

FESSUD

FINANCIALISATION, ECONOMY, SOCIETY AND SUSTAINABLE DEVELOPMENT

Working Paper Series

No 92

Fiscal policies in the European Union during the crisis

Jesús Ferreiro, Catalina Gálvez and Ana González

Fiscal policies in the European Union during the crisis

Authors: Jesús Ferreiro, Catalina Gálvez and Ana González

Affiliation of Authors: Department of Applied Economics V, University of the Basque Country UPV/EHU

Contact details:

Jesús Ferreiro: jesus.ferreiro@ehu.es

Catalina Gálvez: catalina.galvez@ehu.es

Ana González: ana.gonzalezflores@ehu.es

Abstract: The paper studies the fiscal policies implemented in the European Union countries since the beginning of the current crisis. With this aim in mind, we have analyzed separately the expansionary fiscal policies implemented at the first stage of the crisis and the fiscal consolidation policies that became widespread at the beginning of the current crisis. The content of the national fiscal policies (discretionary measures versus built-in stabilizers, revenue-based versus expenditure-based fiscal policies, the relationship existing between the size of the fiscal impulses-adjustments and the composition of these measures) shows the significant differences between the fiscal policies implemented in the European Union countries

Key words: European Union, fiscal policy, economic crisis.

Date of publication as FESSUD Working Paper: February, 2015

JEL Classification Codes: E62, E65, H62, O52

Acknowledgments:

A previous version of the paper was presented at the 11th International Conference Developments in Economic Theory and Policy (Bilbao, 26-27 June, 2014). We want to thank the comments and suggestions made by the participants at the conference. The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 266800.

Website: www.fessud.eu

1. Introduction

The economic crisis that was unleashed in 2008 has led to a reassessment of the fiscal policy. In most cases, based on pragmatic reasons many developed and emerging economies have used fiscal policy as an active instrument to alleviate the effects of the crisis. Moreover, even from a theoretical perspective there has been a change in the view about the economic impact both of the measures of fiscal impulse and consolidation. As a result, the fiscal policy has abandoned its passive role, hitherto limited to the reduction or elimination of the fiscal imbalances in order to guarantee the effectiveness of a monetary policy that focuses on price stability, and has adopted a more active role, at least in certain circumstances (Ferreiro, Gómez and Serrano 2013).

In the case of the eurozone, the fiscal rules resulting from the Maastricht Treaty, the Stability and Growth Pact and the Fiscal Compact, imply an attempt to harmonize the fiscal policies of the eurozone economies, at least in terms of the size and evolution of the fiscal imbalances (public budget deficits and public debt). However, these norms do not mean that all the euro area countries must mimetically adopt the same fiscal policy strategy in order to reach fiscal targets, mainly in the measures adopted to modify the size of public revenue and expenditure. Nonetheless, with the aim of fostering the economic growth, the strategy behind the Quality of Public Finances promoted by the European Union in the last decade has tried to change the composition of the national public budgets, both in the structure of revenue and that of expenditure. An effective implementation of that strategy would imply convergence in the composition of the European public budgets (Ferreiro, Carrasco and Gómez 2014; Ferreiro, García del Valle and Gómez 2010, 2012 and 2013).

Strict observance of those fiscal norms would lead to the existence of a single fiscal policy strategy in the European Union. National fiscal policies would only differ according, first, to the phase of the business cycle of the economies, and, second, to the size of the deviation existing between the current economic activity and its normal or tendency levels.

The purpose of the paper is to analyze whether, as a result of the current crisis, European economies have implemented since the beginning of the crisis the same fiscal policy strategy, or, conversely, there have been different models of fiscal policies. In the following sections we will study the composition of the national fiscal policies in the European Union. We will analyze separately the expansionary fiscal policies implemented at a first stage of the crisis and the fiscal consolidation policies that started to be implemented in the current decade. Thus, section 2 will analyze whether fiscal policies in the European Union have adopted a procyclical or a countercyclical stance. Section 3 will focus on the content of the national fiscal policies, analyzing, first, whether national fiscal policies have been based on discretionary responses or on the working of the built-in stabilizers, and second, whether fiscal policies were revenues-based or expenditure-based. Next, we will analyze the possible relationship between the size and the composition (revenue versus expenditure) of the fiscal impulses-adjustments, and the relationship between the evolution of the size of public revenue and expenditure. The final section concludes.

2. Have fiscal policies in the European Union been procyclical or countercyclical?

The purpose of this section is to analyse whether fiscal policies in the European Union (EU) have been working since the year 1999 in a procyclical or in a countercyclical way. In a recent paper, Florence Huart (2013), focusing on the eurozone countries, argued that in the period 1999-2009, fiscal policy was not procyclical, and that discretionary fiscal policies have become more countercyclical after 1999, in particular during bad times.

The hypothesis we will test is whether in Europe the implementation of a countercyclical fiscal policy has been a widespread phenomenon since the creation of the eurozone in 1999. In this sense, we will analyse the behaviour of the fiscal policy by establishing two sub-periods: 1999-2007 and 2008-2013. Thus, we want to know whether the current crisis has involved a change in the stance of fiscal policies in Europe. Besides, we will divide the EU member states in two groups: the euro countries and the non-euro countries. This division will allow us to ascertain

whether the fiscal rules operating in the eurozone have a singular impact on the fiscal policies of its member states.

To define the stance of the fiscal policy we have used the change in the primary cyclically adjusted budget balance (PCABB) of the general governments in the European Union. Data regarding European public finances have been obtained from Government Finance Statistics provided by the Eurostat Database in its website. An improvement in the PCABB is identified with a restrictive fiscal policy, and a worsening in the change of the PCABB has been identified with an expansionary fiscal policy. The fiscal policy can be procyclical or countercyclical depending on the restrictive-expansionary stance, as previously defined, and on the situation regarding the business cycle. In this respect we will use the output gap (the difference between actual and potential gross domestic product) to argue the existence of a recession (negative output gap) or an expansion (positive output gap). To this end, we have used the output gap figures provided by the AMECO database. We will define a fiscal policy as being procyclical when an expansionary fiscal policy is implemented during a period of expansion and when a restrictive fiscal policy is implemented during a recession. Conversely, a countercyclical fiscal policy will exist when an expansionary fiscal policy is implemented during a recession and when a restrictive fiscal policy is implemented during a period of expansion.

In tables 1 and 2, we show the fiscal policy stances of the EU economies in 1999-2007 and 2008-2013, respectively. Non-euro countries are shown in bold. As table 1 shows, at the beginning of the eurozone era, most European economies were implementing a countercyclical fiscal policy, although we cannot argue that this position was clearly predominant given the large proportion of countries with a procyclical fiscal stance. However, what is important to notice is the fact that before the crisis, namely since the year 2006, this pattern underwent a radical change, with regard to economies - both euro and non-euro - with expansionary procyclical fiscal policies dominating the scene.

Table 2 shows that, at the beginning of the crisis, most European countries implemented expansionary procyclical fiscal policies. This outcome may sound strange, but it is explained by that fact that in 2008 most economies were still experiencing a positive, albeit declining, output gap, and therefore, according to the previous definition these economies were in an expansion.

Table 1. Fiscal policy stance in European Union countries 1999-2007

Year	Fiscal Policy	Stance	Countries	Stance
1999	Expansionary	Countercyclical	EE, SK, LV, BG	Countercyclical (12) Procyclical (12)
		Procyclical	BE, IE, FR, IT, CY, LU, AT, SI, FI, SE, CZ	
	Restrictive	Countercyclical	DE, ES, MT, NL, PT, UK, DK, PL	
		Procyclical	GR	
2000	Expansionary	Countercyclical	SK, BG, CZ, RO	Countercyclical (19) Procyclical (8)
		Procyclical	BE, GR, ES, FR, PT, SI, DK, PL	
	Restrictive	Countercyclical	DE, EE, IE, IT, CY, LU, MT, NL, AT, FI, LV, SE, UK, LT, HU	
		Procyclical		
2001	Expansionary	Countercyclical	LT, PL	Countercyclical (12) Procyclical (15)
		Procyclical	DE, EE, IE, GR, FR, IT, CY, NL, PT, FI, SE, UK, DK, CZ, HU	
	Restrictive	Countercyclical	BE, ES, LU, MT, AT, SI, SK, LV, BG, RO	
		Procyclical		
2002	Expansionary	Countercyclical	GR, NL, SK, FI, LV, SE, UK, CZ, RO	Countercyclical (14) Procyclical (13)
		Procyclical	BE, DE, IE, FR, IT, CY, LU, AT, DK, BG, HU	
	Restrictive	Countercyclical	EE, ES, MT, PT, SI	
		Procyclical	LT, PL	
2003	Expansionary	Countercyclical	ES, CY, LU, MT, NL, AT, FI, SE, DK, PL	Countercyclical (14) Procyclical (13)
		Procyclical	GR, FR, IT, SI, UK, CZ, LT, RO	
	Restrictive	Countercyclical	EE, LV, BG, HU	
		Procyclical	BE, DE, IE, PT, SK	
2004	Expansionary	Countercyclical	LU, AT, PT, SK, FI, PL	Countercyclical (15) Procyclical (12)
		Procyclical	BE, IT, SI, UK, LT, RO	
	Restrictive	Countercyclical	EE, ES, FR, LV, SE, DK, BG, CZ, HU	
		Procyclical	DE, IE, GR, CY, MT, NL	
2005	Expansionary	Countercyclical	PT, BG	Countercyclical (11) Procyclical (16)
		Procyclical	BE, EE, IE, IT, SK, LV, UK, CZ, HU	
	Restrictive	Countercyclical	ES, FR, CY, LU, SI, SE, DK, LT, RO	
		Procyclical	DE, GR, MT, NL, AT, FI, PL	

Year	Fiscal Policy	Stance	Countries	Stance
2006	Expansionary	Countercyclical	NL	Countercyclical (11) Procyclical (16)
		Procyclical	EE, GR, MT, AT, SI, SK, LV, SE, DK, CZ, LT, HU, PL, RO	
	Restrictive	Countercyclical	BE, DE, ES, FR, IT, CY, LU, FI, UK, BG	
		Procyclical	IE, PT	
2007	Expansionary	Countercyclical		Countercyclical (9) Procyclical (18)
		Procyclical	BE, EE, IE, GR, ES, FR, MT, NL, AT, SI, SK, FI, LV, UK, DK, BG, LT, RO	
	Restrictive	Countercyclical	DE, IT, CY, LU, PT, SE, CZ, HU, PL	
		Procyclical		

Source: Our calculations based on the AMECO Database

Table 2. Fiscal policy stance in European Union countries 2008--2013

Year	Fiscal Policy	Stance	Countries	Stance
2008	Expansionary	Countercyclical		Countercyclical (6) Procyclical (21)
		Procyclical	BE, DE, EE, IE, GR, ES, IT, CY, MT, AT, SI, SK, FI, LV, UK, DK, BG, CZ, LT, PL, RO	
	Restrictive	Countercyclical	FR, LU, NL, PT, SE, HU	
		Procyclical		
2009	Expansionary	Countercyclical	BE, IE, GR, ES, FR, IT, CY, LU, NL, AT, PT, SK, FI, UK, DK, BG, CZ, HR, LT	Countercyclical (20) Procyclical (8)
		Procyclical	LV, PL	
	Restrictive	Countercyclical	RO	
		Procyclical	DE, EE, MT, SI, SE, HU	
2010	Expansionary	Countercyclical	DE, IE, LU, MT, NL, AT, PT, FI, SE, DK, HR, HU	Countercyclical (13) Procyclical (15)
		Procyclical	PL	
	Restrictive	Countercyclical	CY	
		Procyclical	BE, EE, GR, ES, FR, IT, SI, SK, LV, UK, BG, CZ, LT, RO	
2011	Expansionary	Countercyclical	BE, SI, SE, HR	Countercyclical (6) Procyclical (22)
		Procyclical	EE, CY,	
	Restrictive	Countercyclical	DE, PL	
		Procyclical	IE, GR, ES, FR, IT, LU, MT, NL, AT, PT, SK, FI, LV, UK, DK, BG, CZ, LT, HU, RO	
2012	Expansionary	Countercyclical	GR, ES, MT, PT, FI, SE, DK, CZ, HR, HU	Countercyclical (10) Procyclical (18)
		Procyclical	EE	
	Restrictive	Countercyclical		
		Procyclical	BE, DE, IE, FR, IT, CY, LU, NL, AT, SI, SK, LV, UK, BG, LT, PL, RO	
2013	Expansionary	Countercyclical	GR, SI, SE, UK, BG, HR, HU, PL, RO	Countercyclical (10) Procyclical (18)
		Procyclical	LV	
	Restrictive	Countercyclical	EE	
		Procyclical	BE, DE, IE, ES, FR, IT, CY, LU, MT, NL, AT, PT, SK, FI, DK, CZ, LT	

Source: Our calculations based on the AMECO Database

In 2009, however, with most countries experiencing a negative output gap, expansionary countercyclical fiscal policies were a widespread phenomenon in the European Union. This situation changed in 2010, when a large number of countries (14 countries) implemented measures to reduce their primary cyclically adjusted public budget balance, despite the fact that they were in the midst of a recession (Ferreiro, Gómez and Serrano 2013; Creel, Hubert and Saraceno 2014). In 2011, procyclical consolidation policies dominated the European scene, but since 2012 the number of countries implementing expansionary countercyclical fiscal policies has increased significantly. Nonetheless, it is important to note that the majority of these economies do not belong to the eurozone.

Table 3. Number of countries with a certain fiscal policy stance

	Expansionary in Recessions (Countercyclical)	Expansionary in Booms (Procyclical)	Restrictive in Recessions (Procyclical)	Restrictive in Booms (Countercyclical)
1999	4	11	1	8
2000	4	8	0	15
2001	2	15	0	10
2002	9	11	2	5
2003	10	8	5	4
2004	6	6	6	9
2005	2	9	7	9
2006	1	14	2	10
2007	0	18	0	9
2008	0	21	0	6
2009	19	2	6	1
2010	12	1	14	1
2011	4	2	20	2
2012	10	1	17	0
2013	9	1	17	1

Source: Our calculations based on the AMECO Database

The figures provided in table 3 show clearly that until the current crisis, countercyclical fiscal policies dominated the European scene, both whether countries implemented expansionary fiscal policies during recessions or they adopted restrictive fiscal policies in expansions. However a large number of countries implemented expansionary fiscal policies in the years 2006 to 2008, i.e., before the crisis or when it had just began. Since 2011 most countries have been adopting restrictive fiscal policies during a slump.

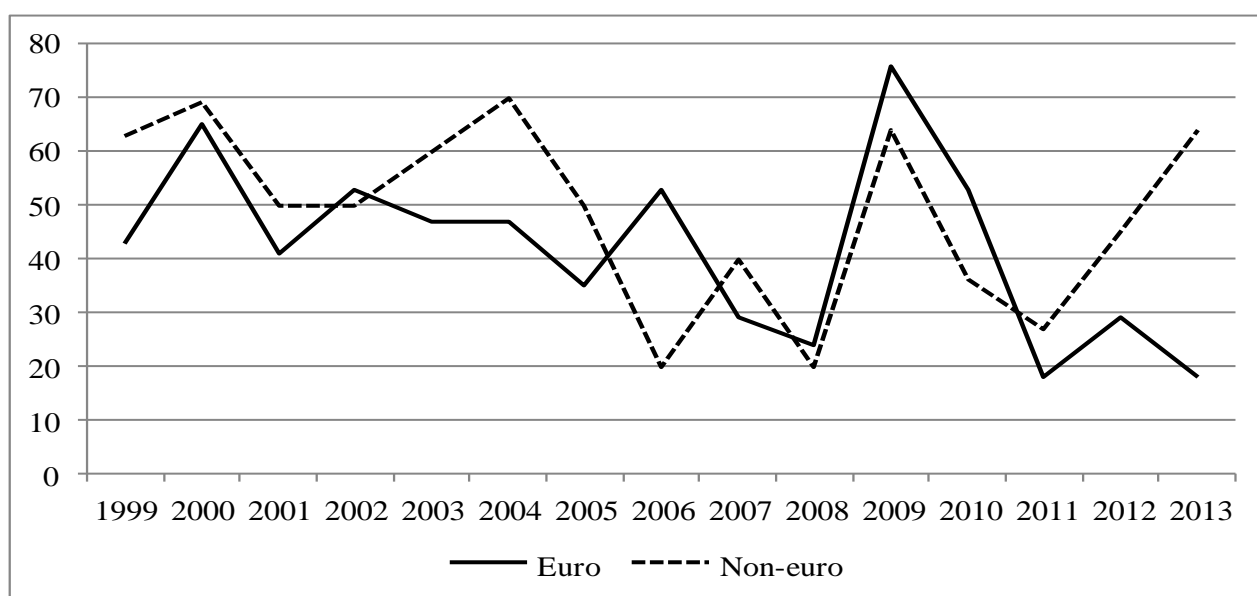
Table 4. Number of EU countries adopting procyclical and countercyclical fiscal policies

	Expansionary in Recessions (Countercyclical)		Expansionary in Booms (Procyclical)		Restrictive in Recessions (Procyclical)		Restrictive in Booms (Countercyclical)	
	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro	Euro	Non-euro
1999	2 (12%)	2 (25%)	9 (57%)	2 (25%)	0 (0%)	1 (12%)	5 (31%)	3 (38%)
2000	1 (6%)	3 (30%)	6 (35%)	2 (20%)	0 (0%)	0 (0%)	10 (59%)	5 (50%)
2001	0 (0%)	2 (20%)	10 (59%)	5 (50%)	0 (0%)	0 (0%)	7 (41%)	3 (30%)
2002	4 (24%)	5 (50%)	8 (47%)	3 (30%)	0 (0%)	2 (20%)	5 (29%)	0 (0%)
2003	7 (41%)	3 (30%)	4 (24%)	4 (40%)	5 (29%)	0 (0%)	1 (6%)	3 (30%)
2004	5 (29%)	1 (10%)	3 (18%)	3 (30%)	6 (35%)	0 (0%)	3 (18%)	6 (60%)
2005	1 (6%)	1 (10%)	5 (29%)	4 (40%)	6 (35%)	1 (10%)	5 (29%)	4 (40%)
2006	1 (6%)	0 (0%)	6 (35%)	8 (80%)	2 (12%)	0 (0%)	8 (47%)	2 (20%)
2007	0 (0%)	0 (0%)	12 (71%)	6 (60%)	0 (0%)	0 (0%)	5 (29%)	4 (40%)
2008	0 (0%)	0 (0%)	13 (76%)	8 (80%)	0 (0%)	0 (0%)	4 (24%)	2 (20%)
2009	13 (76%)	6 (55%)	0 (0%)	2 (18%)	4 (24%)	2 (18%)	0 (0%)	1 (9%)
2010	8 (47%)	4 (36%)	0 (0%)	1 (9%)	8 (47%)	6 (55%)	1 (6%)	0 (0%)
2011	2 (12%)	2 (18%)	2 (12%)	0 (0%)	12 (71%)	8 (73%)	1 (6%)	1 (9%)
2012	5 (29%)	5 (45%)	1 (6%)	0 (0%)	11 (65%)	6 (55%)	0 (0%)	0 (0%)
2013	2 (12%)	7 (64%)	0 (0%)	1 (9%)	14 (82%)	3 (27%)	1 (6%)	0 (0%)

Source: Our calculations based on the AMECO Database

Table 4 shows the differences existing among euro and non-euro countries regarding the stance of their respective fiscal policies. This table shows the number of countries that implement each of the four types of fiscal policy considered. The percentage that the corresponding figure represents in relation to the total number of economies belonging and not-belonging to the euro area are shown in brackets in each cell.

Figure 1. Share of countries implementing countercyclical fiscal policies (%)



Source: Our calculations based on the AMECO Database

For a better understanding of the information provided in table 4, figure 1 represents the percentage of euro and non-euro economies that have adopted countercyclical fiscal policies. The most striking fact is that since 1999, most euro economies have been adopting procyclical fiscal policies. Only in five years (2000, 2002, 2006, 2009 and 2010) the percentage of euro economies that adopted countercyclical fiscal policies was above 50 percent. This behavior has manifested itself both during booms and slumps, and before and during the current crisis. Conversely, the adoption of countercyclical fiscal policies proved to be the dominant pattern in non-euro economies: in 9 out of the 15 years analysed, the percentage number of

countries with countercyclical fiscal policies was above 50 percent. It is remarkable that between 1999 and 2005, countercyclical fiscal policies were dominant in non-euro countries, although this share fell dramatically in 2006. Since then, with the exception of 2007, and until 2010, the share of countercyclical fiscal policies in non-euro economies rose, although it remained below that of eurozone. But since 2011 the share of countercyclical fiscal policies was again higher in non-euro economies.

If we focus on the more recent years, since the year 2011, we can note the differences existing between both groups of countries. In the case of the eurozone in the years 2011, 2012 and 2013, there was a recession in 14, 16 and 16 countries, respectively. Out of these countries, the percentage number of countries adopting a procyclical restrictive fiscal policy was 86%, 69 % and 88% in 2011, 2012 and 2013. The situation in the non-eurozone was, however, significantly different. In the years 2011, 2012 and 2013 10, 11 and 10 countries, respectively experienced a recession. During those three years, the percentage number of countries implementing a procyclical fiscal policy was much lower than that of the eurozone - namely, 80%, 55% and 30% respectively.

In short, the existence of a clear tendency towards implementing procyclical fiscal policies - something that does not happen in the European Union member states that do not belong to the euro area - indicates a failure in the design of the fiscal policy in the eurozone, which makes it difficult for fiscal policies to work following the principles of functional finance (Ferreiro, Gómez and Serrano 2014; Hein and Truger 2014; O'Hara 2013). This failure complicates the working of the macroeconomic policies in the eurozone, because it places the burden of the macroeconomic policy on monetary policy, an instrument whose only objective is price stability. On the other hand, insofar as restrictive fiscal policies are nowadays being implemented in a context of recession or, at best, low growth, this complicates the economic recovery of the eurozone.

3. The content of the fiscal policies in the crisis

Next, we will analyze the differences in the management of fiscal policy in the European Union during the crisis. We have analyzed European public finances since 2007 (the year before the crisis) using data corresponding to the public budget balances of the general governments provided by the General Finance Statistics of Eurostat and the AMECO Database.

In most European Union countries fiscal deficits peaked in the year 2009. Therefore, we have analyzed the evolution of European public finances drawing a line in the year 2009 and, consequently, divided the period 2007-2013 in two sub-periods: 2007-2009 and 2010-2013. The first sub-period corresponds to the period of widespread expansionary fiscal policies in Europe when fiscal deficits increase, and the second sub-period (2010-2013) corresponds to the period of widespread fiscal consolidation processes, when fiscal deficits enter in a path of correction. However, in some countries expansion and consolidation phases started and finished in years other than 2009. Thus, the exceptions to this grouping are Germany, Luxembourg, Austria, Ireland, Poland and Finland, whose fiscal deficits peaked in 2010 (therefore for these countries the sub-periods are 2007-2010 and 2011-2013), Estonia and Malta (with fiscal deficits peaking in 2008, with the sub-periods 2007-2008 and 2009-2013), and Croatia, for which there is available data only since 2009, and whose sub-periods are 2009-2011 and 2012-2013]

The aim of this section is to study the existence of differences in fiscal policies adopted in the European Union during the crisis, both in the first period of widespread implementation of expansionary fiscal policies and in the more recent period of fiscal adjustments. We will first study the extent to which fiscal policies were based on discretionary measures or on the working of built-in automatic stabilizers. Second, we will study the extent to which fiscal impulse and adjustment

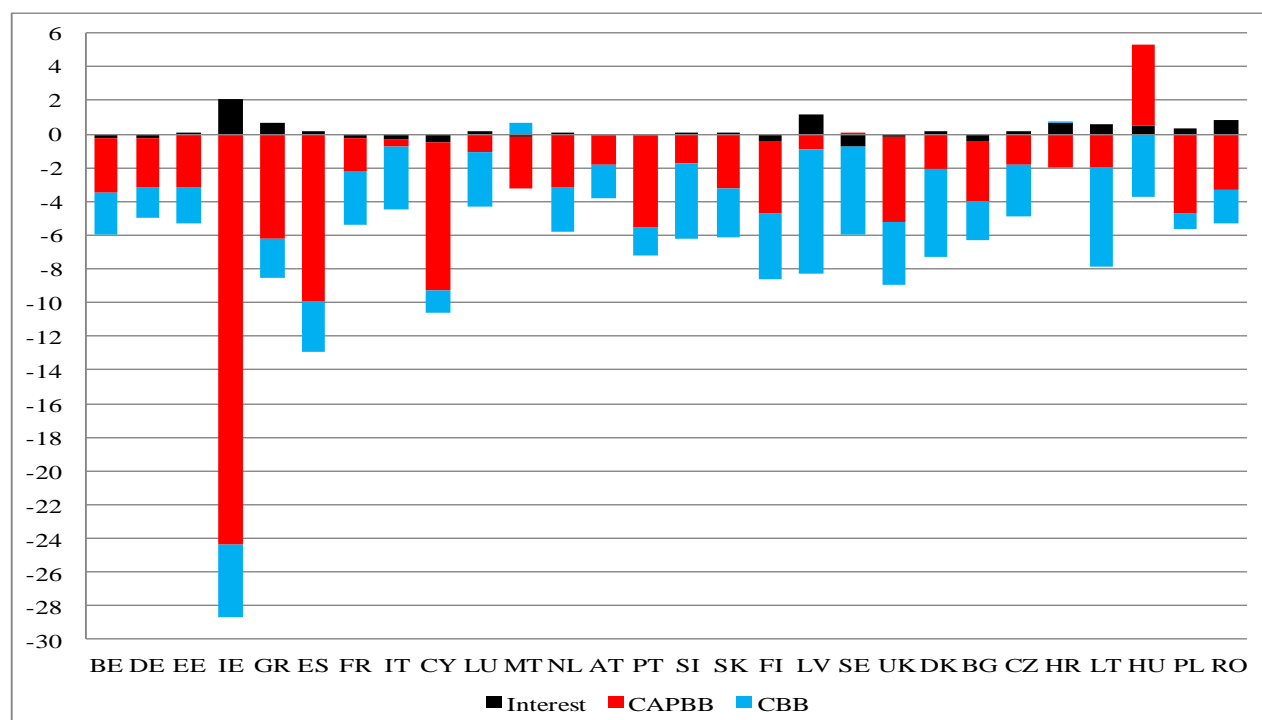
strategies were based on revenue or expenditure. Lastly, we will analyze whether the composition (i.e., revenue–expenditure) of fiscal impulses and adjustments was related to the size of the latter.

3.1 Discretionary versus automatic responses

As mentioned above, we have first studied whether fiscal policies were based on discretionary measures or on the working of built-in stabilizers. To carry out this analysis, we have broken down the public budget balance into three components: interest payments, the cyclically adjusted primary budget balance, and the cyclical component of the public budget balance.

Figure 2 shows the changes recorded in the three components of the public budget balance between 2007 and 2009. A negative (–) sign refers to a fall of the component of the public budget balance (lower interest payments, lower surplus or higher deficit), while a positive (+) sign means an increase in these components (higher interest payments, higher surplus or lower deficit).

Figure 2. Variation in the components of public budget balance between 2007 and 2009 (percentage points GDP)



Source: Our calculations based on AMECO Database

With the sole exception of Hungary, all the EU countries faced a large deterioration of their public finances, ranging from 2.5 (Croatia) to 13.1 (Spain) percent of GDP. Ireland is an exceptional case, because the huge deterioration of its public finances (amounting 30.8 percent of GDP) is explained by the impact of the Irish banking crisis on its public finances. Nonetheless, when we focus on the evolution of the components of public budget balances, significant differences emerge among countries. In the case of interest payments, in 11 countries the size of interest payments (as a percentage of the GDP) in 2009 was lower than in 2007. In the case of the cyclical component of the budget balance, this component only improved in two countries: Malta and Hungary. In the other EU countries, the deterioration of the economic activity meant a worsening in the cyclical budget balance ranging from 0.9

(Poland) to 7.3 (Latvia) percent of GDP¹. In the case of the CAPBB, the variable used to analyze the discretionary fiscal policy - in other words, the responses of the public authorities to the economic crisis - , all the EU countries, with the exception of Hungary and Sweden, adopted fiscal measures that led to a deterioration of their CAPBBs. In Hungary, CAPBB moved from a deficit amounting to 2.5 percent of GDP to a surplus equivalent to 2.3 percent of GDP. In Sweden, its CAPBB moved from a surplus of 3.5 percent of GDP to a surplus of 3.6 percent of GDP. In the remaining countries, the discretionary fiscal impulse (measured by the fall in the CAPBB) ranged from 0.43 (Italy) to 9.96 (Spain) percent of GDP (in Ireland the discretionary fiscal impulse reached 24.4 percent of GDP due to the impact of the banking crisis on Irish public finances²).

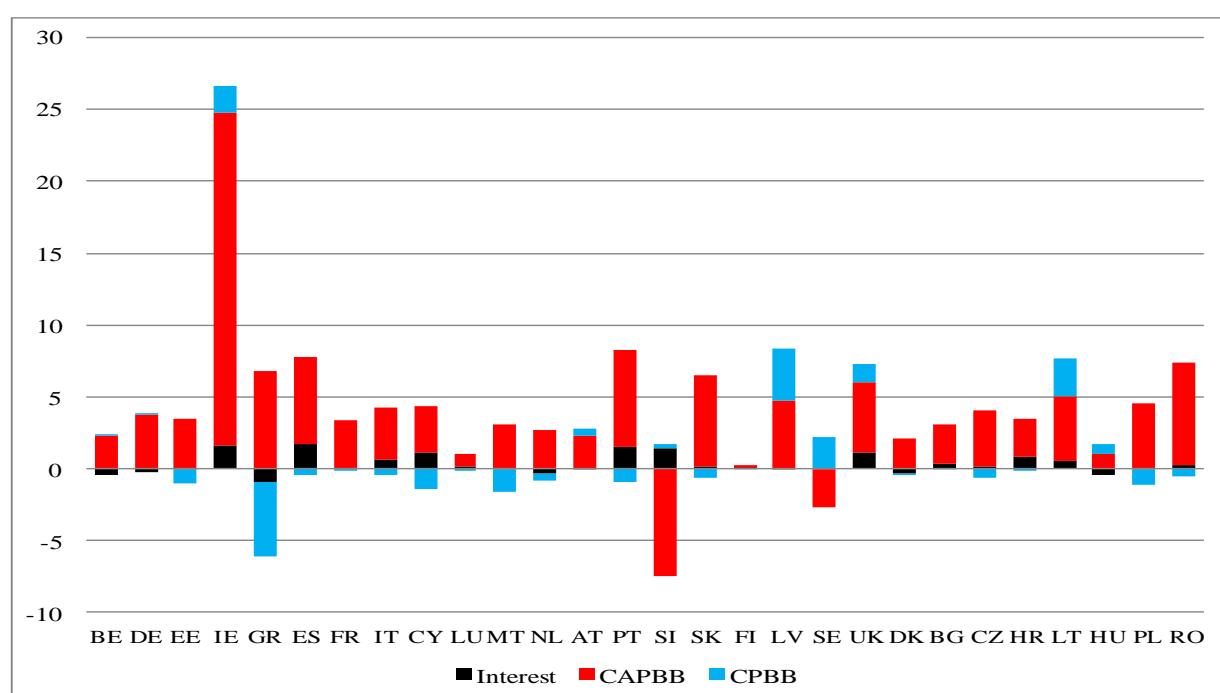
When we focus on the contribution of the changes of the components of the public budget balance to the fiscal impulse recorded in this first period, it is important to note that in 11 countries (France, Italy, Luxembourg, Austria, Slovenia, Finland, Latvia, Sweden, Denmark, Czech Republic and Lithuania) the fiscal impulse deriving from the built-in stabilizers was higher than that deriving from the discretionary fiscal measures. Actually, excluding Hungary, the contribution of the changes in the CAPBB to the deterioration of the public budget balance ranged between the -2.6% for Sweden to the 91.1% for Cyprus. This means that the intensity of the discretionary fiscal impulse in the European Union economies was far from being similar, and that many countries relied on built-in stabilizers in order to face the economic crisis.

¹ Note that the impact of the crisis on the public finances is not only related to the decline in the economic activity but also to the elasticity of public revenue and expenditure in view of the changes in the economic activity.

² According to the AMECO Database, the one-off and other temporary measures on the expenditure sides of the Irish general government (which includes the public financial assistance to the banking sector) amounted 2.5% of GDP in 2009, 20% of GDP in 2010, and 4.2% of GDP in 2011.

Since 2009, all European Union countries have followed fiscal consolidation processes whose outcome has been a major fall in their fiscal deficits (see figure 3). The only exceptions have been Slovenia and Sweden, whose fiscal deficits have increased in 8.6 and 0.3 percentage points of their GDP respectively. In these economies, the improvement in economic activity has led to an improvement in the cyclical budget balance, and the deterioration of public finances is explained by higher interest payments (1.4 p.p. of GDP in Slovenia) and an expansionary discretionary fiscal policy that has worsened the CAPBB in 7.5 p.p. of GDP in Slovenia and 2.6 p.p. of GDP in Sweden³.

Figure 3. Variation in the components of public budget balance between 2009 and 2013 (percentage points of GDP)



Source: Our calculations based on the AMECO Database

³ Like in Ireland, most deterioration of the cyclically adjusted public balance in Slovenia is due to the impact of financial assistance to the financial sector. The Swedish case is different, because Sweden maintains a cyclically adjusted surplus in its public finances, and so we might better say that, more than having an expansionary fiscal policy, Sweden is currently implementing a less restrictive fiscal one.

Excepting these two countries, the situation regarding public finances has improved in the European Union countries. Excluding Ireland, whose improvement in its public finance (equivalent to 23.2 percent of GDP) has been due to the size of the public rescue of its banking system, the improvement in the public budget balance ranges between 0.07 percent of GDP in Finland and 8.5 percent of GDP in Latvia.

It is important to note that the improvement in the European public finances has been based on the improvement in the CAPBB. In other words, European economies have based their fiscal adjustment processes on the implementation of discretionary measures in order to reduce their fiscal deficits. However, as we detected when analysing the contribution of the fiscal impulses that were adopted at the beginning of the crisis, the composition of fiscal consolidations has also been different.

Thus, in 13 out of the 28 EU countries, the size of the interest payments as a percentage of GDP has fallen, ranging from 0.02 (Poland) to 0.95 (Greece) percent of GDP. Conversely, in the remaining 15 countries the size of interest payments has risen, ranging from 0.16 percent of GDP in Luxembourg to 1.7 percent of GDP in Spain. Obviously, in these countries higher interest payments have fuelled the fiscal deficits, leading to a more intense implementation of adjustment measures.

If we focus on the evolution of the cyclical public budget balance (CPPB), i.e. on the impact on public finances of the changes in economic activity, again we detect differences among countries. In 10 countries, the improved economic situation (a higher output gap) has led to an improvement in the CPBB, with impacts ranging from 0.1 percent of GDP in Belgium to 3.7 percent in Latvia. However, in 18 countries, the worse economic situation has in turn contributed to a worsening of their public finances, with impacts ranging from 0.05 (France) to 5.2 (Greece) percent of GDP.

Regarding the variation in the CAPBB, as mentioned earlier, with the exceptions of Slovenia and Sweden, there has been a remarkable change in these balances, with improvements that range from 0.2 (Finland) to 7.2 (Romania) percent of GDP. The magnitude of this unparalleled fiscal consolidation is clearly appreciated by knowing that, besides Ireland, in nine other countries (Greece, Spain, Portugal, Slovakia, Latvia, United Kingdom, Lithuania, Poland and Romania) the fall in the CAPBB is above 4 percentage points of the GDP).

Consequently, most fiscal consolidation has fallen in the discretionary fiscal adjustment measures adopted by public authorities in Europe, both in the countries whose cyclical budget balance has improved and in those countries whose cyclical budget balances have deteriorated due to the worsening economic conditions, as tables 5 and 6 show.

Table 5. Contribution of variations in CAPBB to the variation in total public budget balance between 2009 and 2013 (%) in countries that have seen an improvement of their cyclical budget balances

Belgium	Germany	Austria	Luxembourg	United Kingdom	Lithuania	Hungary
80.5	90.6	83	153	94.8	67.5	48

Source: Our calculations based on the AMECO Database

Table 6. Contribution in variations on CAPBB to the variation in total public budget balance between 2009 and 2013 (%) in countries that have seen a deterioration of cyclical budget balances

EE	ES	FR	IT	LUX	MT	NL	PT	SK	DK	BG	CZ	HR	PL	RO	CY	FI	GRE
135.7	154.4	100.6	143.6	153	193.1	107.2	157.8	114.8	90.2	113.7	124.8	152.4	130.9	115.5	505.5	297.3	262.5

Legend: EE (Estonia), ES (Spain), FR (France), IT (Italy), LUX (Luxembourg), MT (Malta), NL (Netherlands), PT (Portugal), SK (Slovakia), DK (Denmark), BG (Bulgaria), CZ (Czech Republic), HR (Croatia), PL (Poland), RO (Romania), CY (Cyprus), FI (Finland), GR (Greece)

Source: Our calculations based on the AMECO Database

3.2 Tax-based versus expenditure-based fiscal policies

The aim of this sub-section is to study whether fiscal impulses and adjustments in the European Union countries have been tax-based or expenditure-based. Since the nineties, analysis of the influence of the composition of fiscal expenditures and adjustments on the effectiveness and duration of fiscal policies has been flourishing. Traditional analyses were based on estimations of the different short-term fiscal multipliers. However, since the nineties, with the inclusion of (rational) long-term expectations in economic models, a different perspective started to prevail. Thus, estimations (mostly based on DSGE models) concluded that long-term multipliers of public expenditure were zero or even negative, with traditional Keynesian expansionary fiscal policies having a zero impact on economic activity. The counterpoint to these analyses was that fiscal consolidations could be expansionary, mainly when fiscal adjustments were based on credible spending cuts in the long-run (International Monetary Fund 2013, Nicolas Carnot 2013, OECD 2010).

However, recent literature has tended to cast doubts on this simplistic view. Thus, it is now argued that, to be effective and credible, large fiscal consolidations must be based on multiple instruments, involving spending cuts and tax hikes (Hagemann

2012; Molnar 2012; Sutherland, Hoeller and Merola 2012). Moreover, the composition of fiscal adjustments would not only be based on 'economic' criteria, but also reflect country-specific socio-political preferences and structural features regarding the desired size of the public sector and the composition of public revenue and expenditure (Ferreiro, Carrasco and Gomez 2014, Ferreiro, García del Valle and Gomez 2010, 2012 and 2013; Mauro and Villaverde 2013).

To study the composition of fiscal impulses and consolidations, we have broken down the variation in public budget balances into the three components of revenue, interest payments and primary expenditure. Again, we have studied the composition of fiscal impulses and adjustments adopted by European countries in the sub-periods of 2007-2009 and 2010-2013, in accordance with the definition of the periods of expansionary and restrictive fiscal policies used above

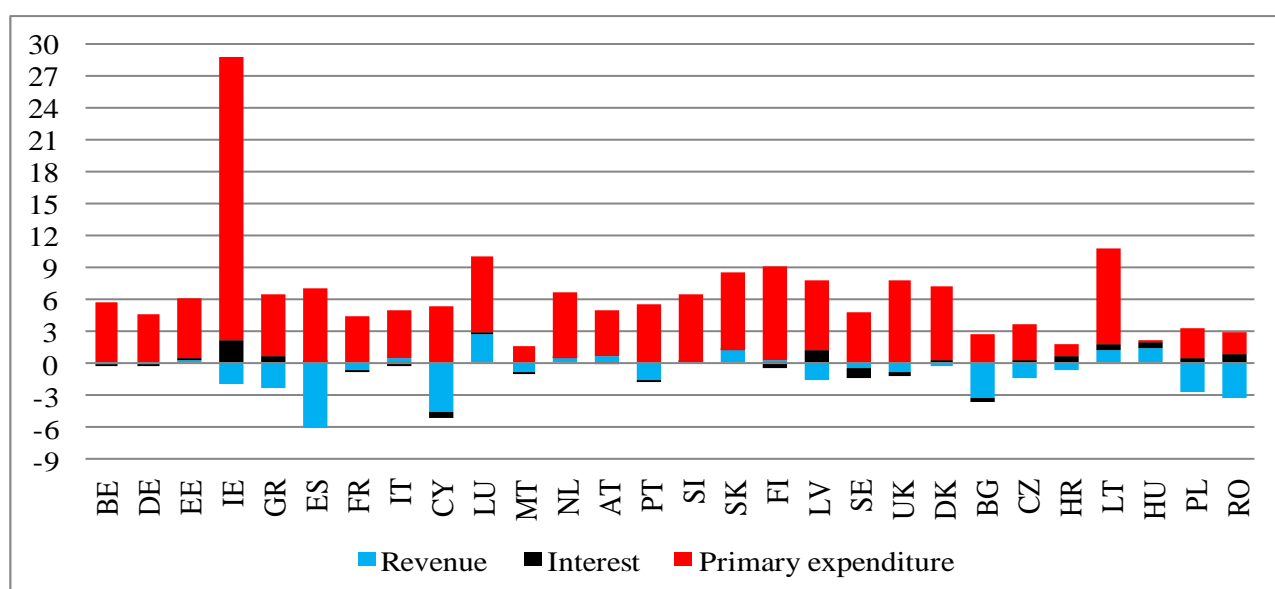
As we did earlier, we have focused first on the expansionary fiscal policies implemented at the beginning of the crisis. Since we analysed in the previous subsection the behaviour of interest payments, we will now focus our analysis on the evolution of public revenue and primary expenditure.

As figure 4 shows, all the EU countries increased public spending as a tool to stimulate the declining economic activity in the first years of the crisis. If we exclude Ireland (because of the impact of the banking crisis on public expenditure), Hungary (because in this first sub-period, its public finances improved) and Croatia (because data became first available in 2009), public expenditure increased in the European Union with a range that oscillates between 1.6 (Malta) and 8.8 (Finland) percent of GDP.

However, in the case of public revenue, we do not find a common and single pattern of evolution. In 18 countries, the fiscal impulse was fuelled by a fall in public

revenue. This fall ranged from 0.05 (Belgium) to 6 (Spain) percent of GDP. However, public revenue increased in 10 economies, with this increase ranging from 0.1 (Slovenia) to 2.8 (Luxembourg) percent of GDP. Actually, if we consider that in two countries (Belgium and Germany), the reduction in public revenues was lower than 0.1 percent of GDP, then, if we exclude Hungary, 40 percent of EU countries implemented expansionary fiscal policies exclusively based on expenditure increases.

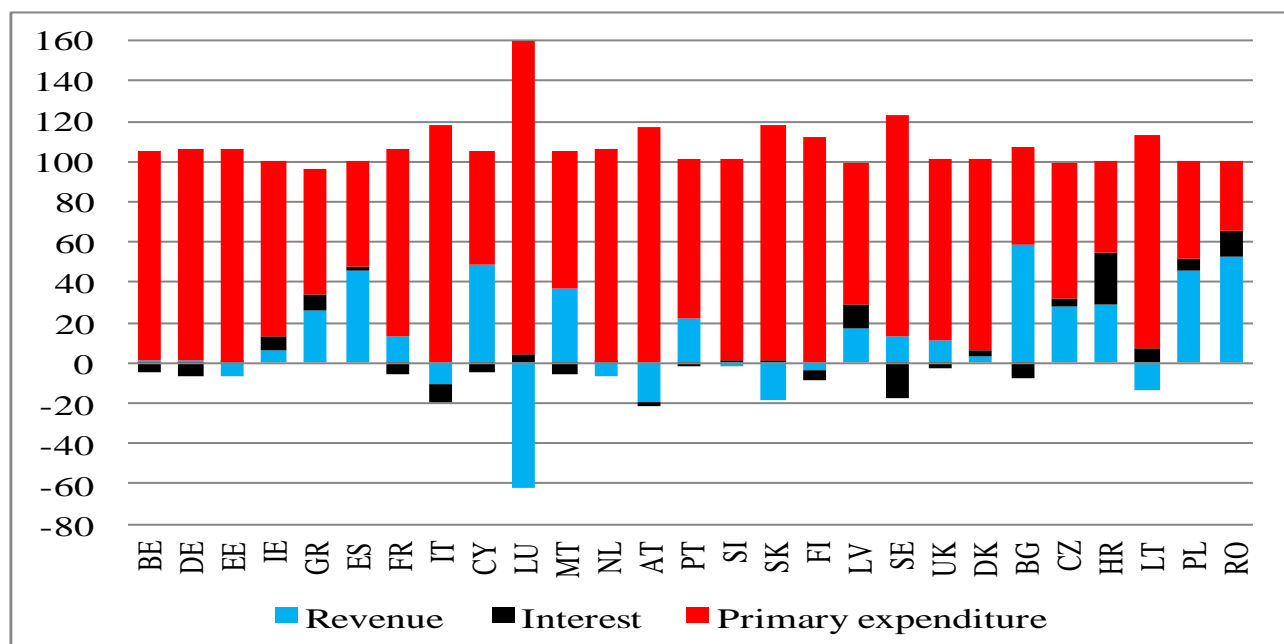
Figure 4. Variation of public revenue and expenditure, 2007-2009 (percent of GDP)



Source: Our calculations based on the AMECO Database

Figure 5 can help us to better discern whether EU countries implemented a tax-based or an expenditure-based fiscal impulse. Figure 5 shows the contributions of the three components of public budget to the total variation in public budget balance during the period of expansionary fiscal policies, as defined above. The figure does not include Hungary, because, as explained, in those years its public budget balance improved rather than worsened as in the rest of Europe.

Figure 5. Contribution to total variation of public budget balance 2007-2009 (% total variation)



Source: Our calculations based on the AMECO Database

It is easier now to detect the differences. In ten countries (Belgium, Germany, Estonia, Italy, Luxembourg, Netherlands, Austria, Slovakia, Finland and Sweden) the contribution of higher public expenditure to the fiscal impulse (measured as the downwards variation in the public budget) was above 100 percent. Consequently in these ten countries the fiscal impulse was exclusively expenditure-based.

In the other countries, there was a mix of higher expenditure and lower revenue, but again with significant differences among them. Thus the contribution of higher expenditure to the fiscal impulse ranged from 75 to 100 percent in six countries (Ireland, France, Portugal, Slovenia, United Kingdom, and Denmark). This contribution ranged between 50 and 75 percent in six countries (Greece, Spain, Cyprus, Malta, Latvia, and Czech Republic), and was below 50 percent in four economies (Bulgaria, Croatia, Poland and Romania).

Actually, if we focus on the contributions of fiscal cuts to the fiscal impulse, the reduction in public revenue represented above 40 percent of fiscal impulse in five countries: Spain (46%), Portugal (46%), Cyprus (49%), Romania (53%) and Bulgaria (59%).

Therefore, we can exclude the existence of a single and/or dominant pattern of expansionary fiscal policies in the European Union. Table 7 shows clearly how four types expansionary fiscal policy strategies co-existed in Europe depending on the evolution of revenue, interest payments and primary expenditure. In all EU countries, the expansionary fiscal policy was based on higher primary expenditure. However, public revenue also increased in nine countries, and in twelve countries the higher primary expenditure came with a lower spending on interest payments.

Table 7. Expansionary fiscal policy strategies in the European Union, 2007-2009

	Higher Primary Expenditures	
	Higher interest payments	Lower interest payments
Lower Revenues	Ireland, Greece, Spain, Latvia, Denmark, Czech Republic, Croatia, Hungary*, Poland, Romania	Belgium, Germany, France, Cyprus, Malta, Portugal, Sweden, United Kingdom, Bulgaria
Higher Revenues	Estonia, Luxembourg, Netherlands, Slovenia, Slovakia, Lithuania	Italy, Austria, Finland

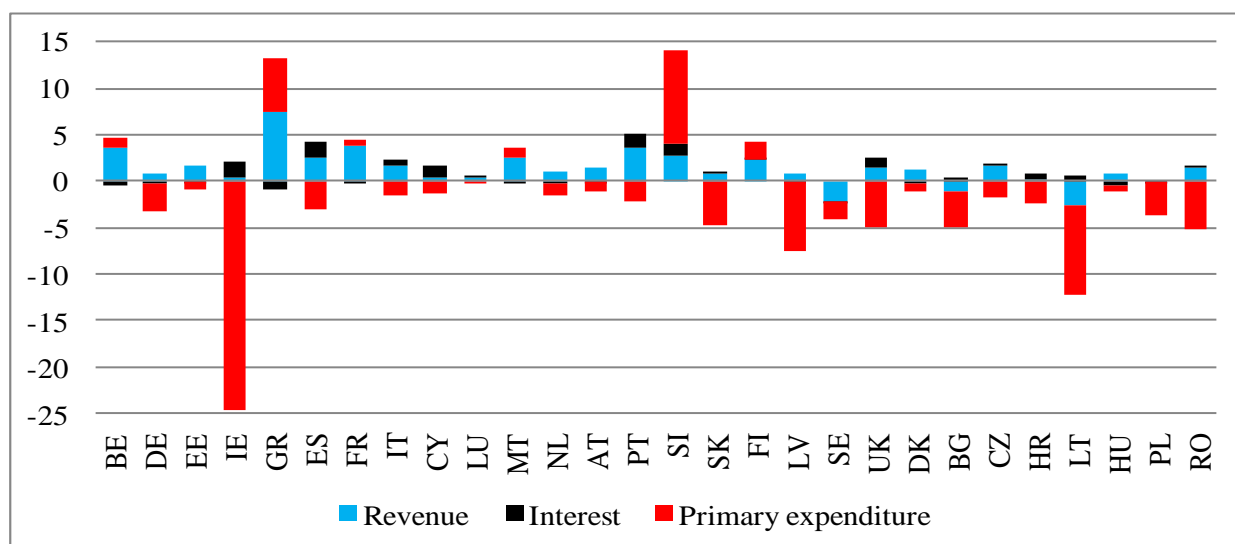
* Hungary evidenced an improvement in the public budget balance

Source: Our calculations based on the AMECO Database

It will be, however, in the period of fiscal consolidations, when we are going to find the most remarkable differences among national fiscal policies. With the already

mentioned exceptions of Slovenia and Sweden, whose public budget balances worsened over this period, fiscal deficits fell in Europe. However, the driving forces behind these fiscal adjustments are significantly different, as figure 6 shows.

Figure 6. Variation of public revenue and expenditure 2009-2013 (p.p. of GDP)



Source: Our calculations based on the AMECO Database

If we focus first on interest payments, in 12 countries (Belgium, Germany, Estonia, Greece, France, Malta, Netherlands, Austria, Latvia, Sweden, Denmark, Hungary and Poland) the fall in interest payments helped to improve public finances. In these countries the fall in interest payments ranged from 0.017 percent of GDP in Poland to 0.96 percent of GDP in Greece. In the remaining countries, the increase in interest payments due to the higher stock of public debt and/or higher yields ranged from 0.06 (Finland) to 1.7 (Spain) percent of GDP.

Regarding public revenue, this increased in most European Union countries, with increases ranging from 0.1 percent of GDP in Croatia to 7.4 percent of GDP in Greece. However, there was a fall in public revenues in four countries - Sweden, Bulgaria, Lithuania and Poland - ranging from -0.13 (Poland) to 2.6 (Lithuania)

percent of GDP. Given that in Sweden there was a worsening of its public finances, three economies therefore implemented a fiscal adjustment based on revenue and expenditure cuts.

If we focus in the variation of primary expenditure, this fell in most countries, with the exception of Belgium, Greece, France, Malta, Slovenia and Finland. In these economies, primary expenditure rose, with the increase ranging from 1 (Malta) to 5.8 (Greece) percent of GDP. In the other countries, the fall in primary expenditure (excluding Ireland) ranged from 0.3 (Luxembourg) to 9.7 (Lithuania) percent of GDP.

Table 8. Fiscal consolidations strategies in the European Union, 2009-2013

	Higher Primary Expenditure		Lower Primary Expenditure	
	Higher interest	Lower interest	Higher interest	Lower interest
Lower Revenue			Bulgaria, Lithuania	Sweden*, Poland
Higher Revenue	Slovenia*, Finland	Belgium, Greece, France, Malta	Ireland, Spain, Italy, Cyprus, Luxembourg, Portugal, Slovakia, United Kingdom, Czech Republic Croatia, Romania	Germany, Estonia, Netherlands, Austria, Latvia, Denmark, Hungary

* Slovenia and Sweden evidenced a deterioration of public budget balance

Source: Our calculations based on the AMECO Database

As in the case of the fiscal expansions, fiscal consolidations strategies have been really diverse. Although most EU countries have implemented a mix of higher revenue and lower primary expenditure, in six economies primary spending has increased parallel to rising revenues. Moreover, four economies cut their primary

expenditure at the same time as they reduced the size of public revenue, which means that in Bulgaria, Lithuania and Poland fiscal adjustments have only been based on expenditure cuts. We must also emphasize the different evolution of interest payments: whilst the size of interest payments has increased (as a percentage of GDP) in 15 economies, interest payments have fallen in 13 countries.

3.3 Size and composition of fiscal impulses and adjustments

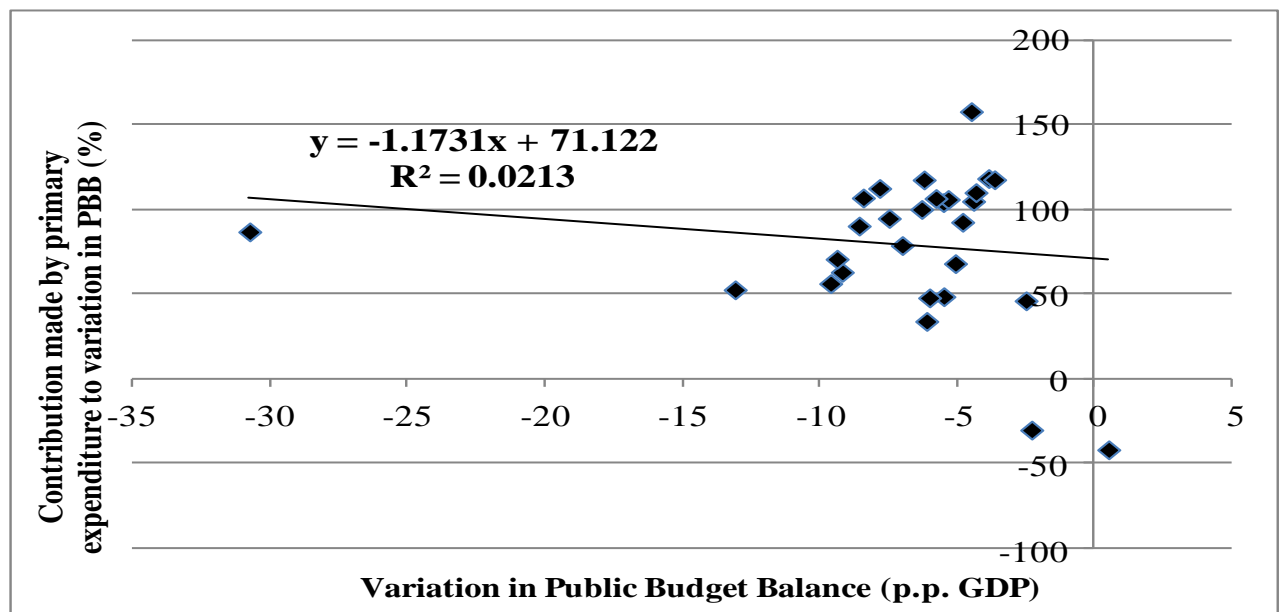
In the previous section, we detected a diversity of expansionary and restrictive fiscal policies, depending on the composition of the fiscal impulses and adjustments. To complete this analysis, in this sub-section, we will study the possible existence of a relationship between the size of fiscal impulses and consolidations and the contributions made by the different components (revenue-expenditure) of the public budget balance to the variation in this balance. Thus, our hypothesis is that this composition will vary according to the size of the fiscal impulses-adjustments.

We will first analyze the relationship between the changes in public budget balance, measured as a percentage of GDP (data that will be shown in the horizontal axes of the figures below) and the contribution made by the components of the budget balance to that variation. For a better understanding of the analysis, we have chosen as a representative variable of the composition of the budget balance the contribution of the primary expenditure to the change in budget balance.

Given that the change in budget balance is the sum of the changes in revenue, interest payments and primary expenditure, greater weight of primary expenditure means lower weight of the other items. In fact, as we will see below, the contribution made by primary expenditure to the change in budget balance can be higher than 100 per cent. This means that one or the two other items (interest payments and

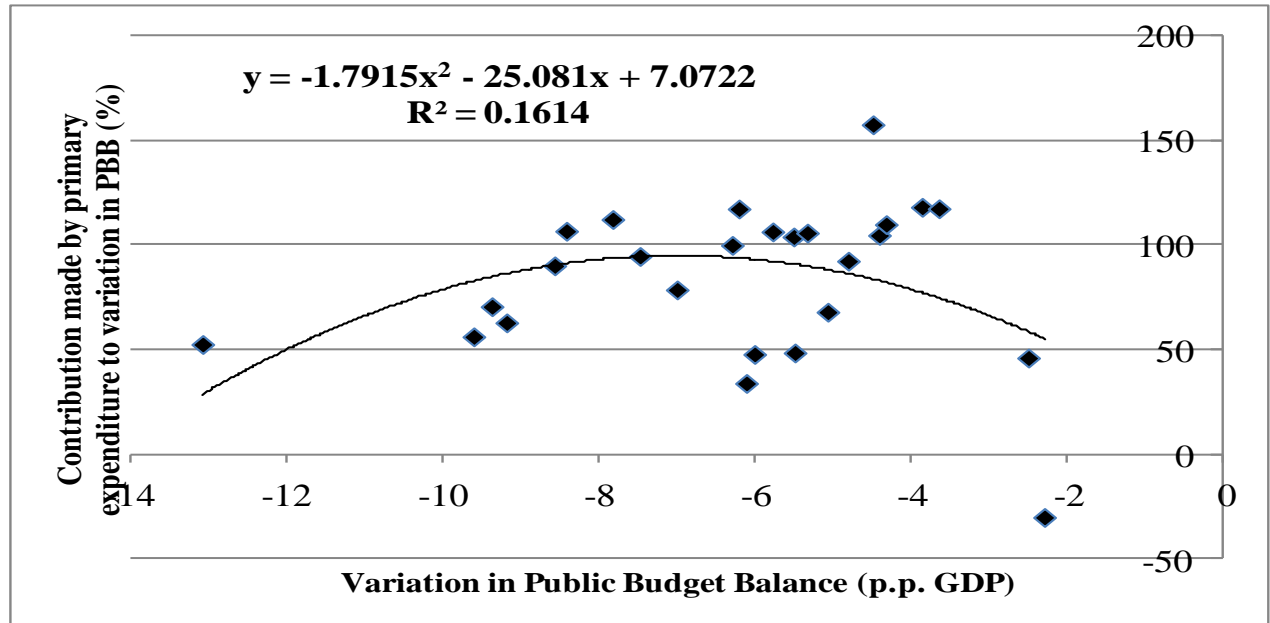
revenue) have had the opposite effect on the budget balance compared to that of the primary expenditure, thus leading to overstrain in this item. The contribution made by primary expenditure may also be negative. This means that the interest payments and/or the revenue have endured the burden of the fiscal impulse-adjustments, offsetting the opposite effects of primary expenditure.

Figure 7. Expansionary fiscal policies (2007-2009)



percentage points. In other words, the more expansionary is a fiscal policy, the more expenditure-based this policy.

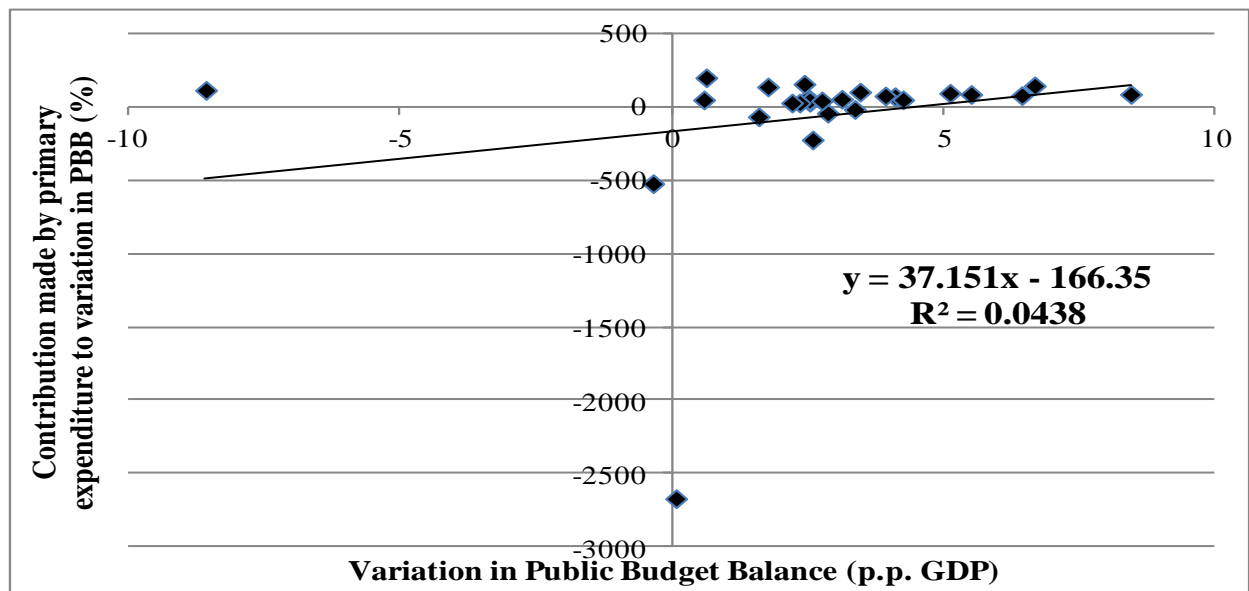
Figure 8. Expansionary fiscal policies, Ireland and Hungary excluded (2007-2009)



threshold is reached. This threshold is 7 percent of GDP. Thus, in countries whose budget balances have worsened by less than 7 percent of GDP, the contribution made by primary expenditure increases insofar as fiscal deficits rise. In the countries whose budget balances fell by more than 7 percent of GDP, the contribution made by primary expenditure falls. This means that highly expansionary fiscal policies are expenditure-based and revenue-based. In other words, countries that implement highly expansionary fiscal policies adopt a mix of primary expenditure hikes and tax cuts.

Figure 9 focuses on the fiscal consolidation strategies implemented in the European Union. As in figure 9, the relationship between the variation in public budget balance and the contribution made by primary expenditure to the fiscal adjustment is quite low, although the regression implies that stronger fiscal consolidations go hand in hand with higher contributions deriving from primary expenditure.

Figure 9. Fiscal consolidations (2009-2013)

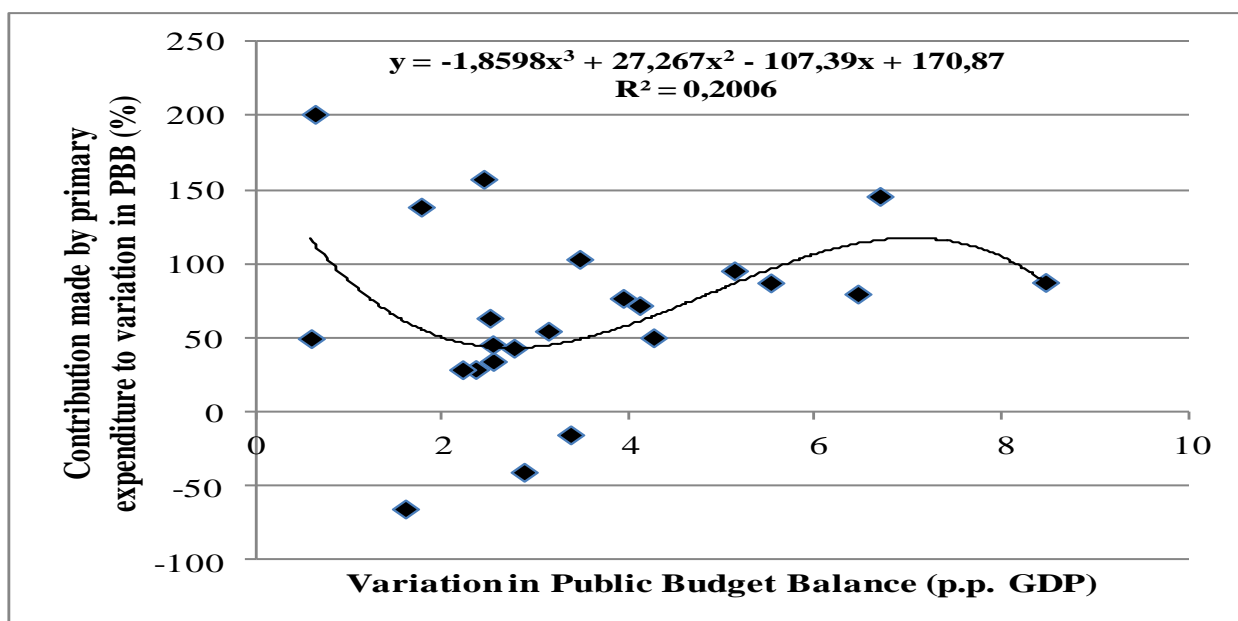


Source: Our calculations based on the AMECO Database

As in the case of expansionary fiscal policies, the above conclusion could be biased because of the inclusion of certain countries that distort the results. Thus, figure 9 includes the data from Slovenia and Sweden (countries that in the period subject to scrutiny reduced their public imbalances, consequently implementing tight fiscal policies), Ireland (whose primary public expenditure fell due to the end of the banking rescue), Greece (whose primary expenditure rose) and Finland (due to the high increase of both public revenue and expenditure).

Figure 10 shows the relationship between the variation in public budget balance and the contribution made by primary expenditure to the improvement in public finances. In this simple analysis, we have included a polynomial equation, because it provides a more significant relationship. This relationship shows interesting results that can be summarized by the fact that the contribution of primary expenditure to the fiscal consolidations changes according to the size of the fiscal adjustment processes.

Figure 10. Fiscal consolidations (2009-2013), excluding Ireland, Greece, Slovenia, Sweden and Finland



Source: Our calculations based on the AMECO Database

The regression included in the figure shows that small fiscal consolidations are mainly primary expenditure-based. Thus, for an improvement of 1 percent of GDP in the public budget balance, 88.9 percent of this variation is explained by a fall in primary expenditure. However, tax hikes gain importance in the fiscal consolidations insofar as the size of fiscal adjustments also rises. As figure 10 shows, for fiscal adjustments ranging from 1 to 3 percent of GDP, the contribution made by primary expenditure falls in favor of an increased relevance of tax hikes. For large fiscal consolidations – i.e., fiscal adjustments ranging from 3 to 7 percent GDP - the main driving forces behind the consolidation process are cuts in primary expenditure. Actually, for fiscal consolidations above 5.7 percent of GDP, the contribution made by primary expenditure to the adjustment efforts is above 100 percent. This implies that major consolidations go hand in hand with tax cuts, leading to offsetting higher primary expenditure cuts. Very large fiscal consolidations, however, go hand in hand with a declining weight of primary expenditure. For fiscal consolidations whose size is above 8.2 percent of GDP, the contribution made by primary expenditure cuts to the adjustment processes is below zero, what implies that tax hikes operate in parallel to expenditure cuts. Indeed, the contribution made by tax hikes to the fiscal consolidations would increase exponentially: thus, the contribution made by primary expenditure cuts to the fiscal adjustment would fall to 57 percent when the fiscal deficits decline amounts to 9 percent of GDP, and would be 17 percent when the fall in fiscal deficits amounts to 9.5 percent of GDP.

3.4 Relationship between public revenue and primary expenditure

In the previous sub-section, we detected a relationship between the size of fiscal impulses and adjustments and their composition. This implies the existence of a relationship between the evolution of the public revenue and the primary

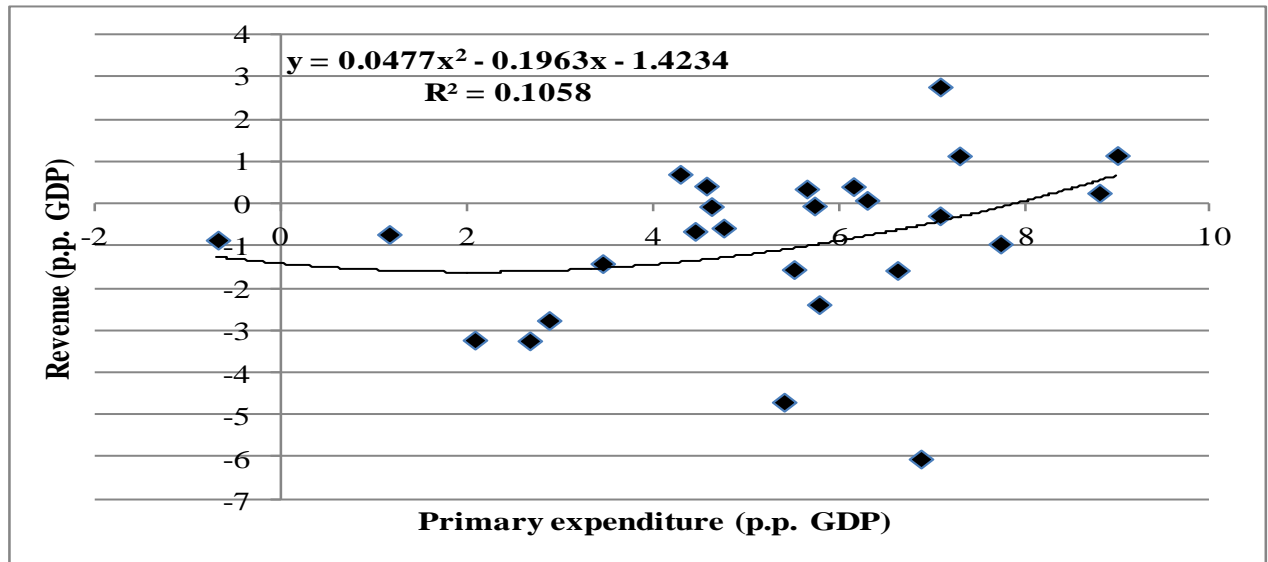
expenditure. With caveats, we can argue that there is a direct and positive relationship between both components of the public budget balance.

To test this hypothesis, we will analyse the relationship between the change noted in the size of public revenue and primary expenditure, both variables measured as percentage of GDP, with a distinction being drawn by the evolution of these variables during the expansionary and restrictive fiscal policies.

Figure 11 shows the behaviour of public revenue and primary expenditure during the first stage of expansionary fiscal policies at the beginning of the crisis. We have excluded two EU countries: Hungary (which in those years implemented a tight fiscal policy leading to a fall in its fiscal deficit) and Ireland (due, as explained above to the distortion of its huge deficit driven by the impact of the banking rescue on the Irish public finances).

The regression included in figure 11 shows the existence of a non-linear relationship between the evolution of public revenue and primary expenditure. In the case of low-sized expansionary fiscal policies, i.e., when the rise in primary expenditure is less than 2.1 percent of GDP, the higher primary expenditure go hand in hand with lower revenue: the size of public revenue would fall up to a maximum of 1.6 percent of GDP. Therefore, small fiscal expansions are both revenue-based and primary expenditure-based. Insofar as the increase of primary expenditure is higher, the fall in public revenue starts to decline. And finally, when the increase in primary expenditure exceeds 7.9 percent of GDP, the size of the public revenue starts to increase, thus partially offsetting the expansionary impact deriving from higher primary expenditure.

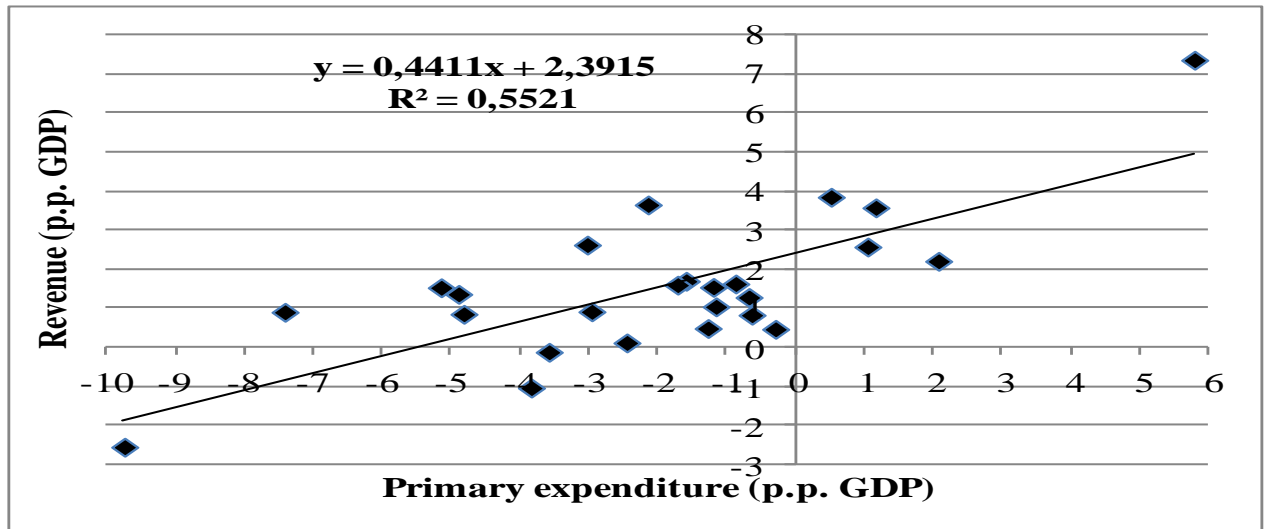
Figure 11. Change in the size of public revenue and primary expenditure during expansionary fiscal policies (2007-2009), Ireland and Hungary excluded



Source: Our calculations based on AMECO Database

This pattern is consistent with the need to take into account the impact of the higher primary expenditure on the public budget balance, trying to avoid an excessive fiscal deficit. Nonetheless, the higher revenue induced would not be enough to reduce the fiscal deficit driven by the higher primary expenditure. This offsetting will only happen when the increase in primary expenditure is above 12.5 percent of GDP. From this threshold onwards, the rise in revenue would be higher than the rise in primary expenditure, consequently reducing (slowly) the fiscal deficit.

Figure 12. Change in the size of public revenue and primary expenditure during fiscal consolidations (2009-2013), Ireland, Slovenia and Sweden excluded



Source: Our calculations based on AMECO Database

Next, we have analysed the changes evidences in the size of public revenue and primary expenditure during the fiscal consolidation processes. The results are shown in figure 12. Here, we have excluded three EU countries: Slovenia and Sweden (whose primary budget balance deteriorated in this period) and Ireland (that recorded a dramatic fall in its primary public expenditure fall due to the end of the banking rescue).

As mentioned in previous sections, most EU countries adopted a fiscal adjustment strategy based on a mix of primary expenditure cuts and tax hikes. In the case that primary expenditure has risen, the increase in public revenue has been the driving force behind the consolidation processes. However, we can detect that insofar as the expenditure cuts are higher, the increase in public revenue declines. Actually, once that expenditure cuts exceeds a threshold equivalent to 5.4 percent of GDP, the variation of public revenue becomes negative. Nonetheless, the decline in public

revenue is lower than the rise in the primary expenditure and, consequently, the fiscal deficit maintains its declining tendency.

These results show that major fiscal consolidations - those that according to our estimations are equivalent to a fall in fiscal deficits of up to a maximum of 5.4 percent of GDP, implying primary expenditure cuts amounting to 5.5 percent of GDP - are generated by a mix of expenditure cuts and tax hikes. However, very large consolidation processes are only expenditure-driven, because expenditure cuts would take place parallel to tax cuts, probably reflecting the economic and social and political problems arising from highly-excessive tax pressures.

4. Conclusions

The analysis carried out of the fiscal policies implemented since the beginning of the current crisis in the European Union shows clearly that a common pattern of national fiscal policies does not exist. The EU countries have adopted different fiscal policy strategies, which applies to both the expansionary fiscal policies implemented during the first years of the crisis and the widespread fiscal consolidation policies implemented since 2010.

At the beginning of the crisis, most EU countries adopted a countercyclical expansionary fiscal policy. This pattern changed after 2010, when the number of countries implementing procyclical restrictive fiscal policies increased. However, since the year 2012 the number of countries that have adopted a countercyclical expansionary fiscal policy has risen significantly. Nonetheless, it is remarkable the fact that most of the latter countries do not belong to the eurozone, which highlights the problems that the current institutional framework of fiscal policies in the eurozone creates in order to implement a countercyclical fiscal policy.

Analysing the content of the fiscal policies applied in the EU Member States shows the remarkable differences among countries. These differences become apparent when we analyze the strategies of fiscal policies in terms, first, of the discretionary or automatic stance of the fiscal policies, and, second, of the variations in public revenue and expenditure. These differences remain when we make analyze separately the composition of expansionary and restrictive fiscal policies.

Lastly, we wish to emphasize the relationship detected, first, between the size of the fiscal impulses-adjustments and the composition (revenue versus expenditure) of these fiscal policies, and, second, between the change evidenced in the size of the public revenue and expenditure.

References

- Carnot, N. (2013) "The composition of fiscal adjustments: some principles", ECFIN Economic Briefs 23.
- Creel, J., Paul H. and Saraceno, F. (2014) "French public finances at risk?", *Panoeconomicus*, 1, pp. 1-19.
- Ferreiro, J., Carrasco, C.A. and Gómez, C. (2014) "Convergence of public expenditures and implementation of a single model of public finances in the European Union", *Revista de Economía Mundial*, 37, pp. 75-102.
- Ferreiro, J., García del Valle, M. and Gómez, C. (2013). "An analysis of the convergence of the composition of public expenditures in EU Countries", *American Journal of Economics and Sociology*, 72(4), pp. 792-825.
- Ferreiro, J., García del Valle, M. and Gómez, C. (2012) "Similarities and differences in the composition of public expenditures in the European Union", *Journal of Economic Issues*, 46(3), pp. 633-659.
- Ferreiro, J., García del Valle, M. and Gómez, C. (2010) "Social preferences and fiscal policies: an analysis of the composition of public expenditures in the European Union", *Journal of Post Keynesian Economics*, 32 (3), pp. 347-370.
- Ferreiro, J., Gómez, C. and Serrano, F. (2014) "Conditions for a sustainable counter-cyclical fiscal policy: the case of Spain", *Journal of Economic Issues*, 48(2), pp. 341-348.
- Ferreiro, J., Gómez, C. and Serrano, F. (2013) "Mistakes in the fiscal policy in Spain before the crisis", *Panoeconomicus*, 60(5), pp. 577-592
- Hagemann, R. (2012) "Fiscal consolidation: Part 6. What are the best policy instruments for fiscal consolidation?" OECD Economics Department Working Papers 937.
- Hein, E. and Truger, A. (2014) "Fiscal policy and rebalancing in the euro area: a critique of the German debt brake from a post-keynesian perspective," *Panoeconomicus*, 1, pp. 21-38.

Huarter, F. (2013) "Is fiscal policy procyclical in the Euro Area", *German Economic Review*, 14(1): 73-88.

International Monetary Fund (2013) "Reassessing the role and modalities of fiscal policy in advanced economies", IMF Policy Paper September 17

Mauro, P. and Villaverde, M. (2013) "Past fiscal adjustments: lessons from failures and successes" *IMF Economic Review*, 61(2), pp. 379-404.

Molnar, M. (2012) "Fiscal consolidation: part 5. What factors determine the success of consolidation efforts?" OECD Economics Department Working Papers 936.

O'Hara, P.A. (2013) "Policies and institutions for moderating deep recessions, debt crises and financial instabilities", *Panoeconomicus*, 1, pp. 19-49.

OECD (2010) *OECD Economic Outlook*, 2010/2.

Sutherland, D., Hoeller, P. and Merola, R. (2012) "Fiscal consolidation: part 1. How much is needed and how to reduce debt to a prudent level?" OECD Economics Department Working Papers 932.

Financialisation, Economy, Society and Sustainable Development (FESSUD) is a 10 million euro project largely funded by a near 8 million euro grant from the European Commission under Framework Programme 7 (contract number : 266800). The University of Leeds is the lead co-ordinator for the research project with a budget of over 2 million euros.

THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?

THE PARTNERS IN THE CONSORTIUM ARE:

Participant Number	Participant organisation name	Country
1 (Coordinator)	University of Leeds	UK
2	University of Siena	Italy
3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
10	University of Pannonia, Veszprem	Hungary
11	National and Kapodistrian University of Athens	Greece
12	Middle East Technical University, Ankara	Turkey
13	Lund University	Sweden
14	University of Witwatersrand	South Africa
15	University of the Basque Country, Bilbao	Spain

The views expressed during the execution of the FESSUD project, in whatever form and or by whatever medium, are the sole responsibility of the authors. The European Union is not liable for any use that may be made of the information contained therein.

Published in Leeds, U.K. on behalf of the FESSUD project.