

An Assessment of Economic Stability under the New European Economic Governance

Gheorghe HURDUZEU

*Bucharest University of Economic Studies
6 Piața Romană Sector 1, Bucharest, 010374, Romania
geohurduzeu@gmail.com*

Maria-Isadora LAZĂR

*Bucharest University of Economic Studies
6 Piața Romană, Sector 1, Bucharest, 010374, Romania
lazar.isadora@yahoo.com*

Abstract. *The economic crisis, followed by the sovereign debt crisis, resulted in high unemployment, unsustainable public finances and deepening disparities between Euro Area member states, and underlined the necessity of strengthening economic coordination. In order to lessen the effects of the crises, to prevent further deepening of the economic context and the appearance of new similar situations, the European framework was improved by the provisions of the new economic governance. The aim of this paper is to assess the effects regarding macroeconomic stability within Euro Area member states, achieved under the new economic governance framework. In this respect, the first part of the paper consists in an overview of the provisions imposed through the European Semester, the reformed Stability and Growth Pact and the other elements of the new European governance. In order to assess the achievement of economic stability we analyzed data for Southern Euro Area member states, during 2009-2013, as this group of countries registered most issues during 2013. We took into consideration five important indicators, essential in any economy that form the macroeconomic stability pentagon: economic growth rate, unemployment rate, inflation rate, budgetary balance and current account balance. By comparing the area obtained through the macroeconomic stability pentagon, we conclude on meeting one of the main objectives of the new European governance: economic stability.*

Keywords: *economic governance, Euro Area, macroeconomic stability pentagon, European Union.*

Introduction

Macroeconomic developments that were registered during the last years underlined the necessity of strengthening economic coordination inside the European Union. The economic crisis, which was followed by the sovereign debt crisis, resulted in high unemployment, unsustainable public finances, and deepening disparities between Euro Area member states. In order to lessen the effects of the crises and to prevent further deepening of the economic context and the appearance of new similar situations, the European framework was improved by the provisions of the new economic

governance. This new framework consists of new rules, enhanced supervision, follow up requirements and sanctions that are meant to ensure macroeconomic stability through better coordination of fiscal and economic policies, enhanced competitiveness and convergence between European economies. The aim of this paper is to assess the effects regarding macroeconomic stability within Euro Area member states, achieved under the new economic governance framework. In this respect, the first part of the paper consists in an overview of the provisions imposed through the European Semester, the reformed Stability and Growth Pact and the other elements of the new European governance. In order to assess the achievement of economic stability we analyzed data for Southern Euro Area member states, during 2009-2013, as this group of countries registered most issues during the last years. We took into consideration five important indicators, essential in any economy, that form the macroeconomic stability pentagon: economic growth rate, unemployment rate, inflation rate, budgetary balance and current account balance. By comparing the area obtained through the macroeconomic stability pentagon, we conclude on meeting one of the main objectives of the new European governance: the economic stability of member states.

Overview of the European economic governance

Economic crisis and subsequent sovereign debt crisis revealed many weaknesses in the functioning of the European Union, highlighting the need for better coordination between member states and for strengthening the supervision of the European Union. In response to the fundamental problems highlighted by the economic development of the last years, a set of measures was implemented; these are the basis of the new European economic governance, designed to counter the effects of the financial crisis, to strengthen the Economic and Monetary Union and to establish a strong political union (European Council, 2011). The recent provisions of the economic governance of the European Union are meant to strengthen economic agenda through closer supervision by the European Union, to ensure Euro Area stability and to support the recovery of the financial sector, which was heavily damaged during the last years (European Council, 2010).

The fulfillment of the first objective was imposed and agreed by the European Union member states through the conditions included in the Stability and Growth Pact (SGP) applied since 1999 and updated through its further amendments (2005), through the provisions of the Europe 2020 Strategy, through the provisions adopted by member states when signing the Euro Plus Pact and through the establishment of the new European Semester

designed to ensure better oversight of the progress made towards achieving the general objectives. The Euro Plus Pact is a program of reforms to which Euro Area member states and six other European countries that are not part of the Euro Area: Bulgaria, Denmark, Latvia, Lithuania, Poland and Romania have committed, in order to achieve higher competitiveness and employment, sustainable public finances and to reinforce financial stability. One of the objectives of the Euro Plus Pact is to avoid further deepening of the gaps between European economies, by addressing issues regarding cost competitiveness. The Pact consists of measures that should be implemented in order to achieve the above mentioned objectives, that include: "reviews of wage setting arrangements, indexation schemes of public sector wages, structural reforms meant to enhance productivity, but also measures intended to enhance employment, to achieve sustainability of public finances and to improve financial stability" (Gabrisch & Staehr, 2014).

The fiscal governance that should lead to the achievement of sound and sustainable public finances represents a key component of the European governance framework. On the 28th September 2011, a package of six legislative proposals on economic governance (Six-Pack) aimed at strengthening economic governance in the European Union by creating a common framework for fiscal governance and a mechanism for correction of macroeconomic imbalances was agreed on. Out of the six proposals four are meant to strengthen the SGP and to improve the budgetary positions. Pillars in this regard remain the two fiscal rules, namely the budget deficit and the public debt, provided by the Maastricht Treaty and the Stability and Growth Pact (Moisa et al., 2009). The other rules are meant to monitor macroeconomic imbalances. The Macroeconomic Imbalance Procedure is "a monitoring and early warning system installed for extra surveillance of economic activity (Article 121, paragraph 6 of the Treaty) that works with the following three pillars: (1) an early warning system on macroeconomic imbalances based on a set of ten indicators called Macroeconomic Imbalance Scoreboard; (2) preventive and corrective measures- the Commission and the Council may make recommendations to member states on the emergence of imbalances, in order to mitigate them; when progress is not sufficient and discrepancies are registered, will be enforced the excessive imbalances procedure, similar to the basic principle of the excessive deficit procedure; (3) strict control".

The Macroeconomic Imbalance Scoreboard consists of indicators and thresholds that were chosen as to provide a reliable signaling device for potentially harmful imbalances and competitiveness losses at an early stage of their emergence. The scoreboard initially consisted of the following ten indicators with indicative thresholds (European Commission, 2012):

- three-year backward moving average of the current account balance in percent of GDP, with a threshold of +6% and - 4%;
- net international investment position in percent of GDP, with a threshold of -35%;
- five-year percentage change of export market shares measured in values, with a threshold of -6%;
- three-year percentage change in nominal unit labour cost, with thresholds of +9% for euro-area countries and +12% for non-euro-area countries, respectively;
- three-year percentage change of the real effective exchange rates based on HICP/CPI deflators, relative to 35 other industrial countries, with thresholds of -/+5% for euro-area countries and -/+11% for non-euro-area countries, respectively;
- private sector debt in percent of GDP with a threshold of 160%;
- private sector credit flow in percent of GDP with a threshold of 15%;
- year-on-year changes in the house price index relative to a Eurostat consumption deflator, with a threshold of 6%;
- general government sector debt in percent of GDP with a threshold of 60%;
- three-year backward moving average of the unemployment rate, with a threshold of 10%”.

Subsequently, the scoreboard was updated, including also indicators regarding the financial sector activity, with focus on liability. As can be noticed, some of the indicators, such as current account balance, are also used in assessing economic stability through the macroeconomic stabilization pentagon.

Under the new European economic governance, the main measure to ensure stability in the Euro Area is the replacement of temporary support mechanisms, created in 2010 in response to the sovereign debt crisis, with a permanent mechanism: the European Stability Mechanism that will provide financing in case of severe problems. Up to now, the European Stability Mechanism has already provided assistance for two Euro Area member states, these being Spain and Cyprus. While Spain needed financing for recapitalization of the banking sector and has already refunded its debt, Cyprus’s debt is due in the first semester of this year, the financing needs covering also budgetary and debt liabilities. Taking this into consideration, can easily be understood the decision of improving the macroeconomic imbalance scoreboard by adding the financial sector liability thresholds.

The latest stage of the European economic governance is the Treaty on Stability, Coordination and Governance in Economic and Monetary Union

(TSCG), signed on 2nd of March, 2012. It is consistent with the European Union law, but it is not a part of it. The Treaty is meant to provide better economic and fiscal coordination through fiscal discipline, economic policy convergence and enhanced governance in the Euro Area. Articles 3 and 8 of the TSGC (the Fiscal Compact) consist in tax rules that apply to signatory countries. It aims for closer coordination of economic policies and strengthening of the stability. If a member country has significant public debt below 60% of GDP and the risks to long-term sustainability of public finances are low, it can record a larger structural deficit of 0.5% of GDP, but not more than 1% of GDP. Amounts imposed as penalties, in case of not meeting the criteria, will be paid to the European Stability Mechanism, or in some cases, to the general budget of the European Union (Article 8, paragraph 2).

Literature review

One of the tools that can provide an overview on the equilibrium of an economy is the macroeconomic pentagon that was developed in 1990 by the Foreign Trade Research Institute (Żuchowska, 2013). However, some may consider that the concept of macro stability pentagon is mostly due to the work of Kołodko (1993). Further studies have been conducted by Văcărel (2003), Isărescu (2006), Abrudan (2013), Anghel et al. (2014). The five main indicators taken into consideration in the construction of the pentagon are: the rate of real GDP growth, unemployment rate, inflation rate, budgetary balance and current account balance. These elements are meant to ensure an overview of the economy, considering the internal and external imbalances, but also aspects on economic growth regarding a country's capacity of maintaining its growth potential. There are studies (Zaman & Drcelic, 2009) that slightly differ in methodology, taking into consideration the external debt, instead of the current account balance. Regarding the interpretation of the pentagon formed based on the above mentioned indicators, two aspects are taken into consideration: surface and shape. It is considered that "the surface of a country's pentagon is directly proportional with the general economic performance, while a more harmonious shape indicates more balanced growth" (WERI, 2013). There are, however, "some limitations regarding this approach that consist mainly in the fact that it does not capture the hidden tensions accumulated in the system, underground imbalances giving, sometimes, the impression of stability, being in fact, unsustainable" (Isărescu, 2006).

The five indicators taken into consideration when assessing macroeconomic stability had been intensely studied, especially during the last years, due to the fact that macroeconomic developments highlighted increasing

government debts caused by unsustainable current account balances and unsound budgetary balances that needed financing. The sovereign debt crisis was in the center of attention for researchers, authorities and the general public due to the specific features of the cause, but also due to the restrictive measures that had to be taken in order to restore stability. Lane (2012) considers that "the sovereign debt crisis is deeply interlined with the banking crisis and macroeconomic imbalances that afflict the Euro Area".

A comprehensive overview of the European economic crisis is provided by Shambaugh (2012). Within its study, the author states that "the Euro Area economies are facing three interlocking crises that together challenge the viability of the currency union and impose significant strains on the participating economies: a banking crisis (caused by the facts that the banks are undercapitalized and have faced liquidity problems), a sovereign debt crisis (many countries have faced rising bond yields and challenges funding themselves; this being especially the case of Southern Euro Area countries as Portugal, Italy, Ireland, Greece and Spain that we will analyze within this paper) and a growth crisis (aggravated by the fact that economic growth is slow in the Euro Area and unequally distributed across countries)". The author argues that "the three crises are connected in many ways and therefore, policy responses should take into account the interdependent nature of the problems; otherwise, will most likely be incomplete or even counterproductive". The interdependent feature of the European economies consists in similar problems that concern high unemployment, low economic growth, high trade imbalances and unsustainable fiscal aggregates.

Even if "the crisis was not originally fiscal in nature, it is now a full-blown sovereign debt crisis and our focus here is on understanding the fiscal dimensions of the Euro crisis" (Lane, 2012). Under the evidence provided within these researches, analysis of the general government debt and budgetary balances can no longer be an option when addressing macroeconomic stabilization. Moreover, Armingeon and Baccaro (2012) consider that "the sovereign debt crisis is more complex than a simple story about fiscally irresponsible governments which now are being forced by international financial markets to tighten their belts". The complexity can also be justified by considering constantly growing unemployment rates. Pentrongolo et al. (2008) studied the contribution of inflows and outflows to the dynamics of unemployment in three European countries, the United Kingdom, France and Spain, and highlighted that "the transition from inactivity to unemployment was becoming more important in the recession of the first sub-period and the unemployment-inactivity transition was becoming more important in the recovery of the second period".

The complexity of the European sovereign debt crises can also be accounted by the effects of the measures taken during and after the acute phase, one of these being the deflations that characterize many European countries. Timbeau et al. (2014), based on independent Annual Growth Survey 2015, underlined the fact that "Euro Area is in period of inflation that is too low, with several countries registering negative rates, that is expected to last. Inflation expectations, both short and medium term and long term expectations, have continued to decline over the past year. Lower inflation expectations imply higher real interest rates". In a simulation for the Euro Area, IMK (2014) determined the fact that a decline of 1% in inflation expectations would depress euro-area GDP by 0.9 percentage points. Inflation, as well as economic growth, had been analyzed thoroughly by Banerjee and Marcellino (2005) that evaluated the role of a set of variables as leading indicators for Euro-area inflation and GDP growth. The leading indicators were taken from the variables in the European Central Bank's (ECB) Euro-area-wide model database, plus a set of similar variables for the US. Therefore, taken all this aspects into consideration, in this paper, by analyzing five important indicators, essential in any economy, that form the macroeconomic stability pentagon: economic growth rate, unemployment rate, inflation rate, budgetary balance and current account balance, we try to address actual and persistent aspects of economic stability in some Euro Area member states.

Macroeconomic stabilization pentagon was used during the last years, in order to analyze the European economies by Żuchowska (2013), who studied economic stability in Central and Eastern Europe countries during 2007-2010, by comparing the economies on two levels. The first level compared the macroeconomic situation of all economies, just before and during the global economic crisis. The second level concerned changes in the indicators in particular economies of Central and Eastern Europe. The purpose of the analysis was "to contribute to the formulation of conclusions concerning the influence of the financial crisis on the macroeconomic situation of the Central and Eastern European countries". The results highlighted the fact that, "after the ongoing instability in the years 2008 and 2009, the year 2010 was the time when Central and Eastern European countries entered on the path to economic stability".

Malina and Mierzwa (2014) also analyzed the effects of the most recent economic crisis on the development of Central and Eastern European countries, using the macroeconomic stability pentagon with the purpose of determining whether the "symptoms" of the crisis could have been noticed much earlier and the further unfavorable dynamics prevented. One important finding of the study reinforces the fact that the assessment of

economic stability cannot be based exclusively on the analysis of only one indicator, as GDP growth, but it should be performed using the macroeconomic stability pentagon, due to the fact that it is based on five fundamental indicators.

Macroeconomic stability pentagon was also applied by Zaman and Drcelic (2009), in order to analyze the macroeconomic stabilization of Serbia. Constructing the analysis on five indicators of stability: real GDP growth, unemployment, inflation, budget deficit and foreign debt, the authors highlighted the fact that "Serbia is confronted with significant economic imbalances, especially regarding unemployment and foreign debt. Moreover, within the Balkans region, the country registered the lowest degree of macroeconomic stability and in the coming years the situation was not expected to improve significantly". One important feature of this study regards the fact that, within the analysis, the authors constructed an Index of Macroeconomic Stabilization, based on the macroeconomic stability pentagon. The Index sums up the values of corresponding indicators for each particular year, using the five economic indicators, characteristic for the use of macroeconomic stability pentagon.

Assessment of economic stability in southern Euro area member states

The recent economic crisis, followed by the European sovereign debt crisis, resulted in rapidly deteriorated public finances, especially in Southern Euro Area countries. The macroeconomic dynamics brought into researchers' attention not only the deficit and public debt criteria of the Stability and Growth Pact, that resulted to be insufficient, but also the economic imbalance indicators. Following Gros (2012) composition of Southern Euro Area Group of countries, we used macroeconomic pentagon in order to assess the achievement of economic stability in Portugal, Ireland, Italy, Greece and Spain, during 2009-2013, as this group of countries registered most issues during the last years. We took into consideration five important indicators, essential in any economy, that form the macroeconomic stability pentagon: economic growth rate (GDP: Gross domestic product at market prices, percentage change on previous period), unemployment rate (UER: unemployment rate, annual average, %labour force), inflation rate (HICP: harmonized index of consumer prices, annual average rate of change), budgetary balance (BB, %GDP) and current account balance (CAB, %GDP). When constructing the pentagons, axes for unemployment and inflation were inverted, due to the fact that the higher the unemployment rate is (inflation also), the greater the distortions regarding economic stability are. We used comparative analysis in order to study the dynamics of the European

economies taken into consideration, through the changes of the macroeconomic stability pentagon from one year to another, during 2009-2013. By comparing the area obtained through the macroeconomic stability pentagon, we highlight changes in economic developments occurred in the five economies that we analyzed and we conclude on meeting one of the main objectives of the new European governance: economic stability.

In Greece, stability shifts from one year to another do not seem to be as pronounced, as in other countries, such as Portugal. However, changes can be noticed (Annex). Based on the surface covered by the pentagon it can be stated that in 2011 the overall economic performance in Greece was lower than in the rest of the period. On the other side, the disharmonious shape of 2013 highlights persistent issues regarding sustainable growth. Nevertheless, improvements can be seen in terms of current account balance, economic growth and inflation. The biggest problems Greece is facing, when considering the above mentioned indicators, regards budgetary deficit (12.7% GDP, in 2013) and high unemployment rate (27.3%, in 2013).

In 2013, in Ireland, a significant enhancement regarding macroeconomic stability can be noticed since 2010. The worst situation in this respect was registered in 2010, caused mainly by the very high budgetary deficit, of 30.6% GDP. Since then, all five economic indicators have registered improvement, the result on macro stability being considerable. The situation in Ireland was different from the Southern Euro Area States, as the high public debt accumulated in the last years was mostly due to the financial support provided to the banking sector. In the other four countries, the degree of indebtedness was related more to issues regarding competitiveness and economic performance.

Important changes were registered also in Italy, in which case the improvement was made especially regarding economic performance. The shape of the pentagon is significantly higher in 2012 than in 2013. This is mainly due to restrictive budgetary policy that kept budgetary balance within the limits of the Stability and Growth Pact (3% GDP, in 2012 and 2013) and due to efforts regarding external competitiveness that resulted in current account surplus (1% GDP, in 2013). As many other countries, Italy experiences high unemployment rates (12.2%, in 2013), that puts pressure on the overall economic performance of the state.

Most conspicuous shifts were registered in Portugal, especially concerning growth, that seem to be more balanced during 2012-2013 than in previous years, but needs, however, significant improvement. Since 2009, the budgetary balance registered improvement, being, in 2013 (4.9% GDP), less

than half, expressed as percent to GDP, than it was in 2009 (10.2% GDP). The most important contribution to stability was brought by the current account balance improvement: from 10.9% GDP deficit (2009) to 0.5% GDP surplus (2013). From the five indicators taken into consideration, macroeconomic stability in Portugal is mostly threatened by high unemployment rate, which grew constantly, from 10.6% in 2009 to 16.5% in 2013.

New European provisions seem to have had lower impact on economic stability in Spain, than in other countries, as Ireland or Portugal. During 2009 and 2011, GDP growth had registered improvement, but since 2011, the situation constantly worsened. Unemployment also rose from 17.9% in 2009 to 26.1% in 2013. There were, however, registered improvements in what budgetary and current account balances are concerned. Although the results are still below the targets set through the Stability and Growth Pact, Italy had lowered its budgetary deficit from 11.1% GDP in 2009 to 7.1% GDP in 2013. Most noticeable results concern the current account balance that improved from 4.8% GDP deficit in 2009 to 0.8% GDP surplus in 2013.

The macroeconomic pentagon can also be used as a tool for comparative analysis between countries. Having this in view, we considered the five indicators for the Southern Euro Area member states and we compared data for year 2013. The pentagon showed similarities between Italy, Portugal and Spain and highlighted differences between these three countries and Greece on the one side and Ireland on the other side. The results confirm the aspects already discussed in the above analysis.

Conclusions and implications

Macroeconomic developments that were registered during the last years by the European economies underlined the necessity of strengthening economic coordination among member states. The economic crisis that was followed by the sovereign debt crisis resulted in high unemployment, unsustainable public finances and deepening disparities between Euro Area member states. As a response to macroeconomic developments registered during the economic and sovereign debt crises, the European economic governance was improved through provisions meant to have short-term effects and help restore confidence in international markets and medium term effects, contributing to the sustainable development of the European economies.

In order to assess the achievement of economic stability in five Southern Euro Area countries (Portugal, Ireland, Italy, Greece and Spain) we used macroeconomic pentagon and analyzed data for 2009-2013. We have chosen

to determine economic stability in these five countries due to the fact that this group of countries registered most issues during the last years. We took into consideration five important indicators, essential in any economy, that form the macroeconomic stability pentagon: economic growth rate (GDP: Gross domestic product at market prices, percentage change on previous period), unemployment rate (UER: unemployment rate, annual average, %labour force), inflation rate (HICP: harmonized index of consumer prices, annual average rate of change), budgetary balance (BB, %GDP) and current account balance (CAB, %GDP).

The results of the analysis conducted using the macro stability pentagon highlighted the fact that Ireland and Portugal registered most improvements regarding economic stability. All countries made efforts in order to enhance their economic performance and succeeded in improving especially their budgetary balance (with the exception of Greece) and current account balance and reduced, therefore, their internal and external imbalances. It can be distinguished the general improvement registered by the analyzed countries in terms of public finances and competitiveness. A problem constantly worsening that needs immediate solution is unemployment, present in all countries and highlighted by the assessment as the main issue that deteriorate macroeconomic stability and needs to be responsibly tackled.

Further studies regarding the assessment of economic stability under the new European economic governance can also include in the analysis the Index of Macroeconomic Stabilization, as it offers a quantitative overview of economic stability in the country under analysis. Moreover, further study regarding economic stability in the European area should be conducted by extending the analysis on all European Union economies, in order to highlight the vulnerabilities of each economy and subsequently of the Union. Only then, adequate policies can be implemented, through measures that appropriate address the weaknesses of each economy.

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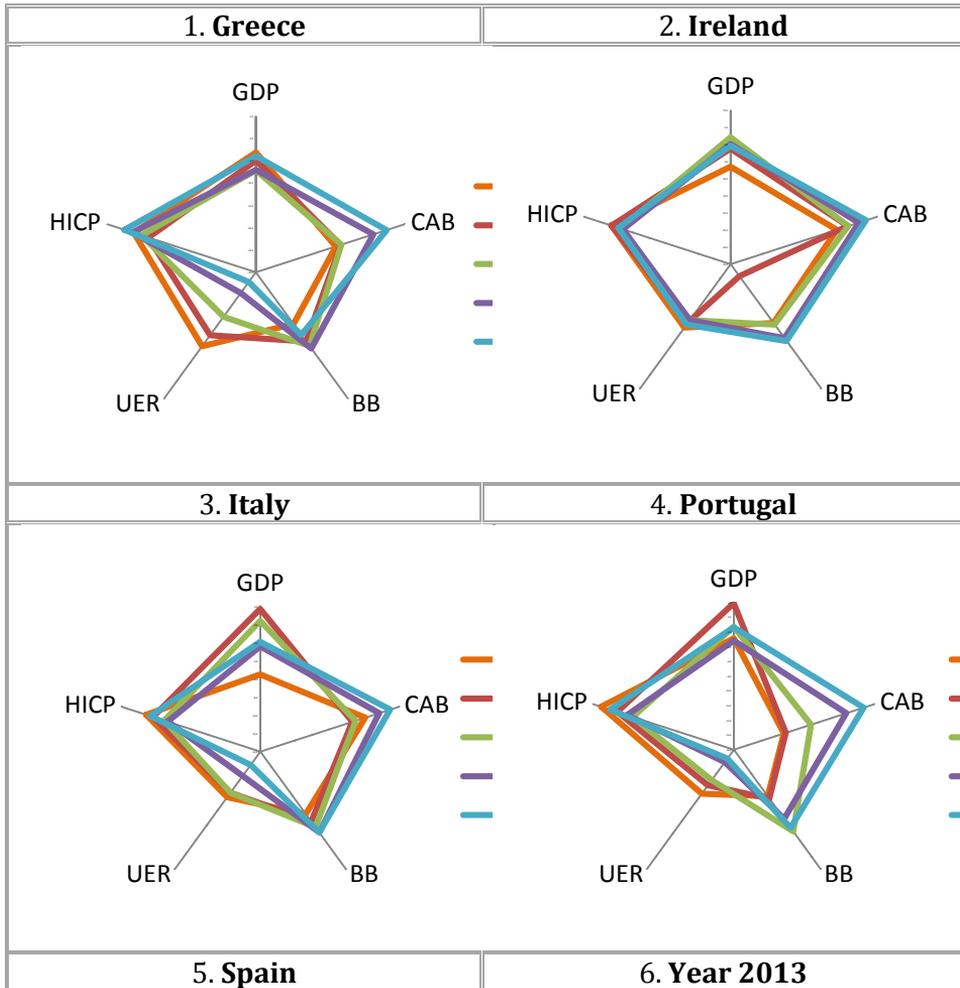
References

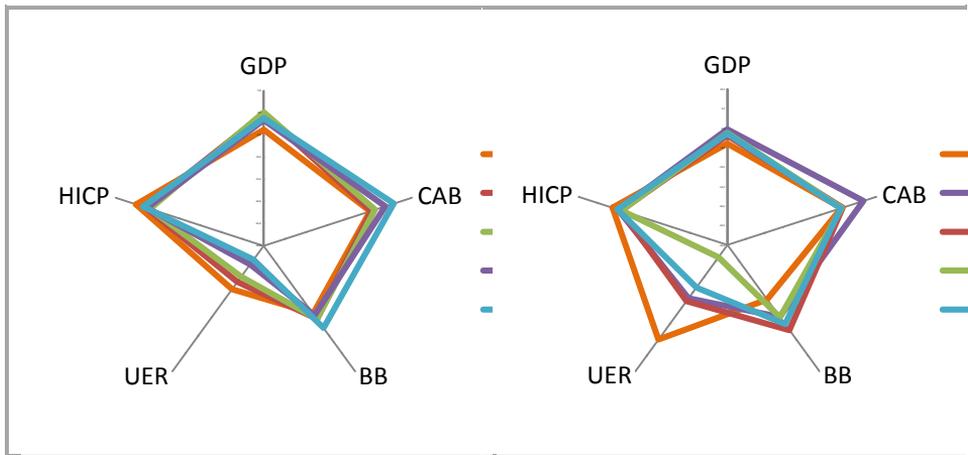
Abrudan, C. (2013). Analysis of Romanian Economic Stability in Terms of Evolution of the Budgetary Deficit and other Macroeconomic Indicators, in the Period 2005-2012. *The Annals of the University of Oradea*, No. 2/2013.

- Andreica, M.E., and Andreica, M. (2014). Forecasts of Romanian industry employment using simulations and panel data models. *Romanian Journal of Economic Forecasting*, XVII (2), 130-140.
- Anghel, L.C., Pînzaru, F., Dinu, M., and Treapăt, L.M. (2014). Fixing the Central Parity and the Evolution of the Currency within the Exchange Rate Mechanism II in the Countries that Joined the Euro Zone. *Management Dynamics in the Knowledge Economy*, 2(1), 21-40.
- Armingeon, K., and Baccaro, L. (2012). Political economy of the sovereign debt crisis: the limits of internal devaluation. *Industrial Law Journal*, 41(3), 254-275.
- Banerjee, A., Marcellino, M., and Masten, I. (2005). Leading Indicators for Euro-area Inflation and GDP Growth. *Oxford Bulletin of Economics and Statistics*, 67(S1), 785-813.
- Cristescu, A., and Andreica, M.E. (2011). Estimation of Inflationary Expectations and the Effectiveness of Inflation Targeting Strategy. *Theoretical and Applied Economics*, 2(555), 195-206.
- European Commission (2012). Scoreboard for the Surveillance of Macroeconomic Imbalances. *European Economy*, Occasional Paper 92.
- European Council (2010). Strengthening Economic Governance in The EU. *Report of the Task Force to the European Council*, Brussels.
- European Council (2011). *Economic governance: Council adopts legal texts*. Press Release, 413.
- European Council (2012). *Treaty on Stability, Coordination and Governance in the Economic and Monetary Union*. Retrieved from http://europa.eu/rapid/press-release_DOC-12-2_en.htm.
- Gabrisch, H., and Staehr, K. (2014). The Euro Plus Pact: Competitiveness and external capital flows in the EU countries. *JCMS: Journal of Common Market Studies*, 53(3), 558-576.
- Gros, D. (2012). Macroeconomic Imbalances in the Euro Area: Symptom or cause of the crisis?, *CEPS Policy Brief*, No. 266.
- IMK (2014). Der gefährdete Aufschwung. *Prognose der wirtschaftlichen Entwicklung 2014-2015*.
- Isărescu, M. (2006). *Reflecții economice - Contribuții la teoria macrostabilizării [Economic reflections – Contributions to the theory of macro-stabilization]*. Bucharest: Editura Expert.
- Kołodko, G. (1993). *Kwadratura pięciokąta. Od załamania gospodarczego do trwałego wzrostu*. Warszawa: Poltext.
- Lane, P.R. (2012). The European sovereign debt crisis. *The Journal of Economic Perspectives*, 26(3), 49-67.
- Malina, A., and Mierzwa, D. (2014). The Impact of the Global Crisis on the Macroeconomic Stability of the Countries of Central and Eastern Europe and Germany. Presented at the international conference *Knowledge Economy Society, Contemporary Organizations in the Process of Institutional Transformations*, Faculty of Management, Cracow, 2014.
- Moisă, A., Albu, L.L., Necula, C., and Bobeică, G. (2009). *Finanțe publice: introducerea unui cadru fiscal-bugetar pe termen mediu. Proiect SPOS 2009 – Studii de strategii și politici [Public finance - the introduction of a mid-term fiscal and budgetary framework. Project 2009 – Studies of strategy and policies]*. Bucharest:

- European Institute in Romania.
- Moisă, A., Necula, C., Dumitru, I., and Bobeică, G. (2011). *Semestrul European și asigurarea unei creșteri economice sustenabile prin însănoșirea finanțelor publice [The European semester and the assurance of a sustainable economic growth through healthy public finance]*. Bucharest: European Institute in Romania.
- Petrongolo, B., and Pissarides, C.A. (2008). The Ins and Outs of European Unemployment. *CEPR Discussion*, Paper No. DP6681.
- Shambaugh, J. (2012). The Euro's Three Crises. *Brookings Papers on Economic Activity*. Retrieved from http://www.brookings.edu/~media/Projects/BPEA/Spring%202012/2012a_Shambaugh.pdf.
- Stanila, L., Andreica, M.E., and Cristescu, A. (2014). Econometric Analysis of the Employment Rate for the E.U. Countries. *Procedia - Social and Behavioral Sciences*, 109(1), 178-182.
- Timbeau, X., Anderson, L., Blot, C., Creel, J., and Watt, A. (2015). Deflation is coming: economic perspectives for the Euro Area and Euro Area countries in 2014, 2015, 2016. The independant annual Growth Survey 2015. Retrieved from http://www.iags-project.org/documents/iags_report2015.pdf.
- Văcărel, I. (coord.) (2003). *Finanțe publice [Public finance]*. Bucharest: Didactică și Pedagogică Publishing House.
- World Economy Research Institute (2013). *Poland Competitiveness Report 2013 National and Regional Dimensions*. Retrieved from http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf.
- Zaman, C., and Drcelic, B. (2009). *Macro-Stabilisation Issues in the Serbian Economy: Methodological Evaluation*. Retrieved from <http://ssrn.com/abstract=1521660>.
- Żuchowska, D. (2013). Assessment of the Central and Eastern Europe Economies in the Years 2007-2010 Based on the Model of the Macroeconomic Stabilization Pentagon, Equilibrium. *Quarterly Journal of Economics and Economic Policy*, 8(4), 49-64.

Appendix
Macroeconomic Stability Pentagons in Southern Euro Area Countries, during 2009-2013





(Source: EUROSTAT, authors' calculations)