

## **FISCAL DISCIPLINE WITHIN THE EU: COMPARATIVE ANALYSIS**

**SORIN CELEA, PETRE BREZEANU,  
ANA PETRINA PĂUN \***

**ABSTRACT:** *This paper focuses on the analysis of the convergence indicators relative to fiscal area in the EU; subsequent to a description of the main peculiarities of the convergence criteria, the research develops a critical analysis on a comparative perspective of the actual values of fiscal convergence indicators registered in EU countries compared with the reference values of the indicators, with emphasis on the differences between emerging and developed countries.*

**KEY WORDS:** *nominal convergence, the Maastricht criteria, benchmarks.*

**JEL CLASIFICATION:** *E52, E61, E62.*

### **1. INTRODUCTION**

In order to create an economic and monetary union, the Treaty of Maastricht introduced as fundamental parts of the nominal convergence an assembly of criteria on which the EU appreciates the ability of countries to join the euro area. Nominal convergence criteria are related to a set of policies - financial, monetary, currency, fiscal and macro-financial architecture that substantiates the nations that will become members of the Euro-zone.

In essence, the **convergence criteria** consist of a series of macroeconomic indicators that have been calibrated to specific reference levels considered to be sustainable for a stable macroeconomic environment.

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\* *Ph.D. Student from The Bucharest University of Economic Studies, Romania*  
*Ph.D. Professor from The Bucharest University of Economic Studies, Romania,*  
[brezeanupetre@yahoo.com](mailto:brezeanupetre@yahoo.com)  
*Ph.D. Student from The Bucharest University of Economic Studies, Romania,*  
[stanciu.anapetrina@yahoo.com](mailto:stanciu.anapetrina@yahoo.com)

**Reference values** for the analyzed indicators are<sup>1</sup>:

- 1.5% above the average of the three best performing states recorded over the last two years in case of the inflation rate;
- 2% above the average of the three best performing states recorded over the last two years in case of the interest rate;
- 3% share of GDP years in case of the budget deficit;
- 60% share of GDP in case of the public debt.

In the following chapters, there will be conducted an analysis of the indicators of fiscal convergence that is achieved during the period 2000-2010, with the fore in the EU countries. The analysis will be conducted on a comparative perspective of the actual values of macroeconomic indicators registered in EU countries compared with the reference values of the indicators.

Fiscal indicators that show the highest degree of divergence derive from the fiscal area. The actual share of the budget deficit and public debt to GDP is moving away from the reference value as the time of financial crisis is approaching, ie 2006-2007. Out of the two indicators specific to fiscal convergence process, the budget deficit is the most divergent.

## **2. CHAPTER 1**

With regard to budgetary discipline, it is noted that Germany has evolved to balance the budget deficits within the limits imposed by the convergence criterion, except the years of 2002, 2003 and 2010 where the share of budget deficit to GDP reached values of 3.7%, 4% and 3.3%; during the other years the effective deficit was below 3% of GDP (see Annex 2).

However, as regards the fiscal rigor, Denmark is ranked first for the period under review, the budget balance was predominantly positive, except the last two years (2009, 2010), when the deficit was below the threshold (2,7%).

Financial crisis generated a swelling budget deficit to GDP ratio; if during the period 2000-2007, France, Italy, Luxembourg, Netherlands, UK and even Portugal have effectively managed public finances, managing to maintain a positive budget balance or slightly negative, below the limit imposed by the convergence criteria, with the financial crisis, budget deficit ratio to GDP increased significantly, reaching alarming levels even more than 7% of GDP for France (7%), Spain (9.2 %), Portugal (9.1%) or UK (10.4%).

Nevertheless, in terms of leverage, Spain managed to ensure its proper control by 2009, with any breach of the reference level. A galloping growth occurred in 2009-2010, with a share of GDP amounting from 60.1% to 53.3% (see Annex 1).

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<sup>1</sup> Out of all the convergence criteria, the analysis did not focus on the inflation, interest rate and exchange rate, these criteria being outside the scope of this research.

Luxembourg has the lowest indebtedness degree during the analyzed period, with an average of about 6% by 2007, while later on the public debt to GDP increased to 14.6% in 2009 and to 18.4% in 2010.

Other countries with rigorous management of public debt to GDP are the Netherlands, Finland and Sweden, where the appearance of financial turmoil has increased the debt over the fence required by the convergence criteria, leading only to an increase of 10%, which continued to maintain the public debt to GDP in the 60% limit.

Greece is in a position to state the highest deficit recorded over the period analyzed, either before the financial crisis, the share of GDP budget deficit was not managed effectively, reaching almost permanently above the reference values ( 4.5% in 2001, 5.2% in 2005, 6.4% in 2007). The emergence of the financial turmoil triggered the inflammation of unprecedented budget deficit, which in 2008 reached 9.8%, while in 2009 its value amounted to 15.4% and 10.5% in 2010.

The same situation is found at the level of public debt to GDP, Greece recording an average of this indicator superior to 100% over the period.

Another country with a high degree of fiscal indiscipline is Italy, which even in the period before the outbreak of the financial turmoil experienced a GDP share of public debt exceeding 100%. This is in contrast to the deficit that, with certain exceptions, it was maintained within the default convergence criteria, with any slippages not even under the impact of the financial crisis.

At the opposite pole lies Ireland which until the outbreak of financial imbalances has failed to show adequate control of public finances, accounting for almost the entire analyzed period a positive budget balance, once the financial crisis broke out, since 2007, suddenly the budget balance became negative, reaching alarming levels: 7.3% in 2008, 14.3% in 2009 and 32.4% in 2010.

Moreover, the same considerations can be made and the debt ratio to GDP, by 2008, Ireland met this criterion of convergence, giving leverage to approximately half the reference value, while in 2009 and 2010 the values of this indicators rose alarmingly to 65.6% and 96.2%.

France and Britain have applied a more relaxed management of public finances, maintaining a share of public to debt GDP close to baseline throughout the analyzed period. Under the impact of financial crisis, public debt to GDP increased, reaching 81.7% in 2010 if the value of 80% in France and the UK.

### **3. CHAPTER 2**

The average share of budget deficit to GDP in the EU27 and the euro area increased in the period under review from 3.1% in 2003 to 6.4% and 6% in 2010. It is noted that even in the euro area the share of budget deficit to GDP is much lower than the value within EU27, which shows poor management of public finances including at the level of the euro area countries.

A particularly interesting aspect is that public debt to GDP in the euro area average is higher than the EU27 average, reflecting significant levels of debt for countries in this area. From this perspective, we appreciate that eurozone countries

have exerted a negative effect in the EU27, essentially causing a spiraling financial crisis, anchored initially in the sub-prime loans, subsequently passing on public finances.

The work brings to the fore the innovative idea of disparities in the EU through the gaps created not only due to significant differences between the economic development of emerging countries compared with developed countries but also in terms of imbalances caused by the degree of excessive indebtedness of euro area countries. Practically non-existent budgetary discipline in Portugal, Italy, Greece and Spain led to significant accumulation of deficits over time that conducted to the emergence of significant turbulences, with negative effects on the macroeconomic stability.

As for the budget deficit, the situation is characterized by diversity. There are a number of countries - Bulgaria, Latvia and Lithuania, where budgetary policies have been managed effectively, highlighting a convergence of budget deficit towards the reference value; in opposition, there are countries such as Romania, Poland and Hungary which are characterized by differences.

Except for Hungary, all countries present convergence for the debt indicator both previously to the crisis outbreak, as well as beyond. This is in opposition against the developed countries - Greece, Ireland, Portugal, Spain - where the values reflect an extremely high leverage.

As regards Romania, budget is quite far removed from the reference value.

#### **4. CONCLUSIONS**

Analysis of the nominal convergence criteria reflects important disparities both within countries and within the indicators. Inflation and budget deficit have generated problematic situations, breaching the reference values in the post-crisis period. This is explained in terms of decreasing tax revenues generated by macroeconomic imbalances and financial turmoil.

The actual share of the budget deficit and public debt to GDP is moving away from the reference value as the time of financial crisis is approaching, ie 2006-2007. Out of the two indicators specific to fiscal convergence process, the budget deficit is the most divergent.

An important aspect is the comparative analysis of the budget deficit registered in Romania in relation to other countries in Central and Eastern Europe that went through similar experiences. The research highlighted that Romania has managed to keep control of budgetary and fiscal policy.

Generally, the values recorded by this indicator for all countries are close to the period analyzed, with a similar dynamic while Czech Republic has a higher value for this indicator in the years 1992-2005, like Romania, Bulgaria, Poland and Hungary.

The only country that has a much higher budget deficit compared to the other is Slovakia, which in 2000 shows a deficit amounting to over 10%.

Although Romania was characterized by control of the budget balance, highlighting, except for the period marked by financial crisis, a policy to avoid the accumulation of a significant deficit, fiscal strategy has not proved to be most successful in this respect, given the deficiencies in the collection of taxes.

Integration into the European Union imposed a series of challenges in terms of ensuring a proper management of public expenditure policy. Indeed, as a member state, Romania has a number of grants that can help improve living standards, but also to contributions to the EU budget. Average contributions in this period were approximately 1% of GDP.

Between 2007 and 2009 Romania has contributed to the EU budget by about 9 billion, but it was to take over the same period, over 30 billion.

Given that Romania's position is the net contributor to EU budget and not the beneficiary, the financial turmoil creates real difficulties in maintaining a budget deficit limits imposed by the Maastricht Treaty.

In the future, it remains of great interest for different research approaches the issue of nominal convergence from the perspective of recently integrated the new Member States. Their ability to rank within the reference values depends on the harmonization of economic policies to reduce the gap between nominal convergence and real convergence indicators.

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**Annex 1.**  
**The dynamics of public debt to GDP in the EU over the period 2000-2010**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>European Union (27 countries)</b>	61.9	61.0	60.4	61.8	62.2	62.8	61.5	59.0	62.3	74.4	80.0
<b>Euro area (17 countries)</b>	69.1	68.1	67.9	69.0	69.5	70.0	68.4	66.2	69.9	79.3	85.1
<b>Belgium</b>	107.9	106.6	103.5	98.5	94.2	92.1	88.1	84.2	89.6	96.2	96.8
<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
<b>Czech Republic</b>	18.5	24.9	28.2	29.8	30.1	29.7	29.4	29.0	30.0	35.3	38.5
<b>Denmark</b>	52.4	49.6	49.5	47.2	45.1	37.8	32.1	27.5	34.5	41.8	43.6
<b>Germany</b>	59.7	58.8	60.4	63.9	65.8	68.0	67.6	64.9	66.3	73.5	83.2
<b>Estonia</b>	5.1	4.8	5.7	5.6	5.0	4.6	4.4	3.7	4.6	7.2	6.6
<b>Ireland</b>	37.8	35.5	32.1	30.9	29.6	27.4	24.8	25.0	44.4	65.6	96.2
<b>Greece</b>	103.4	103.7	101.7	97.4	98.6	100.0	106.1	105.4	110.7	127.1	142.8
<b>Spain</b>	59.3	55.5	52.5	48.7	46.2	43.0	39.6	36.1	39.8	53.3	60.1
<b>France</b>	57.3	56.9	58.8	62.9	64.9	66.4	63.7	63.9	67.7	78.3	81.7
<b>Italy</b>	109.2	108.8	105.7	104.4	103.9	105.9	106.6	103.6	106.3	116.1	119.0
<b>Cyprus</b>	58.8	60.7	64.6	68.9	70.2	69.1	64.6	58.3	48.3	58.0	60.8
<b>Latvia</b>	12.3	14.0	13.5	14.6	14.9	12.4	10.7	9.0	19.7	36.7	44.7
<b>Lithuania</b>	23.7	23.1	22.3	21.1	19.4	18.4	18.0	16.9	15.6	29.5	38.2
<b>Luxembourg</b>	6.2	6.3	6.3	6.1	6.3	6.1	6.7	6.7	13.6	14.6	18.4
<b>Hungary</b>	54.9	52.0	55.6	58.3	59.1	61.8	65.7	66.1	72.3	78.4	80.2
<b>Malta</b>	55.9	62.1	60.1	69.3	72.4	69.6	64.2	62.0	61.5	67.6	68.0
<b>Netherlands</b>	53.8	50.7	50.5	52.0	52.4	51.8	47.4	45.3	58.2	60.8	62.7
<b>Austria</b>	66.5	67.3	66.7	65.8	65.2	64.6	62.8	60.7	63.8	69.6	72.3
<b>Poland</b>	36.8	37.6	42.2	47.1	45.7	47.1	47.7	45.0	47.1	50.9	55.0
<b>Portugal</b>	48.5	51.2	53.8	55.9	57.6	62.8	63.9	68.3	71.6	83.0	93.0
<b>Romania</b>	22.5	25.7	24.9	21.5	18.7	15.8	12.4	12.6	13.4	23.6	30.8
<b>Slovenia</b>	:	26.7	27.9	27.3	27.4	26.7	26.4	23.1	21.9	35.2	38.0
<b>Slovakia</b>	50.3	48.9	43.4	42.4	41.5	34.2	30.5	29.6	27.8	35.4	41.0
<b>Finland</b>	43.8	42.5	41.5	44.5	44.4	41.7	39.7	35.2	34.1	43.8	48.4
<b>Sweden</b>	53.9	54.7	52.5	51.7	50.3	50.4	45.0	40.2	38.8	42.8	39.8
<b>United Kingdom</b>	41.0	37.7	37.5	39.0	40.9	42.5	43.4	44.5	54.4	69.6	80.0

Source: Eurostat

**Annex 2.**  
**The dynamics of government budgetary position to GDP in the EU over the period 2000-2010**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>European Union (27 countries)</b>	0.6	-1.4	-2.5	-3.1	-2.9	-2.5	-1.5	-0.9	-2.4	-6.8	-6.4
<b>Euro area (17 countries)</b>	0.0	-1.9	-2.6	-3.1	-2.9	-2.5	-1.4	-0.7	-2.0	-6.3	-6.0
<b>Belgium</b>	0.0	0.4	-0.1	-0.1	-0.3	-2.7	0.1	-0.3	-1.3	-5.9	-4.1
<b>Bulgaria</b>	-0.5	1.1	-1.2	-0.4	1.8	1.0	1.9	1.1	1.7	-4.7	-3.2
<b>Czech Republic</b>	-3.7	-5.6	-6.8	-6.6	-3.0	-3.6	-2.6	-0.7	-2.7	-5.9	-4.7
<b>Denmark</b>	2.3	1.5	0.4	0.1	2.1	5.2	5.2	4.8	3.2	-2.7	-2.7
<b>Germany</b>	1.3	-2.8	-3.7	-4.0	-3.8	-3.3	-1.6	0.3	0.1	-3.0	-3.3
<b>Estonia</b>	-0.2	-0.1	0.3	1.7	1.6	1.6	2.4	2.5	-2.8	-1.7	0.1
<b>Ireland</b>	4.7	0.9	-0.4	0.4	1.4	1.6	2.9	0.1	-7.3	-14.3	-32.4
<b>Greece</b>	-3.7	-4.5	-4.8	-5.6	-7.5	-5.2	-5.7	-6.4	-9.8	-15.4	-10.5
<b>Spain</b>	-1.0	-0.6	-0.5	-0.2	-0.3	1.0	2.0	1.9	-4.2	-11.1	-9.2
<b>France</b>	-1.5	-1.5	-3.1	-4.1	-3.6	-2.9	-2.3	-2.7	-3.3	-7.5	-7.0
<b>Italy</b>	-0.8	-3.1	-2.9	-3.5	-3.5	-4.3	-3.4	-1.5	-2.7	-5.4	-4.6
<b>Cyprus</b>	-2.3	-2.2	-4.4	-6.5	-4.1	-2.4	-1.2	3.4	0.9	-6.0	-5.3
<b>Latvia</b>	-2.8	-1.9	-2.3	-1.6	-1.0	-0.4	-0.5	-0.3	-4.2	-9.7	-7.7
<b>Lithuania</b>	-3.2	-3.6	-1.9	-1.3	-1.5	-0.5	-0.4	-1.0	-3.3	-9.5	-7.1
<b>Luxembourg</b>	6.0	6.1	2.1	0.5	-1.1	0.0	1.4	3.7	3.0	-0.9	-1.7
<b>Hungary</b>	-3.0	-4.0	-8.9	-7.2	-6.4	-7.9	-9.3	-5.0	-3.7	-4.5	-4.2
<b>Malta</b>	-6.2	-6.4	-5.5	-9.9	-4.7	-2.9	-2.8	-2.4	-4.5	-3.7	-3.6
<b>Netherlands</b>	2.0	-0.2	-2.1	-3.1	-1.7	-0.3	0.5	0.2	0.6	-5.5	-5.4
<b>Austria</b>	-1.7	0.0	-0.7	-1.5	-4.5	-1.7	-1.6	-0.9	-0.9	-4.1	-4.6
<b>Poland</b>	-3.0	-5.3	-5.0	-6.2	-5.4	-4.1	-3.6	-1.9	-3.7	-7.3	-7.9
<b>Portugal</b>	-2.9	-4.3	-2.9	-3.0	-3.4	-5.9	-4.1	-3.1	-3.5	-10.1	-9.1
<b>Romania</b>	-4.7	-3.5	-2.0	-1.5	-1.2	-1.2	-2.2	-2.6	-5.7	-8.5	-6.4
<b>Slovenia</b>	-3.7	-4.0	-2.5	-2.7	-2.3	-1.5	-1.4	-0.1	-1.8	-6.0	-5.6
<b>Slovakia</b>	-12.3	-6.5	-8.2	-2.8	-2.4	-2.8	-3.2	-1.8	-2.1	-8.0	-7.9
<b>Finland</b>	6.8	5.0	4.0	2.4	2.3	2.7	4.0	5.2	4.2	-2.6	-2.5
<b>Sweden</b>	3.6	1.5	-1.3	-1.0	0.6	2.2	2.3	3.6	2.2	-0.7	0.0
<b>United Kingdom</b>	3.6	0.5	-2.1	-3.4	-3.4	-3.4	-2.7	-2.7	-5.0	-11.4	-10.4

Source: Eurostat