure 4*).

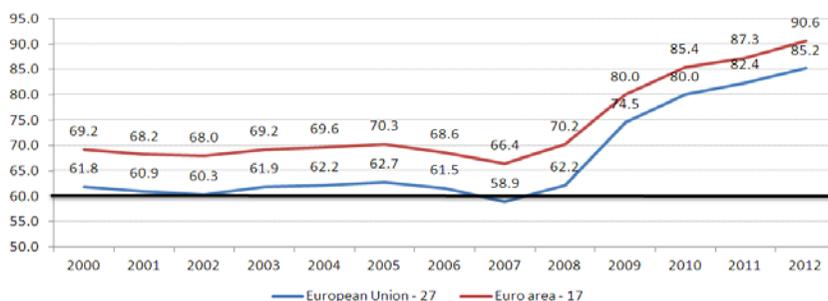
AN ANALYSIS OF THE FISCAL CONVERGENCE CRITERIA IN THE EUROPEAN UNION IN TERMS OF THE SUSTAINABILITY



**Figure 4 Gross public debt in EU-27, 2012 (% of GDP)**

Source: Own calculations, based on the data available on Eurostat

Moreover, we find two extremely interesting aspects (*Figure 5*): on the one hand, the fact that the average gross public debt share of GDP in EA-17 is higher than in the EU-27, a situation that reflect significant indebtedness of the euro area Member States than in other EU member states, while the trend in the both cases continuously growing since 2007 and, on the other hand, during the period 2000-2012 the average level of debt for both the EU and EMU exceeds the reference value of 60%.



**Figure 5 Average of gross public debt in EU-27 and EA-17, 2000-2012 (% of GDP)**

Source: Own calculations, based on the data available on Eurostat

So, we can appreciate that overall during the period of time 2000-2007, the EU-27 and the EA-17 failed to meet the budget deficit criterion, but due to the financial crisis that began in 2008 and the prolonged slowdown in economic growth, the fiscal balance had an unfavorable evolution so far. Meanwhile, gross public debt situation overall has worsened increasingly since 2008 until 2012.

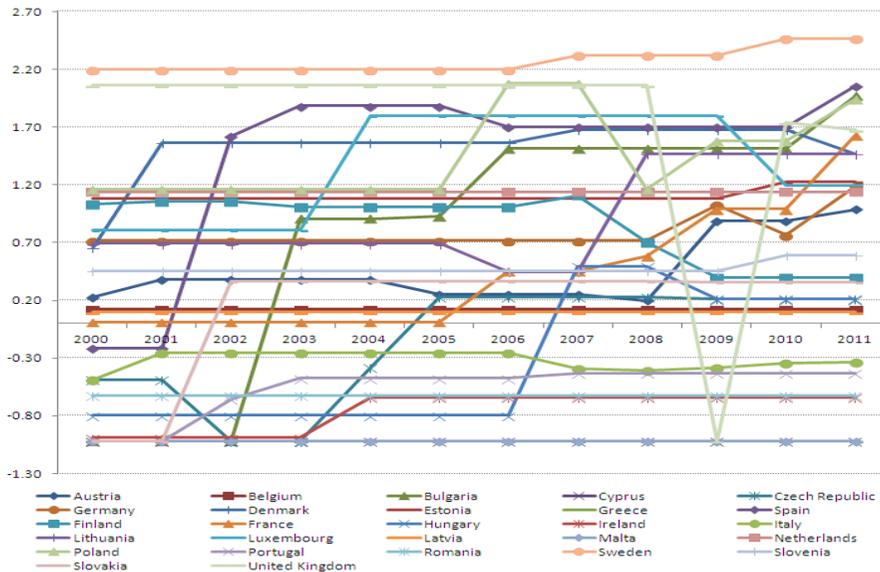
#### 4. The national numerical fiscal rules

In order to be a good tool for adjusting economic processes, fiscal policy must be effective. Unfortunately, there are some aspects that limit its ability to be effective and which are arising from a reduced flexibility due to information, political and social reasons, such as (Bukowski, 2006):

- the insufficient information that government has about the evolution of economic growth;
- difficulties in achieving a parliamentary consensus concerning the changes in the size of the fiscal deficit and budget structure;
- a long time for preparing and discussing fiscal changes;
- social barriers in increasing taxation or limiting the government expenditures;
- the specificity of government expenditures due to their ease of growth at the expense of reduction.
- the contradictory situation between the political cycle and the rational fiscal policy.

Fiscal sustainability in the EU Member States, and especially of the euro zone, is under stress. This requires the implementation of fiscal policy rules that establish specific numerical targets for budget aggregates, namely a permanent constraint on fiscal policy expressed by a composite indicator of fiscal outcomes (e.g. public budget balance, public debt, government expenditure development, government revenues development, and others).

In this respect, the Economic Policy Committee attached to ECOFIN Council prepared for EU Member States a data set of fiscal rules since 1990, under which it is calculated the *Fiscal Rule Index* (FRI) which summarizes information regarding on: the legal basis of the rule, the space for a review, mechanisms for monitoring the compliance and implementation of the rule, the existence of pre-defined enforcement mechanisms and media visibility rule. *Figure 6* shows the evolution of the composite index for the EU-27 Member States during the period 2000-2011.

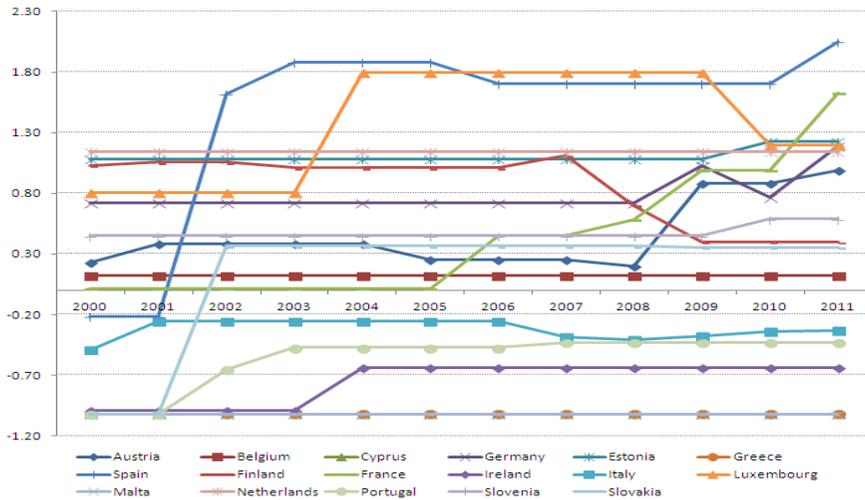


**Figure 6 Fiscal Rule Index in EU-27, 2000-2011**

Source: European Commission

If we analyze the evolution index in the EA-17 for the same period, we see that euro area countries show significant variations of FRI that should not manifest in a single currency area.

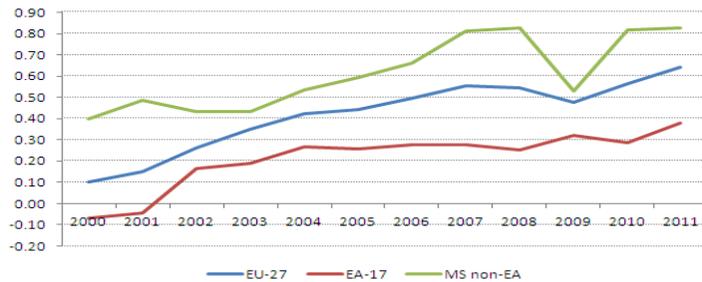
AN ANALYSIS OF THE FISCAL CONVERGENCE CRITERIA IN THE EUROPEAN UNION IN TERMS OF THE SUSTAINABILITY



**Figure 7 Fiscal Rule Index in EA-17, 2000-2011**

Source: European Commission

During the considered period, there is a slight increase growth of the average of FRI in the EU and the euro area (*Figure 7*), suggesting the growing importance of fiscal rules in the fiscal management of the EU and euro area. However we identify a weaker fiscal management in the euro area comparing to that applied in other EU Member States but non-EA.



**Figure 7 Fiscal Rule Index in EA-17 comparing to EU-27 and non-EA Member States, 2000-2011**

Source: Own calculations, based on the data available on Eurostat

The advantage of such an approach seems quite obvious, as national policymakers would maintain the autonomy to design an effective fiscal policy and appropriate circumstances.

Given the positive effects of fiscal reforms already initiated, the Commission considers as priorities at national and EU levels the following:

- further differentiated fiscal consolidation, given the specificities of each EU economy, favoring economic growth;
- careful resumption of lending to the economy;
- promoting growth and competitiveness today and in the future;
- approaching the issues concerning the unemployment and the social consequences of crisis;
- modernization of public administration.

## 5. Conclusions

Highly controversial, convergence criteria, both from the perspective of economic theory and empirical research in the field, cannot be considered without doubt a barrier to economic growth. By introducing benchmarks and penalties for overcoming them, fiscal stability criterion has the merit of having introduced some fiscal discipline in the EU Member States, being one of the important factors, along with others, of macroeconomic stabilization and balanced economic growth.

In the context of certain technical deficiencies of the fiscal criteria, analyzing the developments of fiscal deficit and gross public debt of the EU-27 and EA-17 Member States, during the period 2000-2012 we can say that overall during the period of time 2000-2007, the EU-27 and the EA-17 failed to meet the budget deficit criterion, but due to the financial crisis that began in 2008 and the prolonged slowdown in economic growth, the fiscal balance had an unfavorable evolution so far. Meanwhile, gross public debt situation overall has worsened increasingly since 2008 until 2012. Analyzing the adoption, application and enforcement of the fiscal policy rule expressed by Fiscal Rule Index, for the period 2000-2011, using the data available on the European Commission, the results on the evolution of this composite indicator highlights the increasingly importance of rules in the fiscal management of the EU and especially of the euro area.

It is obvious that public finances in the European assembly, overall, face major challenges arising from the need to reduce the level of indebtedness in the context of bleak economic growth prospects, of the pressure on long-term expenditures and of fiscal burden which is already quite high.

Given the long-term challenges of fiscal sustainability, reviewing the effectiveness of public expenditures is extremely important, while promoting the consolidation of a set of measures of income that are efficient and pro-growth.

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