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**Working Paper**

## State-of-Play in Implementing Macroeconomic Adjustment Programmes in the Euro Area

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# RUHR

ECONOMIC PAPERS

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**Short Version**

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Daniel Gros, Cinzia Alcidi, Ansgar Belke, Leonor Coutinho, and  
Alessandro Giovannini<sup>1</sup>

# State-of-Play in Implementing Macroeconomic Adjustment Programmes in the Euro Area

## Short Version

### Abstract

*Two of the four macroeconomic adjustment programmes, Portugal and Ireland's, can be considered a success in the sense that the initial expectations in terms of adjustment, both fiscal and external, were broadly fulfilled. A rebound based on exports has taken hold in these two countries, but a full recovery will take years. In Greece the initial plans were insufficient. While the strong impact of the fiscal adjustment on demand could have been partially anticipated at the time, the resistance to structural reforms was more surprising and remains difficult to cure. The fiscal adjustment is now almost completed, but the external adjustment has not proceeded well. Exports are stagnating despite impressive falls in wage costs. In Cyprus, the outcome has so far been less severe than initially feared. It is still too early to find robust evidence in any country that the programmes have increased the long-term growth potential. Survey-based evidence suggests that structural reforms have not yet taken hold. The EU-led macroeconomic adjustment programmes outside the euro area (e.g. Latvia) seem to have been much stricter, but the adjustment was quicker and followed by a stronger rebound.*

*JEL Classification: E22, E62, F32*

*Keywords: Current account imbalance; Euro area; fiscal multiplier; investment; macroeconomic adjustment programme*

*April 2014*

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<sup>1</sup> Daniel Gros, CEPS; Cinzia Alcidi, CEPS; Ansgar Belke, UDE; Leonor Coutinho, Europrism Research Centre; Alessandro Giovannini, CEPS. – The expertise was conducted for the European Parliament and the copyright remains with the European Parliament at all times. The full version of the original study can be found at [http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/497740/IPOL-ECON\\_ET\(2014\)497740\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/497740/IPOL-ECON_ET(2014)497740_EN.pdf). – All correspondence to Ansgar Belke, University of Duisburg-Essen, Chair for Macroeconomics, Department of Economics, 45117 Essen, Germany, e-mail: [ansgar.belke@uni-due.de](mailto:ansgar.belke@uni-due.de)

## 1. INTRODUCTION

Since the start of EMU (Economic and Monetary Union) in 1993 until 2008, the euro area, and more broadly the global economy, experienced an unprecedented credit boom. The expansion of credit was particularly strong in Greece, Ireland, Portugal, Spain and Cyprus and all of them subsequently needed official financial support.<sup>1</sup> This briefing paper focuses on the analysis of the four countries that implemented fully-fledged macroeconomic adjustment programmes: Greece, Ireland, Portugal and Cyprus.

Greece was the first country to lose market access in early 2010 as the catastrophic state of its public finances became gradually known. When the need for an assistance programme (consisting of financial support and a designed adjustment plan) became inevitable, a debate over the involvement of the International Monetary Fund (IMF) started. It became rapidly clear that the IMF's expertise was indispensable and that it could also make a substantial financial contribution in the programme. Moreover, given that the European Central Bank (ECB) had a solid expertise in financial markets but also that it had extended large amounts of lending to Greek banks and provided *de facto* substantial balance-of-payments support via its Emergency Lending Assistance (ELA), it was decided that the ECB should also be involved in the assistance process. This led to the creation of what is informally called the 'Troika', with the European Union, represented by the European Commission, acting as the third pillar of the alliance.

Greece did not qualify for the balance-of-payments assistance the EU offered to Latvia in 2008, because this facility was designed only for non-euro area countries (see Casale et al., 2012). Moreover, given that the total outstanding amount of loans to be granted to member states under the medium-term financial assistance facility is limited to €50 billion, the resources available would have been insufficient to cope even with the case of Greece alone. Therefore other means had to be found to finance the first Greek programme, and the only possible solution was through bilateral loans from other EU governments, which materialised in the Greek Loan Facility.<sup>2</sup>

At first, it was thought that Greece would remain an isolated case. However, it was soon feared that other governments might also face similar refinancing problems and that a more systematic approach was needed. This led to the establishment of the European Financial Stability Facility (EFSF), a temporary rescue mechanism which was later *de facto* made permanent in the form of the European Stability Mechanism<sup>3</sup> (ESM). On November 2010, Ireland officially requested financial assistance from the EFSF, followed by Portugal in April 2011.<sup>4</sup>

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<sup>1</sup> Spain also needed external financial assistance. In this case, however, the financial support was limited in size and scope to the banking sector. Therefore, only the programmes for the other four countries are analysed in this paper.

<sup>2</sup> Under the Greek Loan Facility (GLF), the European Commission was not acting as a borrower but was entrusted by the euro area member states with the coordination and administration of the pooled bilateral loans, including their disbursement to Greece.

<sup>3</sup> Contrary to the ESM, which is a formal institution based on international treaty, the EFSF is private company (more exactly a special purpose vehicle – or SPV) established in Luxembourg and jointly controlled by (finance ministers of) the euro-area states.

<sup>4</sup> In addition to the financial resources provided by the EFSF and the IMF, the European Financial Stability Mechanism (EFSM) also participated in the assistance programmes, providing €2.5 billion for Ireland and €6 billion for Portugal. For a clear description of the differences between the EFSF, EFSM and ESM, see Casale et al. 2012.

In early 2012, Greece requested further assistance, which was then provided by the EFSF and accompanied by a private sector involvement (PSI) to reduce the amount of outstanding public debt. Finally, in 2013 it was Cyprus' turn: after a formal request by the country in June 2012, the assistance programme finally started in mid-2013. A contribution by the ESM of up to €9 billion was announced in return for Cyprus agreeing to close the country's second-largest bank and imposing a one-time bank deposit levy on uninsured deposits above €100,000.

Ex post, it appears that the underlying assumption of the various assistance programmes drafted by the Troika was that the countries in question only faced a temporary liquidity crisis. Under this hypothesis, a relatively short and sharp adjustment effort should have been sufficient for them to resolve their fundamental problems, mostly fiscal and external deficits (but not only), thus making it possible to regain access to international capital markets rather quickly. While in the case of Ireland and Portugal this assumption has proved correct, in the case of Greece it turned out to be wrong. Only after the debt restructuring through the PSI, which lowered the debt burden, and lower interest rates, was Greece's sovereign debt again deemed to be in a sustainable position.

In each of the four programmes, financial assistance has been provided and promised against the commitment of each country to fulfil certain economic policy conditions contained in the macroeconomic adjustment programme. This usually involves an agreed path of fiscal consolidation, governance measures as well as financial-sector stabilisation and structural reform measures to improve the business environment and support growth.

More in general, a macroeconomic adjustment is a process driven by policies but also by changes in private spending behaviour (consumption, imports, investment) and improvement in competitiveness that countries are required to undertake after a large shock. In the case of the four countries, the shock emerged as a consequence of an excessive accumulation of imbalances in different parts of the economy: in the public sector in Greece, in the housing and banking sectors in Ireland, external imbalances in Portugal and in the banking sector in Cyprus.

Before going into a detailed case-by-case analysis, we address some issues common to all countries, namely the feasibility of the fiscal adjustment and the role of the fiscal multiplier as well as other factors that can explain why output losses have been so different across countries.

Our detailed analysis shows that the four countries differ enormously, but that some issues are similar. Portugal and Greece share three key features, namely high external debt, an extremely low rate of national savings and low competitiveness. These weaknesses are all interrelated: low savings imply that consumption is relatively high relative to income and that the level of consumption pre-crisis could be sustained only with continuing large inflows of capital (see Alcidi and Gros, 2010). Moreover, relatively high consumption (and at times housing investment) during the pre-crisis period kept domestic demand and employment high. Wage increases therefore outpaced productivity, thus leading to an erosion of competitiveness.

By contrast, Ireland had a much lower debt to start with and higher savings rate, but it was highly exposed to financial markets because its construction boom went hand-in-hand with a huge expansion of financial activity. Housing prices fell significantly and the losses in the banking sector were so large that the government could not absorb them without outside support. This was the key reason for Ireland's fiscal troubles.

In Cyprus, the crisis had a very specific nature as it was precipitated by the losses that the two largest banks of the country made on their investments in Greek government bonds when the



PSI came. These losses crippled the huge banking system of the country, and the government was in no position to absorb them given their size. Cyprus was also less able to withstand this shock because it was coupled with the bursting of a housing and credit bubble, similar to that of Greece (but not as extreme as that of Ireland), that significantly deteriorated private-sector balance sheets.

Most judgments of the adjustment programmes are coloured by comparing the state of the economy today to its state the year the programme started. However, this view fails to take into account the fact that imbalances were accumulated in the preceding years. The problems of the programme countries today cannot simply be ascribed to the adjustment programmes, but to the combination of the accumulation of imbalances and the adjustment programme.

A somewhat different view of the adjustment programmes can be obtained by simply comparing the state of the economy today (2013 data) with that of 2007. This is instructive because if one compares these two dates, one finds that the fiscal deficit actually fell very little in both Greece and Portugal. Both countries thus had a huge fiscal expansion between 2007 and 2009 (by about 10% of GDP in the case of Greece) which was then followed by cutting the deficit under the adjustment programme. The multiplier should have worked both on the way up and the way down for the deficit. Hence it is difficult to explain why Greek real GDP should be over 20% lower in 2013 than in 2007 when the deficit was cut between these two dates by only a few points of GDP. One can understand the fall in GDP only if one takes into account that between these two dates the role of investment in the economy collapsed, with a negative contribution to GDP of about 12 percentage points. A similar observation can be made for Portugal as well: over the period 2007-13, the contractionary impact of fiscal policy was much smaller than that of investment.

In the case of Ireland, the comparison between 2013 and 2007 indicates that the fiscal deficit has increased between these two dates, suggesting that in conventional terms fiscal policy was expansionary. This remains true disregarding the increase in the deficit driven by the guarantees offered to the banks. This makes it difficult to argue that the large unemployment today is mainly due to the adjustment programme. Likewise, it would not be correct to argue that the recessions in the programme countries were caused by 'austerity'. The key negative factor behind the collapse of demand was in all cases the slump in investment. One reason why the recession was particularly deep in Greece is that the fall in investment demand in this country was not even partially offset by higher exports.

One could argue that a continuation of large fiscal deficits would have mitigated the recession. Nevertheless, given the continuing weakness of investment, deficits would have had to remain elevated for a long time and the adjustment would in any event have to take place sooner or later with the unavoidable costs in terms of lost output and employment, unless the multipliers had changed in the meantime.

Finally, another general observation is that *ex-ante* (i.e. in 2010) it appeared that in Greece and Portugal the problem of the sovereigns was potentially insolvency, given the very high external debt of these countries, while in Ireland and Cyprus this seemed to be less the case. Of course, the difference between liquidity and solvency problems is never clear-cut *ex ante*. The Greek and Portuguese experiences have diverged substantially, mainly because reforms were implemented in the latter and resulted in strong export growth or, alternatively, as Portuguese exporters have been eager and able to stay in the market, although home markets have collapsed. Export growth limited the fall in output and government revenues, contributing greatly to the sustainability of public finances. By contrast, in the case of Greece, exports have

stagnated and provided no offset to the required fiscal adjustment, which had to be much larger than that of Portugal because the initial conditions were so much worse.

The remainder of this briefing paper is organised as follows. The next section looks at the feasibility of the fiscal adjustment comparing the macroeconomic conditions in the four countries and emphasising the role of the fiscal multipliers in the process. The last part of this section assesses the fall in the output in a comparative framework, stressing the role played by the different components of demand either in amplifying the effect of the fiscal consolidation or in offsetting it. Sections 3 to 6 focus on the assessment of the adjustment in Greece, Portugal, Ireland and Cyprus, respectively. They look at the formulation of the programmes as well as their implementation with most attention devoted to reforms aiming at improving competitiveness, growth and employment. Section 7 considers this last aspect in the framework of a cross-country approach. The final section provides conclusions.

## **2. THE FEASIBILITY OF THE MACROECONOMIC ADJUSTMENT**

The tough policy measures implemented after 2010 represent an unavoidable response to financial and macroeconomic pressures that mounted in the years before. Therefore, before assessing the macroeconomic adjustment programmes followed by the four countries under analysis, it is crucial to understand why this rebalancing was unavoidable and why it happened. Only in this framework of analysis is it possible to investigate in a critical manner the main elements of a macroeconomic adjustment programme that affects aspects both of aggregate (private and public) demand and aggregate supply (structural reforms).

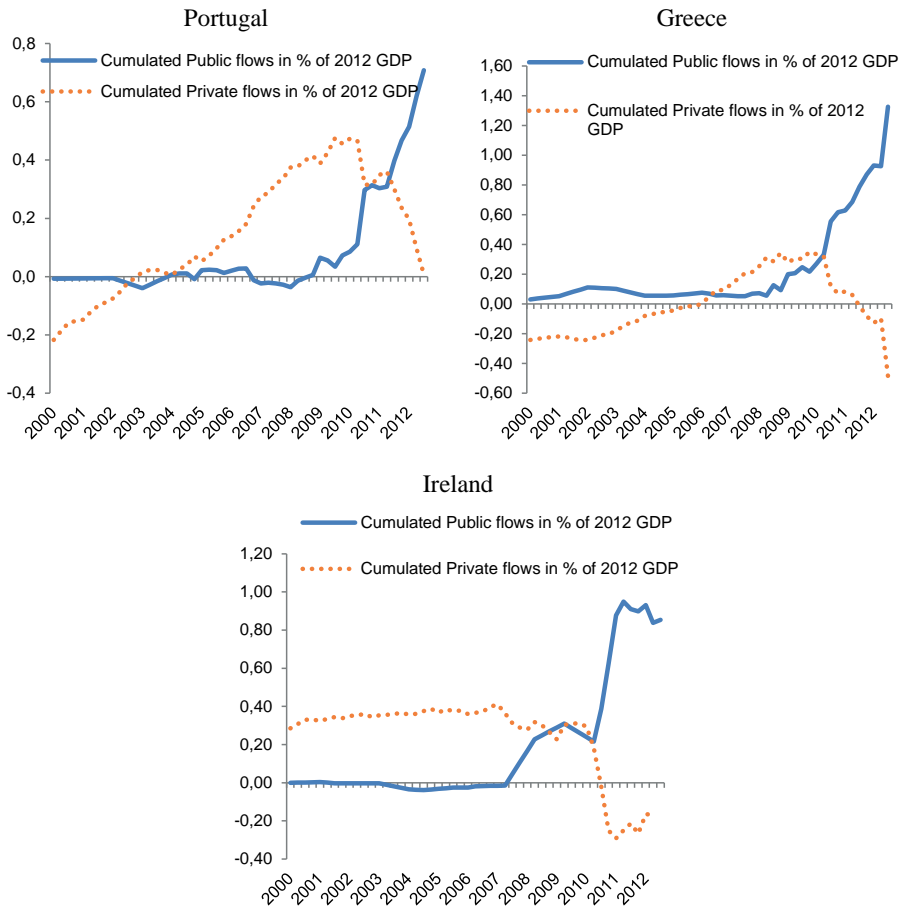
### ***2.1 Why the macroeconomic adjustment was suddenly needed***

Soon after the creation of the EMU, significant amounts of capital, largely intermediated by the banking system, started to flow from the core to periphery: the elimination of the exchange rate risk appeared beneficial for both borrowers and lender and all four countries under analysis benefited from external resources to finance their economies.

Despite the fact that these capital flows naturally resulted in large current account imbalances, the academic and political debate did not judge them as risky, but they were seen as part of a well-functioning monetary union and a by-product of the process of convergence towards higher output levels. Figure 1 shows the developments in private and public financial flows, for the four economies: the period from 2004 to 2007 was characterised by a large increase in the flows of private resources into the economies and then the sudden reverse.

As already discussed, until 2007, these imbalances were seen as part of a process of catching-up in the context of the monetary union, considered not only innocuous but also a source of growth for both lenders and borrowers. Indeed, this is consistent with the vision of peripheries as emerging-market economies. According to the general wisdom, a know-how-poor country is expected to be an importer of capital to develop production processes, which implies current account deficits to provide financing to their economic growth (Belke & Dreger, 2013). Greece, Portugal, Ireland and Cyprus were perceived as having a good growth potential in terms of income convergence towards higher standards of living of the oldest members. Moreover, this view appeared to be validated by reality as actual growth rates increased with the capital inflows.

Figure 1. Private and public flows, cumulated (2000-12)

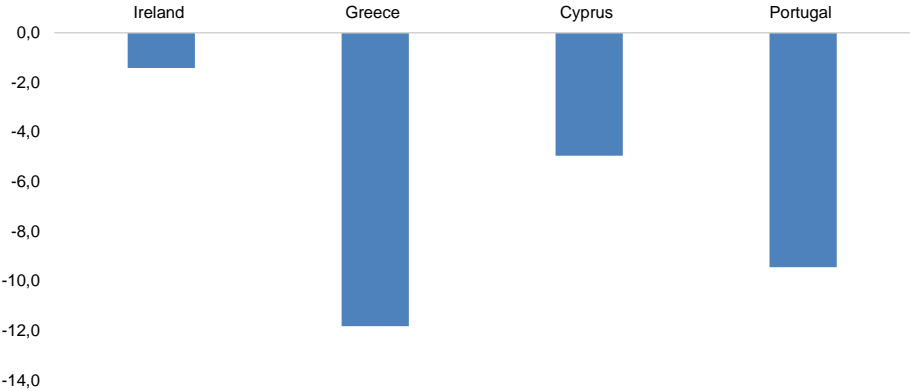


Note: The blue line denotes public flows; the orange line private flows. Private flows are computed following the definition contained in the MIP Commission report. It is calculated in a residual way from financial accounts after subtracting public flows. The latter are given by the sum of changes in the Target2 balance plus the programme finance (for countries under emergency programmes). We neglect the capital account in the definition of private flows. We consider stock financial accounts in 2000.

Sources: Eurostat and national central banks and IMF and European Commission for programme countries.

The eruption of the financial crisis in late 2007 and 2008 changed the perception of the risk as well as the attitude towards the relevance of macroeconomic imbalances within the monetary union. The current account imbalances accumulated in the years before (see Figure 2) no longer appeared as the side effect of a convergence process towards higher output levels, but rather as indicators of excess debt, construction bubbles and resource misallocation, which led to the accumulation of a large external debt (Belke & Schnabl, 2013).

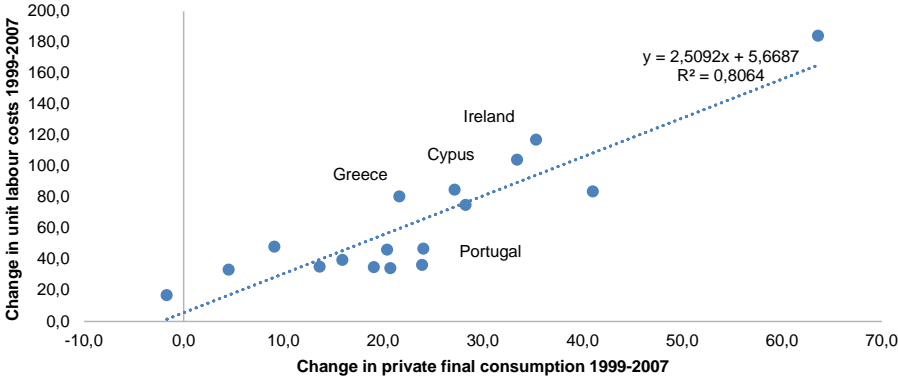
Figure 2. Current account balance as % GDP (1999-2007)



Source: European Commission Services (AMECO), 2013.

The second important consequence of these inflows was that they generated a generalised increase in consumption, as shown in Figure 3, where the vertical axis shows the compounded growth rate in consumption over the period 1999-2007 in the euro area. Although the increase in private consumption is not a problem per se, what Figure 4 shows is that this increase exhibits a strong positive correlation with a loss in competitiveness as measured (inversely) by the unit labour cost. In other words, the countries that experienced the highest increase in consumption are the same that experienced the highest increase in labour costs and hence the fall in competitiveness.

Figure 3. Demand and competitiveness



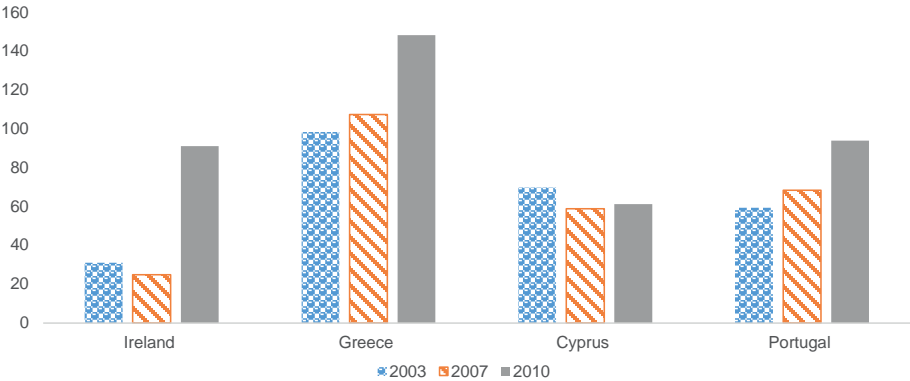
Sources: Eurostat and European Commission Services (AMECO), 2013.

Although Figure 3 is just a correlation matrix, economic reasoning suggests that the high levels of demand, which have boosted growth, have also contributed to an environment that is favourable to large increases in wages. In this sense, within the EMU the falling competitiveness in the peripheral countries and the growing divergence relative to the core countries were mostly

a symptom of a deeper problem related to excessive credit and consumption rather than the problem of a conscious policy to favour high wage increases. Along this line of reasoning, Sanchez & Varoudakis (2014) have recently argued that capital flows were the driving factor causing the deterioration of competitiveness.

Moving in the same direction of the external position, the fiscal position also deteriorates for Greece and Portugal. As Figure 4 shows, they did not manage to reduce their size most likely because of pro-cyclical fiscal policies, leading their government debt to increase in a period in which they were also benefiting from low levels of interest rate. Conversely, Cyprus and Ireland managed to reduce their level of public debt and the latter to bring it at the lowest levels among the countries of the monetary union. Note that Cyprus had to be a good student to enter the euro in 2008.

Figure 4. Government debt (as % of GDP)



Source: European Commission Services (AMECO), 2013.

The path just described towards unsustainable macroeconomic situations, forced the four countries under analysis to implement tough adjustment policies. As previously stated, macroeconomic adjustment involves correcting the distortion and the imbalances in various sectors of the economy; in order to improve the outcome of key macroeconomic variables, more simultaneous policies are needed.

When other countries in the past had undertaken macroeconomic adjustments, the key areas in which they immediately operated changes in existing policies were mainly the monetary field (reduction in the growth rate of broad money, depreciation in the countries' exchange rate, or a shift from a fixed to a floating exchange rate) and the reduction in the fiscal imbalances. As the first policy area is not in the hands of euro area member states, the primary policy area in which adjustment took place was the government fiscal policy. Table 1 describes the main changes occurring in the last years in the primary fiscal balance (and in its components) in Greece, Ireland and Portugal. It also reports the expected changes initially foreseen in the macro-adjustment programmes, in order to better understand both how the fiscal correction was designed and whether or not the commitments have been observed.

Table 1. Changes in primary balance and in its components multipliers

Country	Fiscal component	Absolute change (€bn)	% of GDP
<b>Greece</b>		(2009-14)	(2009-14)
<b>1st plan</b>	Primary deficit	-34.7	-14.5
	Revenue and grants	20.2	7.6
	Primary expenditure	-14.2	-6.8
<b>2nd plan</b>	Primary deficit	-33.9	-15.1
	Revenue and grants	-0.5	4.1
	Primary expenditure	-34.6	-11.1
<b>Last review</b>	Primary deficit	-27.1	-12.0
	Revenue and grants	-8.5	5.3
	Primary expenditure	-35.6	-6.7
<b>Ireland</b>		(2010-14)	(2010-14)
<b>Plan</b>	Primary deficit	-47.7	-30.2
	Revenue and grants	10.7	2.2
	Primary expenditure	-36.9	-28.0
<b>Last review</b>	Primary deficit	-44.5	-28.2
	Revenue and grants	4.8	0.5
	Primary expenditure	-39.7	-27.7
<b>Portugal</b>		(2010-14)	(2010-14)
<b>Plan</b>	Primary deficit	-15.6	-8.9
	Revenue and grants	5.0	0.9
	Primary expenditure	-10.7	-8.1
<b>Last review</b>	Primary deficit	-11.1	-6.4
	Revenue and grants	0.2	1.3
	Primary expenditure	-11.0	-5.2

Note: Cyprus is excluded, as the IMF plan only started in 2013.

Sources: IMF and authors' own calculations.

The table gives a clear picture of the efforts, in terms of reducing fiscal imbalances, undertaken by the three countries in question. Greece has reduced its primary deficit (i.e. without considering the interest expenditure) by 2.4% GDP per annum while Portugal by 2.2%. The case

of Ireland is somehow misleading as the year before the start of the adjustment plan was characterised by a large fiscal deficit to bailout the Irish financial sector. In terms of intensity of effort, an adjustment of the primary balance by more than 2% per year can be found in recent European history, only in the cases Denmark (2.5% per year in the period 1982-86) and Greece (2.2% per year in the period 1989-94).<sup>5</sup>

Moreover, the table shows how the first Greek plan (2010) was initially designed to achieve a primary surplus in 2014 thanks to measures, composed of around 60% from higher tax revenues and 40% from expenditures cuts. However, the large fall in revenues that occurred in the last years had forced Greece to compensate by cuts in expenditure that were more substantial than expected. This was already clear at the time of the preparation of the second plan, which has been designed accordingly. In the case of Ireland, in contrast, the foreseen expenditures cuts were larger, especially because the reference year for the programme was 2010 (see above). However, also in this case the subsequent increase in revenues was lower than expected, forcing larger cuts in absolute terms. Finally, the third plan designed by the Troika, i.e. for Portugal, was initially designed with more emphasis on expenditure cuts, compared to those designed for Greece. But also in this case the fall in revenues has forced larger cuts, even if this change has been relatively lower than in Greece (resulting in more gradual fiscal adjustment).

## ***2.2 Multipliers and the impact of the fiscal adjustment***

One key issue for all programmes was the impact that a large fiscal adjustment just described would have on output. As is well known, any fiscal consolidation has a negative impact on demand via the so-called ‘Keynesian multiplier’: when public spending goes down, GDP and therefore income fall and so does consumption, which in turn induces another drop in GDP. The drop in GDP then also affects tax revenues, which implies that a reduction in expenditure by one euro could potentially lead to a fall in demand by more than one euro and a fall in tax revenues.

How large are these effects? Modern macroeconomic models assign only a small role to the multiplier because they usually assume that consumption is driven mainly by expectations about future income and not just current income. Most of the models used by the European Commission, the ECB and the IMF thus gave estimates of the multiplier below unity (implying that a reduction in the deficit equivalent to 1% of GDP should lead to a fall in demand of less than 1%). However, the academic literature suggests that the size of the multiplier can vary considerably depending on whether the fiscal adjustment is conducted via expenditure cuts or tax increases with different expenditure and tax categories yielding quite different multipliers. Another factor of uncertainty in these models relates to whether the adjustment is temporary or permanent. At the time of the first Greek programme, the conventional wisdom was that on average the fiscal multipliers should be low, but with a high degree of uncertainty depending on the nature of the fiscal adjustment, neither negative values nor values larger than one could be excluded a priori.

In 2009-10, another element of uncertainty was related to the role of a binding budget constraint on households’ spending decisions. The assumption that forward-looking households would not adjust their consumption on the basis of today’s income, but would base their decision on their expected future income was more difficult to maintain given that in some countries a credit crunch was substantially limiting access to credit. It was thus clear that the ‘pure’ Keynesian effect of current output and income affecting current consumption should have become stronger (see, for example, Gros, 2008).

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<sup>5</sup> See Gros & Alcidi (2010a) for an analysis of past European experiences with large fiscal adjustments.

A useful benchmark for the likely fall in output in response to a fiscal adjustment can be calculated assuming a Keynesian model in the simplest form where current income drives (current) consumption and imports and where exports are exogenous (because determined by foreign demand and the real exchange rate does not vary in the short run).

Table 2. Simple Keynesian multipliers

Country	Keynesian multiplier: $1/(1-c+m)=1/(s+m)$	Marginal propensity to import (m)	Marginal propensity to consume (c)
Greece	2.5	0.2	0.92
Ireland	1.3	0.57	0.82
Portugal	1.7	0.60	0.99
Cyprus	1.02	0.82	0.86

Note: The marginal savings rate,  $s$ , is computed as the ratio of the increment in private savings relative to the increment in GDP over the period 2002-07; similarly the marginal propensity to import,  $m$ , is computed as the ratio of the increment in imports relative to the increment in GDP over the same period.

Sources: European Commission Services (AMECO database) and authors' own calculations.

In this simplest model, the size of the Keynesian multiplier, and hence the final effect of fiscal consolidation on output is influenced by two factors: the (marginal) propensity to save and the degree of openness to trade. The multiplier is large when the savings rate is low and/or when the degree of trade openness is low. A low degree of trade openness also means that exports cannot provide a strong offset to low domestic demand – adding to the political difficulties of maintaining a tight fiscal stance. As shown in Table 3, openness varies a lot across countries.

Table 3. Degree of openness in the programme countries in 2009

Country	Exports % GDP	Imports % GDP	Openness indicator
Greece	19.0	29.8	0.49
Ireland	90.7	75.4	1.66
Portugal	27.9	35.5	0.63
Cyprus	40.8	46.5	0.87

Note: Openness indicator is defined as the sum of import and exports relative to GDP.

Sources: European Commission Services (AMECO database). Based on Alcidi & Gros (2010).

What was known already in 2009-10 was that the structure of the Greek economy made it likely that the multiplier would be high. The savings rate was low and it was a relatively closed economy. Hence the problem of Greece could be summarized as “the need for a very large fiscal adjustment without a safety valve” (Gros & Alcidi, 2010a). Portugal displayed similar features but in an attenuated form, with debt at a lower level and a higher degree of openness. By contrast, Ireland, being a very open economy with a high level of savings, had the potential for achieving fiscal consolidation at a lower cost in terms of GDP contraction.



Given the large adjustment need and the likely large multiplier, Greece was deemed to face a large slump in GDP, of the order of 20%, even assuming a trend growth rate of 3% per annum, and 3-year adjustment period.<sup>6</sup>

Generally speaking, simplistic multipliers like the ones shown in Table 1 tend to exaggerate the severity of the recession that would follow the fiscal adjustment, but they deliver the unambiguous message that the assumption that GDP growth can remain positive over large fiscal adjustment periods is unrealistic. A corollary of this view is that the potentially large negative impact on output driven by the fiscal correction might well be politically very difficult or even unfeasible in some of the countries.<sup>7</sup>

Overall, we conclude that it was clear even at the time the Greek programme was designed that the fall in output in response to the fiscal adjustment required would be very large.

### 2.2.1 The ‘fiscal multipliers’ debate

The approach of the Troika is in principle the same as all IMF programmes: financing is provided against promises of fiscal adjustment, usually in the form of expenditure cuts, expenditure switching, which in this case had to be achieved through internal devaluation, and, subordinately, also tax increases.

There has been some debate about the importance of expansionary effects of budget consolidation, i.e. the expansionary or non-Keynesian effects of fiscal consolidations.

Many empirical studies have found support for the notion that a fiscal adjustment, *if credibly implemented*, can positively affect demand through confidence and wealth effects and offset the usual growth reductions following an increase in taxes and a decrease in government expenditure. This, in turn, improves long-term refinancing conditions, the return (crowding-in) of private investment and, thus, the prospect that the programme countries will return to the capital markets (Belke, 2013a, 2013b). The case of Greece is of course problematic because the fiscal adjustment appeared for a long time not to be credible.

The above-mentioned positive growth effects resulting in the long run from austerity measures depend on the size and the persistence of the fiscal adjustment. Such non-Keynesian effects emerge if the initial budget deficit is large or if the debt-to-GDP ratio is very high. But at the same time, we stressed further above the importance of swift real exchange-rate depreciations for those economies, such as Greece, that are caught up in a situation with large fiscal deficits, low-output growth and an appreciated real exchange rate (allusions are frequently made to Sweden in the 1990s). This implies by definition that either a country may have to leave the euro area in order to be able to devalue its own currency or, if it prefers to stay in the common currency area, country-specific shocks must have a release valve elsewhere and, thus, prices and/or wages have to fall to a sufficient extent. This mirrors the often-cited balance-of-payments restriction that is valid also for Portugal (Belke, 2013a, 2013b).

If these real devaluations of the home currency do not take place to a sufficient extent, tax increases and public expenditure cuts are truly bound to reduce aggregate demand and output. In that case, tax revenue will fall and fiscal consolidation will be slow. In this case, one would be justified in arguing that austerity policies cause low growth.

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<sup>6</sup> See Gros & Alcidi (2010a) for more detailed calculations and description on Keynesian multipliers.

<sup>7</sup> See Gros & Alcidi (2010a) on the past European experience with large fiscal adjustments.

New econometric results from the IMF suggesting that the multipliers were much higher have received enormous attention. However, not all of the literature on this subject points towards higher fiscal multipliers than employed by the Troika.<sup>8</sup> The results obtained by the ECB and the European Commission are a priori by no means less persuasive than those delivered by the IMF. Best academic practice requires that the choice of the adequate model should not be based on ideological priors of the contracting authority ('Keynesian' versus 'non-Keynesian', socialist versus conservative, etc.) but, instead, on the much more neutral use of widely accepted empirical model selection criteria (see, for instance, Pesaran & Pesaran, 1997).

We acknowledge that large debts discourage capital accumulation and, thus, also reduce growth. This occurs through higher long-term interest rates, higher future distortionary taxation, higher (expected) inflation, greater uncertainty and macroeconomic volatility, thus fuelling accumulation of other macroeconomic (such as current account) imbalances. Higher interest expenditure implies higher taxes or constraints on other government spending items promoting higher growth. If growth is indeed reduced, fiscal sustainability issues are likely to be exacerbated, with further adverse consequences. Note that the link between growth and debt turns out to be rather weak at 'normal' debt levels, but seems to be highly valid for countries with larger public debt. Finally, the consolidation of public debt in financially distressed countries is by all means necessary to give the European Central Bank its credibility back, which it needs to ensure the effectiveness of its announced OMTs and to avoid any impression that there is monetary financing of public debt by the money printing press (Belke, 2013a, 2013b).

Another weak point in the Troika's debt sustainability analysis is the at least implicit *assumption of multiple equilibria*. In leaked Troika reports, the results of the debt sustainability analysis were often not included and inserted only at the latest possible moment. The intention obviously was to avoid negative growth impacts of a too early published and too rigorous analysis. Moreover, the impression emerged in the cases of Greece and Portugal that the Troika followed a well-founded theory of multiple equilibria: "if a positive debt sustainability analysis is delivered, there will be more growth and the positive assessment of debt sustainability becomes self-sustained". For instance, they did not take into account that such a solution might not be consistent over time, because there are national elections in the euro-area member states whose results in some cases might cast doubt on the validity of the contractual basis of the measures (Belke, 2013a, 2013b).

## 2.2.2 Concluding considerations on multipliers

There is even today great uncertainty about the size of the fiscal multipliers in the programme countries. Recent IMF research arguing that the multipliers were large has received more attention than other results which do not come to this conclusion. We find that, however, in 2010 there were reasons to believe that the multiplier should be very large in the case of Greece, of medium size in the case of Portugal, but low in the case of Ireland.

In the case of Greece the multiplier might thus have been under-estimated. One implication of it was that the degree to which expenditure cuts would translate in an improvement of the deficit was over-estimated. With a large multiplier any reduction in government spending would lead an important loss of revenues due the fall income (Gros & Alcidi, 2011). This implied that a given reduction in government expenditure would result in a much smaller reduction of the deficit because of lower tax revenues.

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<sup>8</sup> See extensively ECB (2012, pp. 82ff.) and EU Commission (2012 pp. 41ff.) versus IMF (2012a).

One aspect that has only rarely been discussed is the fact that if one takes a longer perspective, fiscal policy has not been so restrictive in the programme countries. For example, for Greece the (primary) balance is in 2013 only a little better than in 2005. Total government expenditure actually increased if one compares 2001 to 2005 as shown below.

The puzzle, which is seldom addressed, is that a priori one should expect that, if the multipliers were really large, that the previous fiscal expansion should have created an outsized boom and that the subsequent fiscal adjustment should have only led to a renormalisation. There are only two logically consistent explanations for the fact that output in the programme countries is so much below potential, although the fiscal adjustment has been quite limited if one compares 2013 to some years before the crisis (e.g. 2005). First, the multipliers are of a radically different size during different phases of the cycles, booms and busts. Second, other components of demand than public consumption and public investment had collapsed in the meantime.<sup>9</sup>

The literature suggests that indeed multipliers tend to be larger during booms than during busts.<sup>10</sup> Yet the difference could not explain the large output gap for Greece that developed between 2005 and 2011, following a small net change in the fiscal stance. For Greece and Ireland, the second effect seems to have been key: fiscal policy had been 'expansionary' just before the countries went into the programme to offset the impact of a collapse in investment. For Ireland the collapse of the housing boom is well known.

It is less widely appreciated that an important fall in investment had also taken place in Greece where investment fell from 30 to 20% of GDP up to 2009-10. The huge expansion in the government deficit until 2009 can be seen as an attempt to offset this investment collapse with that greater public. This would explain why the observed multiplier during the years before 2010 appeared much lower: the expansion of government expenditure was mostly offset by lower investment expenditure. Once the fiscal adjustment started, the two effects, namely lower investment expenditure and lower government expenditure, reinforced each other. The impact of this 'double whammy' on output is documented further below.

Finally, one must take into account that a high multiplier applies to all components of demand, and not only to government expenditure. The multiplier should then also be high for exports. This implies that one key element of the programmes was the expected performance of exports. In the case of Greece, exports disappointed, whereas in Ireland and Portugal, they grew as much as expected in the programme, providing an important offset to the fiscal adjustment.

### ***2.3 Comparing falls in output***

A high Keynesian multiplier does not only imply that a fiscal contraction will lead to a large fall in output. It also implies that the impact of all changes in exogenous demand components will be magnified.

It follows in particular that, even in an economy characterised by a high multiplier (like Greece), a fiscal contraction does not have to have a large impact on output if it is offset by an increase in

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<sup>9</sup> In principle, these considerations should apply to symmetric increases and then declines in the primary balance. Since debt is accumulated during the fiscal expansion, the consolidation has to be stronger because of the need to offset higher interest payments on the debt accumulated in the meantime through either higher taxes or reduced expenditure. However, in the case of Greece, interest payments did not materialize owing to the official financing, thereby providing the considerable relief to the country.

<sup>10</sup> See for instance Auerbach & Gorodnichenko (2010) and Barrell et al. (2012).

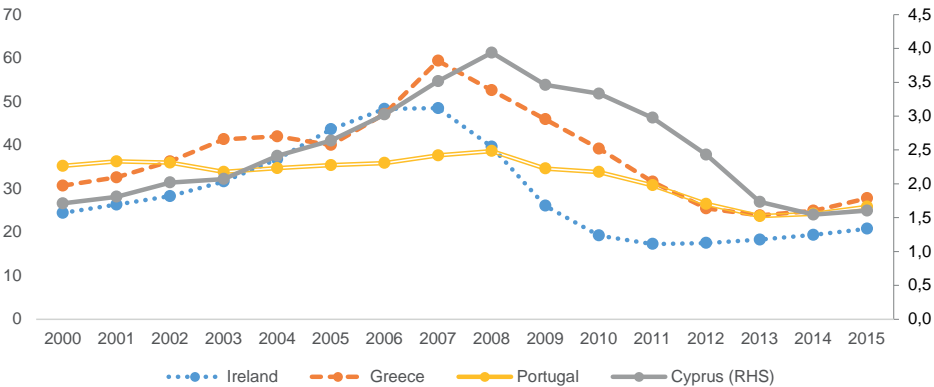
other components of demand, such as exports or investment. The extraordinary size of the output drop in Greece seems to be due to a significant extent to the fact that exports did not provide an offset and that investment contracted even more than one would have expected normally, thus adding to the drag on demand coming from the fiscal consolidation.

For any economy that starts with a large current account deficit (like Greece or Portugal, but much less Ireland), export growth is the key to long-term growth. But experience has shown that export growth can provide an important offset to a large fiscal adjustment even in the short run.

2.3.1 Investment

Another important element of demand is investment. Investment demand is notoriously difficult to explain and forecast. Major changes in investment demand are often attributed to ‘confidence’ effects. But confidence cannot be measured objectively and the impact of ‘soft’ variables, such as confidence or political stability is always difficult to pin down.

Figure 5. Gross fixed capital formation, total economy (€ bn)

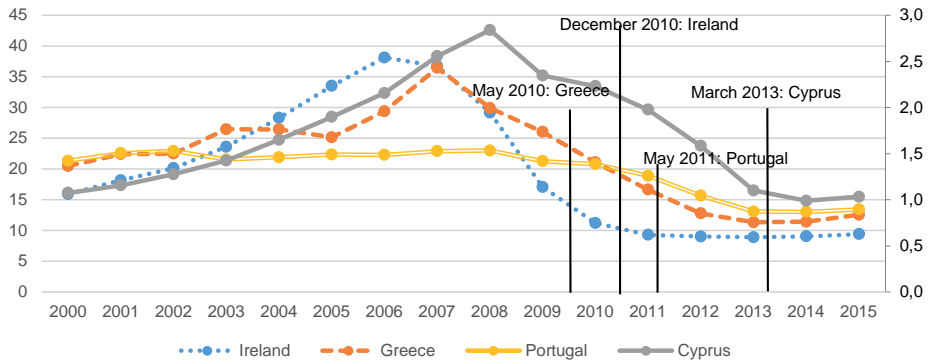


Source: European Commission Services (AMECO), 2013.

Figure 5 represents the time path of (total) gross fixed capital formation since 2000 and shows that three programme countries, namely Greece, Ireland and Cyprus, but not Portugal, have been experiencing an over-investment cycle and this fact has hitherto been too little recognised. Figure 6 shows only investment in construction, which clearly was the main driver for the longer-term cycle in both Ireland and Greece.

Figure 6 shows the component of investment most subject to the boom/bust cycle, namely investment in construction. Here, the more short-term developments during the programme period were quite different: in Ireland, construction investment had already bottomed out when the programme started, while it continued to fall in both Portugal and Greece after the start of their programmes. In both countries, the fall between 2011 and 2013 amounted to about €7-8 billion (for Portugal almost exactly equal to the increase in exports). However, investment had already fallen in Greece in 2010 by another €9 billion.

Figure 6. Gross fixed capital formation in construction (€ bn)



Source: European Commission Services (AMECO), 2013

### 2.3.2 Exports

Another component of demand that helps explain the different output performance across countries is exports.

It is clear that within the euro area there is no scope for increasing exports via devaluation, and an ‘internal’ devaluation via lower domestic prices and wages takes time. However, even within this constraint, there are important differences among the programme countries, especially the two with the weakest starting point in terms of the external position. Both Portugal and Greece had run current account deficits in excess of 10% of GDP for some years and had run up a negative external position of close to 100% of GDP. However, the dynamics of exports, which had been similar before the crisis, started to diverge around the time the programmes were put into place.

In Greece what is particularly puzzling is the time path of services exports, which have yet to recover to the 2008 level. By contrast, in the case of Portugal, exports were more important from the outset (amounting to about 30% of GDP). This implies that a growth rate of exports of 6% p.a. could contribute an impulse of about 1.8% to growth, cumulated over 3-5 years, which makes a difference of 5.4 to 9% in the level of GDP.

Figure 7 shows the evolution of exports of goods and services for these two countries since the start of EMU. Between 2000 and 2008, both countries managed a similar substantial increase in exports (up 50% in eight years, despite the fact that they had lost competitiveness<sup>11</sup>). Both countries also experienced a similar drop during the global trade crisis of 2009. However, from there onwards divergence set in.

<sup>11</sup> This increase was actually similar in percentage terms as that of Germany, as noticed by Gros & Alcidi (2010c). The fact that exports had been growing despite the large increase in relative prices and wage costs casts doubt on the argument that the main problem of these countries was competitiveness.

Figure 7. Exports of goods and services, excluding oil (€ bn)



Source: European Commission Services (AMECO), 2013.

Portuguese exports recovered quickly and were in 2013 about €10 billion, or about 6% of GDP, higher than the first programme year, 2011. This provided an important offset to the fiscal contraction that was going on at the same time. Greek exports, by contrast, recovered only partially from the 2009 drop and have been stagnant until 2013.

The Commission's forecast up to 2015 suggests that by that time the exports of Portugal will be over €20 billion larger than those of Greece. This implies that if Greece had had the same export growth as Portugal (in % terms), it would by that time have higher exports equivalent to over 10% of GDP. If one accepts the hypothesis of a large multiplier, its GDP would then be more than 10% higher than otherwise. Moreover, since GDP growth translates into higher revenues, its budget surplus would also be considerably larger, probably (again *ceteris paribus*) by over 5% of GDP given the usual relationship between growth and revenues.

Export growth rates of the magnitude achieved by Portugal could thus have also transformed the outlook for fiscal policy, contributing decisively to the sustainability of the public debt.

As discussed in more detail in the section on Greece. The first Greek programme was based, inter alia, on the assumption that there would be substantial export growth. The fact that this growth did not materialise was thus one key element in the unexpected large drop in output (and the increasing doubts about the sustainability of its public debt).

## 2.4 Concluding remarks on the macroeconomic adjustment

As mentioned above, it matters considerably whether one looks at the macroeconomic adjustment only after the programme started or whether one takes a longer view, which encompasses the boom years preceding the crisis. Table 4 provides a summary of the contribution of the major components of demand which, in a Keynesian framework, are usually considered (completely or at least partially) 'exogenous', namely investments (possibly a part of it does not depend on the interest rate) and exports (and imports). The change in the government deficit is also provided.

Table 4. Changes in exogenous demand components

Panel A: Change 2007-13

Country	Fiscal balance	Real GDP	Investment	Exports	Imports
<b>Ireland</b>	-7.36	-6.99	-12.2	15.81	1.25
<b>Greece</b>	2.66**	-23.29	-11.91	-1.56	13.25
<b>Portugal</b>	-2.70	-7.09	-8.07	7.18	2.71
<b>Cyprus</b>	-11.78	-7.88	-8.11	-2.34	7.57

Panel B: Change 2010-2013

Country	Fiscal balance	Real GDP	Investment	Exports	Imports
<b>Ireland</b>	5.85*	2.64	-4.51	13.27	-2.60
<b>Greece</b>	6.73**	-16.51	-10.16	1.08	10.80
<b>Portugal</b>	3.94	-6.12	-6.65	8.42	1.58
<b>Cyprus</b>	-2.99	-10.56	-9.97	-0.16	8.57

\*We consider the change over the period 2011-13 in order to eliminate the impact on the budget balance of the guarantee offered to the banking sector.

\*\*The Greek fiscal balance in 2013 is taken from the Troika's programme review the data of Ameco database, which includes the cost of banks' recapitalisation.

Source: Own calculations based on European Commission Services (AMECO), 2013.

Comparing the first column of panel A to panel B shows immediately that Ireland, Portugal and Cyprus actually had an 'expansionary' fiscal policy over the entire period (2007-13) and the reduction in the deficit for Greece was minor (below 3% of GDP).<sup>12</sup> These changes in the fiscal balance are difficult to reconcile with the view that 'austerity' caused the very large fall in GDP. Multipliers would have been unrealistically high (above 8 in the case of Greece) to justify a fall in GDP of close to 20%, when the deficit fell by less than 3% of GDP.

However, if one looks only at the period since the start of the programme there has been considerable 'austerity' in the sense that deficits have been reduced in all the three 'early' programme countries with an improvement of about 8% of GDP in the case of Greece. It is only for this latter period that one could argue that austerity, coupled with a reasonable multiplier could be held responsible for the large fall in output.

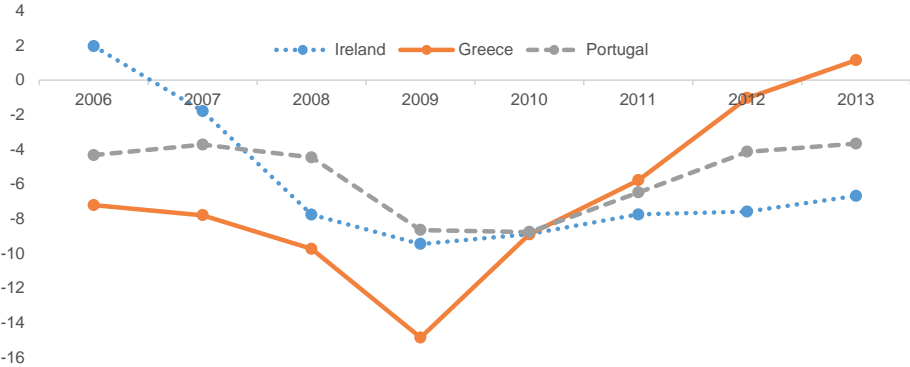
If one looks at structural deficits, a different picture emerges. As shown in Figure 8 the situation was very different before the crisis: Ireland was running a small surplus, Portugal a deficit of around 4% of GDP and Greece was clearly in the worst position with a structural deficit of over 7% of GDP already during the boom years and an extraordinary structural deficit of over 14% of

<sup>12</sup> For Greece interest payments were about the same proportion of GDP in 2013 as before. It would thus not make a difference whether one considers the primary or the overall balance. For Portugal and Ireland, part of the deterioration in the overall balance since 2007 is due to higher interest payments.

GDP on the eve of its programme. Figure 8 also confirms that the first year of the programme only saw a correction of the extraordinary expansion of 2009, but also that in the subsequent years the fiscal impulse must have been strongly negative, with austerity policies taking place, given that the structural balance improved by a full 8 percentage points of GDP. If one accepts the assumptions underlying the structural balances (i.e. that the output gap in Greece for 2013 was around 10%), one would come to the conclusion that public finances in Greece are now in a stronger position than in Portugal or Ireland.

For Portugal the structural balance data shows essentially no difference between 2007 and 2013, which confirms the sense of the question: Why should one hold austerity responsible for the deep recession when the fiscal impulse (as measured by the structural balance) was essentially zero if one takes a longer view? On the basis of structural balances, one would conclude that Ireland is in the weakest position today and that between 2007 and today, the fiscal impulse has actually been positive. The primary driver of the recession in Ireland was the huge decline in housing construction, not austerity.

Figure 8. Structural balances



Sources: European Commission Services (AMECO), 2013.

By 2010, all three programme countries had converged at a structural balance surplus of around 9% of GDP, which implies that Ireland had seen the strongest deterioration with Greece in the particular situation of having experienced in 2010 a sharp fiscal adjustment which made up for an equally sharp temporary deterioration during 2009 (an outlier).

From 2010 onwards, however, Greece is the country with the strongest reduction in the structural deficit of cumulatively about 10% of GDP, compared to about half that much for Portugal and only about 2% of GDP for Ireland.

The result is that by 2013, Greece seems to have the strongest fiscal position of the three programme countries. In structural terms, its budget is actually in slight surplus. In principle this should mean that as the economy recovers, the situation should automatically improve. By contrast, a considerable further fiscal adjustment seems to be necessary in Ireland and Portugal.

One has to keep in mind, however, that these structural deficits represent only estimates, which are based on two elements that are imperfectly known: the size of the output gap and the relationship between the output gap and the deficit. The Commission publishes several different estimates of the fiscal deficit adjusted for the cycle or output gap. There are two ‘cyclically adjusted’ measures, one adjusted for the trend in output and the other adjusted for potential output. These two measures differ considerably at times and are in turn different from the



'structural' deficit shown here. For example, for 2012,<sup>13</sup> the three measures – structural, adjusted for trend output and potential output –for Greece are: -1, -5.6 and -3.2. The broad trend, however, namely that Greece implemented the strongest fiscal contraction since 2010, remains valid for all three measures.

### **3. (RE)GAINING COMPETITIVENESS, ASSURING LONG-TERM GROWTH**

The structural adjustment undertaken by the peripheral countries in the last three years has been not a mere fiscal re-balancing process due to excessive government deficits/debt, but a comprehensive macroeconomic adjustment to absorb the balance of payments' imbalances accumulated in the first 10 years of the EMU. The constitution of the Euro and the subsequent strong financial integration between countries has allowed from 1999 the accumulation of large current account deficits of peripheral countries financed by large inflows of capital from surplus countries in the north. A natural and positive economic mechanism, except for the fact that this transfer of resources went primarily to finance unproductive capital in the peripheral countries.

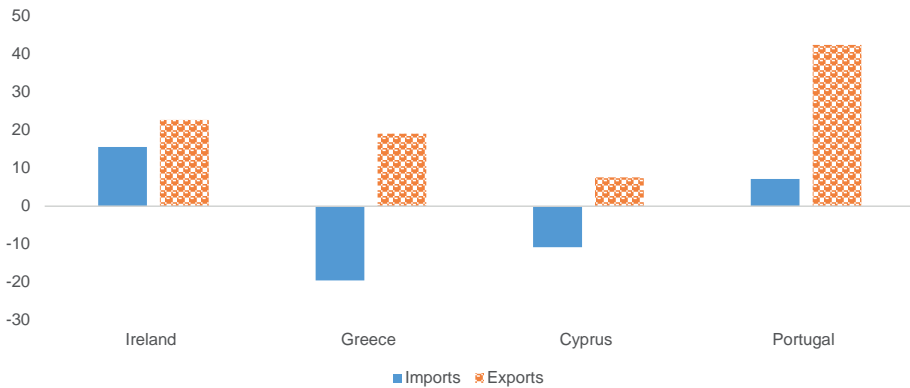
The adjustment plans defined by the Troika were designed therefore not only to bring public finances to sustainability, but also to restore competitiveness to the peripheral countries, in order to absorb the large deficit through an increased flow of exports and assure a sustained growth path in the medium/long run.

Within a system of fixed exchange rates as the EMU there are two ways to make the country's exports more competitive in order to support the growth of the economy: i) the so-called 'internal devaluation', which should make the exports most competitive directly lowering the cost of products; and ii) the so-called 'structural reforms', which are expected to reduce the market imperfections/inefficiencies that increase costs in direct and indirect ways. Have these mechanisms worked? Analysing what has happened since 2009, the answer seems positive.

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<sup>13</sup> The data for 2013 for the headline and cyclically adjusted deficits for Greece appear to contain a clerical error and could thus not be used. If one uses the 2014 forecast, Greece seems to fulfil the requirement of the Fiscal Compact, which is in terms of the cyclically adjusted deficit.

Figure 9. Changes in imports/exports of goods and services at current prices: 2009-13



Source: European Commission Services (AMECO).

Figure 9 shows how all peripheral countries considered in this study have improved their external position by increasing exports and reducing imports (or, at least, increasing them less than exports), improving in this way their trade balance. Nevertheless, this big picture hides relevant differences between countries. The value of Greek exports, for instance, is lower now than in 2007, resulting still in a current account deficit of the economy (although it was seven times higher in 2007). Portugal, instead, has been able to increase its exports by 23% compared to the pre-crisis level (and by more than 40% to the 2009 level), transforming its previous current account deficit, in a current account surplus, despite the increase in the imports in the last years.

### 3.1 Enhancing exports through price competitiveness

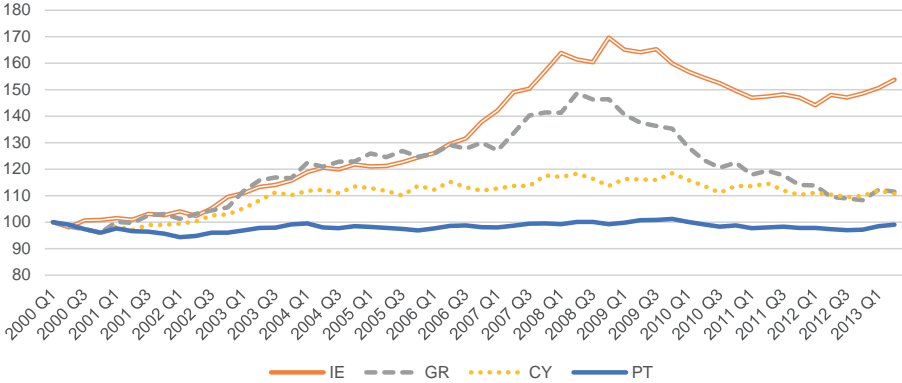
What has driven this gain in competitiveness? The first instrument described above, i.e. the internal devaluation, implied the need for peripheral countries to reduce their wages and consequently the domestic prices: the underlying economic mechanism foresees that if wages are reduced, the costs of production are lowered, leading to an increase in exports. At the same time, this mechanism is expected also to reduce imports (due to the lower costs of domestic products and to lower purchasing power), reducing in this way the current account deficits.

Figure 28 shows the adjustments in prices occurred in peripheral countries in the last years. From the first graph it emerges how the adjustment in terms of labour costs has been very strong especially in Greece: the ULC index in 2013 has been equal to that of 2003, reabsorbing in the last four years all the large increase (+37 points) accumulated in the five years before. The Portugal, instead, has not adjusted in terms of ULC, but this is perfectly consistent with its performances before the crisis: between 2002 and 2008, in fact, the ULC index of Portugal has increased only by 4 points, i.e. the half of the increase recorded in Germany. The country, has instead, adjusted in terms of general prices (Figure 29) re-absorbing the increase it had before the crisis.

Finally, the case of Ireland is particularly interesting: while it registered a sharp decline in terms of UCL it has not yet reached the “pre-bubble” levels, as its index is now equal to that of 2007, still 50 points higher than the level of the index in 2002. The country has adjusted, instead, in terms of general prices: it has registered, in fact, the largest fall among the countries analysed

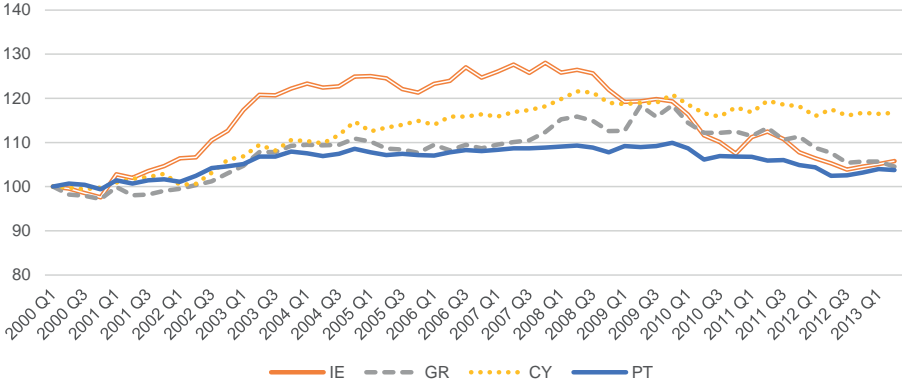
and it has completely absorbed the large increase in prices registered in the pre-2007 period, reaching the same level of the index in 2002.

Figure 10. Harmonised competitiveness indicators based on unit labour costs: indices for the total economy (2000 Q1=100)



Source: European Central Bank.

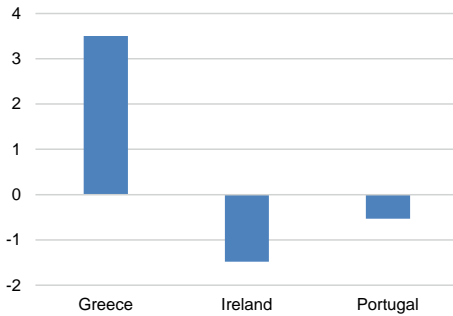
Figure 11. Harmonised competitiveness indicators based on GDP deflators (2000 Q1=100)



Source: European Central Bank.

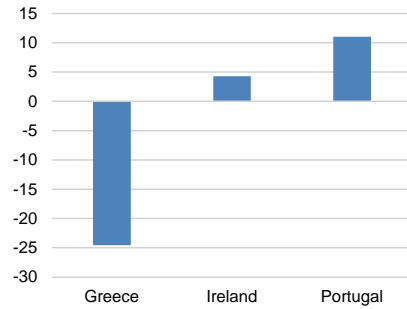
A natural question would therefore arise: why has Greece, despite the relevant adjustment both in terms of prices and in terms of labour costs, not seen its exports increase as has Portugal or Ireland? Figure 13 shows, in fact, how the performance of Greek exports (measured as gains in export market share) has largely deteriorate in the last years, in total contrast to that of Portugal and Ireland. Figure 12 gives the explanation: Greek exports price competitiveness has not improved nearly as much as its cost (and wage) competitiveness and since the Greek goods exports are concentrated in low-tech products for which price competitiveness is crucial, the poor performances have been unavoidable.

Figure 12. Relative export prices (index change 2008-13)



Source: OECD.

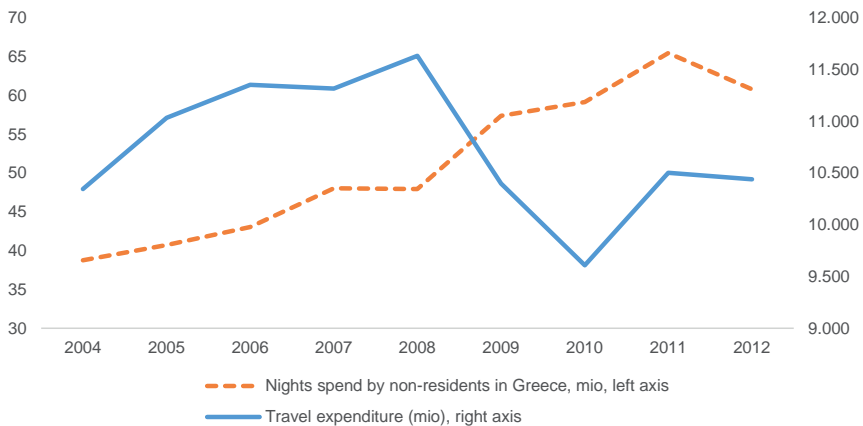
Figure 9. Goods and services export performance (index change 08-13)



Source: OECD.

Good news, however, comes from the service sector that with tourism represent a central element of the Greek economy (see Figure 14): while number of total nights spent by non-residents has increased in the last years, the overall travel expenditures in Greece by non-residents have decreased. Despite this trend may in part results from a possible increase in transactions not reported by tour operators (whose propensity to evade, already present in Greece, may be increased because of the crisis), it indicates that the Greek tourism industry has sought to gain competitiveness by lowering its costs.

Figure 14. Development in Greek travel services



Source: Eurostat.

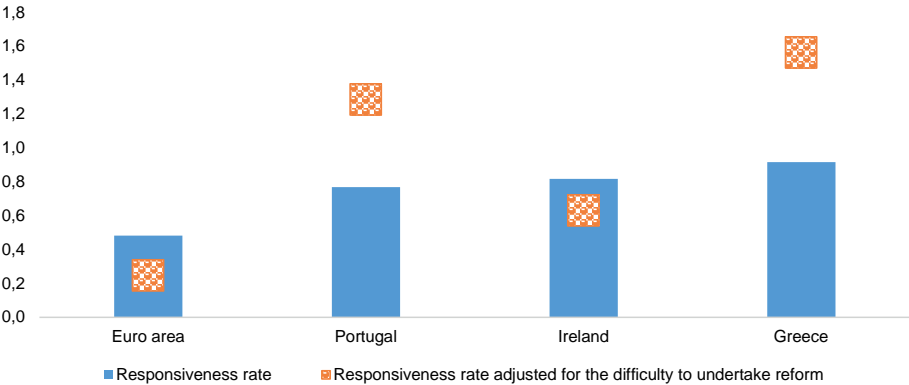
### 3.2 Enhancing growth through structural reforms

When it comes to structural reforms needed to (re)gain competitiveness in peripheral countries, the assessment is harder. Despite the fact that the necessity for peripheral countries to undertake 'structural reforms' to re-gain competitiveness was one of the 'mantras' of the last few years, it is very difficult to objectively measure structural reforms in general. The following sections contain the specific analysis of the measures implemented by the countries; here the analysis

remains at general level and it focuses on three main dimensions: labour market reform, ease of doing business and government sector reform.

Before proceeding into the analysis of these policy areas, it is important to stress how the impetus for reform has strengthened in the last years. There is little doubt that the crisis and the financial market pressure played an important role in intensifying the reform process. Figure 15 reports an indicator summarising the progress that countries have made in responding to Going for Growth policy recommendations since 2011. The chart suggests that Greece emerges as the country where most advancement has taken place, both in absolute terms and accounting for the difficulties (as perceived by the OECD) to actually undertake reforms.<sup>14</sup> Greece is ahead of the other countries receiving financial assistance like Ireland, Portugal and is largely more responsive than the euro-area average (see Alcidi & Gros, 2013).

Figure 15. Reform responsiveness to policy recommendations



Source: OECD.

The OECD yearly recommendations focus on two large set of policy issues, labelled as labour productivity and labour utilisation (Alcidi & Gros, 2013) and in most cases the reforms approved were part of the programme assistance.<sup>15</sup>

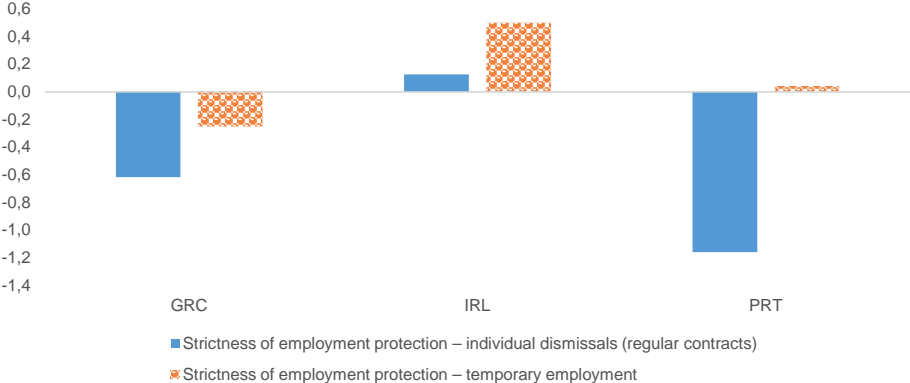
Despite the increase in the responsiveness, the question of how these changes could improve the economic situation of these countries remains. In fact, in the specific case at hand the question is which kind of reforms would foster long term growth and facilitate in the short term an adjustment away from domestic consumption or real estate investment towards exports. In the specific instances of the four programme countries considered here the key policy question should be: which (kind of) ‘structural’ reforms foster the necessary shift of resources to the tradable sector and lower the adjustment costs?

<sup>14</sup> It is interesting that the 2007 Survey of the OECD of Greece stated that the authorities faced a challenge in pursuing reforms in a benign environment.

<sup>15</sup> A recent paper by the IMF (Barkbu et al., 2012) highlights that while structural reforms can lift growth over the medium and long term, their near-term impact on output and employment is likely to be modest or even negative. Indeed reforms are likely to force reallocation of resources and restructuring which may imply a cost in terms of higher unemployment and for society at large. See Alcidi & Gros (2013).

The standard prescription in this case is usually more flexibility. An increase in labour market flexibility should make the adjustment easier. The charts below represents 2008-13 changes in the OECD EPL indicators (Figure 16): the first column refers to regular contracts while the second to temporary ones. It shows that some reforms materialised in Greece and a significant reform process took place in Portugal, while in Ireland the protection increased slightly despite starting from a very low level (data for Cyprus are not available). Just to cite a significant example of the labour market reforms introduced in peripheral countries, Portugal reduced the wage premium for weekly holiday work and abolished priority rules for redundancy dismissals; at the same time, it has also increased the maximum duration of fixed-term contracts and reduced the severance pay applicable in cases of redundancy dismissals.

Figure 16. Employment protection indicators: Change 2008-13



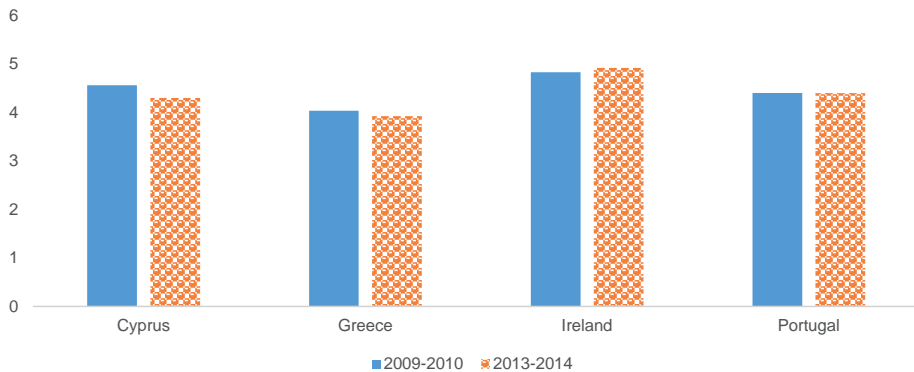
Source: Own elaboration based on OECD data.

However, the previous two indexes are based on the adoption of reforms by national authority, while the real question is whether these reforms are actually implemented (and whether they can accelerate the adjustment process). In fact, one should keep in mind that governments can only set rules, but in the end, change must take place in the market implemented by the private sector.

To overcome this limitation it is necessary to rely on other types of indicators, such as those collected by the World Economic Forum that try to capture the changes in the competitive structure of the country through surveys conducted among business managers. Despite the widely recognised limitations of these types of studies mainly related to the nature of being survey, they still represent a good ‘thermometer’ of the changes in the way of doing business in the country.

The WEF competitiveness index is one of the most used and comprehensive competitiveness indicator that is made up of over 110 variables, organised into 12 pillars with each pillar representing an area considered as an important determinant of competitiveness. The time path of the overall index is shown in Figure 17. For Greece, Cyprus and Portugal there is a (slight) deterioration since the crisis began, while for Ireland, the situation has improved. However, an additional caveat must be stressed: given the inclusion of recent macroeconomic data, this indicator is thus bound to show deterioration for any country in a crisis, even if the country does undertake structural reforms. For this reason a deeper look at the sub-indicators is needed to assess whether actual structural reforms are really undertaken by the countries under analysis.

Figure 17. Global Competitiveness Index, 1-7 (best)



Source: Own elaboration based on WEF data.

In particular, it is instructive to look at indicators of the WEF relating to the labour market. We select the relevant ones and add graphs depicting the programme countries and as a benchmark Germany. Before going forward in the analysis, it is important to stress that it is not clear whether one should look at the level or the change in these indicators. A high level (like for Ireland) should imply that the country actually needs little reforms in the sense that it has already been certified that its economy is flexible.

Labour market efficiency has seen little improvement for countries such as Greece after the crisis, though labour market flexibility increased before the programme started. For Portugal this indicator suggests a loss of flexibility since 2009 and no gain under the programme. Some elements of the overall indicator of labour market flexibility give a somewhat different picture. For example, as shown below hire and fire practices "improved" and flexibility of wage determination was enhanced in Greece after the programme (Figures 18 and 19).

Figure 18. Labour market flexibility

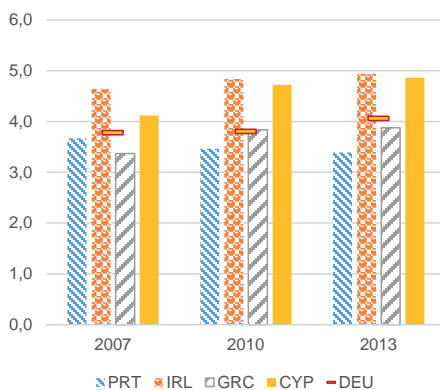
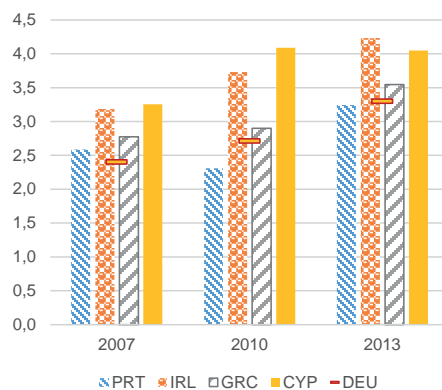


Figure 19. Hiring and firing practices



Source: Own elaboration based on WEF data.

The available numerical indicators on labour market flexibility do not give a consistent picture. The many sub-indicators available often point in different directions and the average for Greece

and Portugal indicates little change. The one consistent message which emerges is that Cyprus and Ireland have more flexible labour markets and that in Portugal legislative change on regular employment contracts has been considerable, even before the programme started.

Figure 20. Flexibility of wage determination

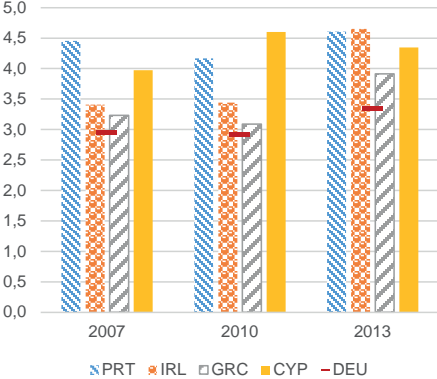
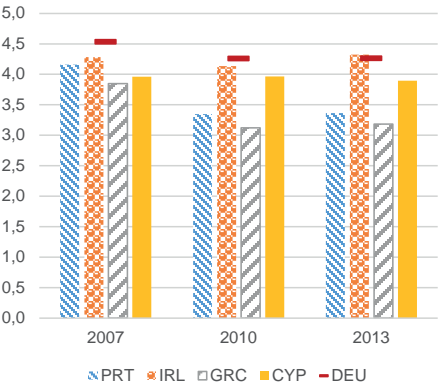


Figure 21. Pay and productivity



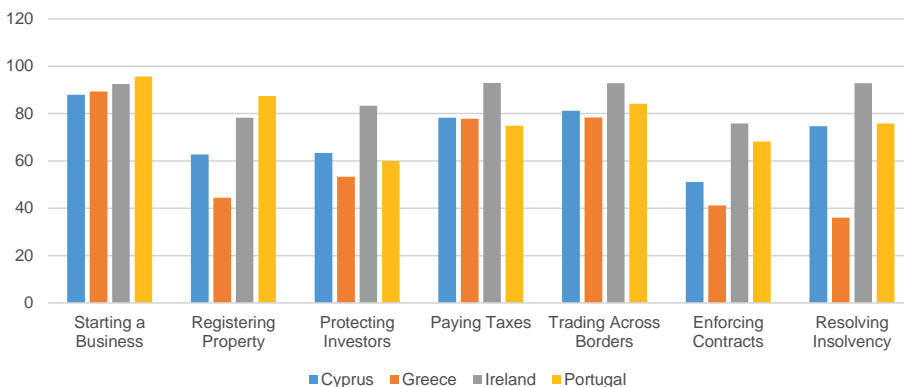
Source: Own elaboration based on WEF data.

Moving to a second set of indicators of structural reforms, the emerging picture is not necessarily the same. Figure 22 shows the ‘doing business’ indicators elaborated by the World Bank to measure the costs to firms of business regulations: for each element are shown the distance from the frontier, i.e. an higher level represents a better environment for the private sector development and the data are reported for 2009 (pale bar) and for 2013 (solid bar).

Countries that were already close to the frontier in 2009 (like Ireland or, to some extent Portugal) had less incentives to sensibly ameliorate their policies in these fields. Particularly important, instead, is the progress shown by Greece, especially in terms of polices to facilitate the starting of new business or those to protect investors. Regarding the first set of policies, in the last three years Greece adopted a simpler form of limited liability companies, abolishing the minimum capital requirement for such companies and made starting a business easier by implementing an electronic platform that interconnects several government agencies. Moreover, Greece has strengthened investor protections by introducing a requirement for director approval of related-party transactions and by requiring greater immediate and annual disclosure of material related-party transactions.



Figure 22. Doing Business indicators, distance to frontier (2009 and 2013)

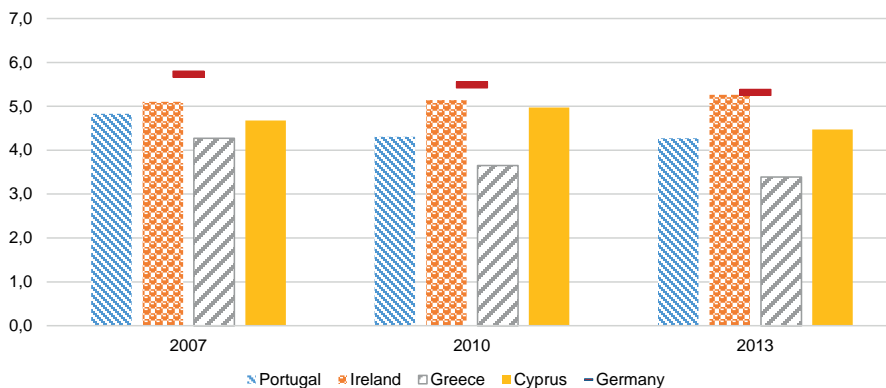


Source: Own elaboration based on World Bank data.

To assure a sustainable growth path of these countries, overcoming issues within the internal political sphere is as much as important as fixing the economic and financial fallacies of the economy. Bad economic regulation tends to weaken economic performances in all business sectors, lowering the possibility for the private sector to (re)gain competitiveness thanks to a well-functioning county-system.

Figure 23 shows that significant steps forward have not been done by those countries that required mostly a deep reform of their institutional structure: all Mediterranean countries have instead seen their performance even deteriorate compared to the pre-crisis level and Greece always appears near the bottommost among developed countries. Ireland, instead, has improved its government quality, reaching a similar level of Germany (whose score in the same period has actually worsened).

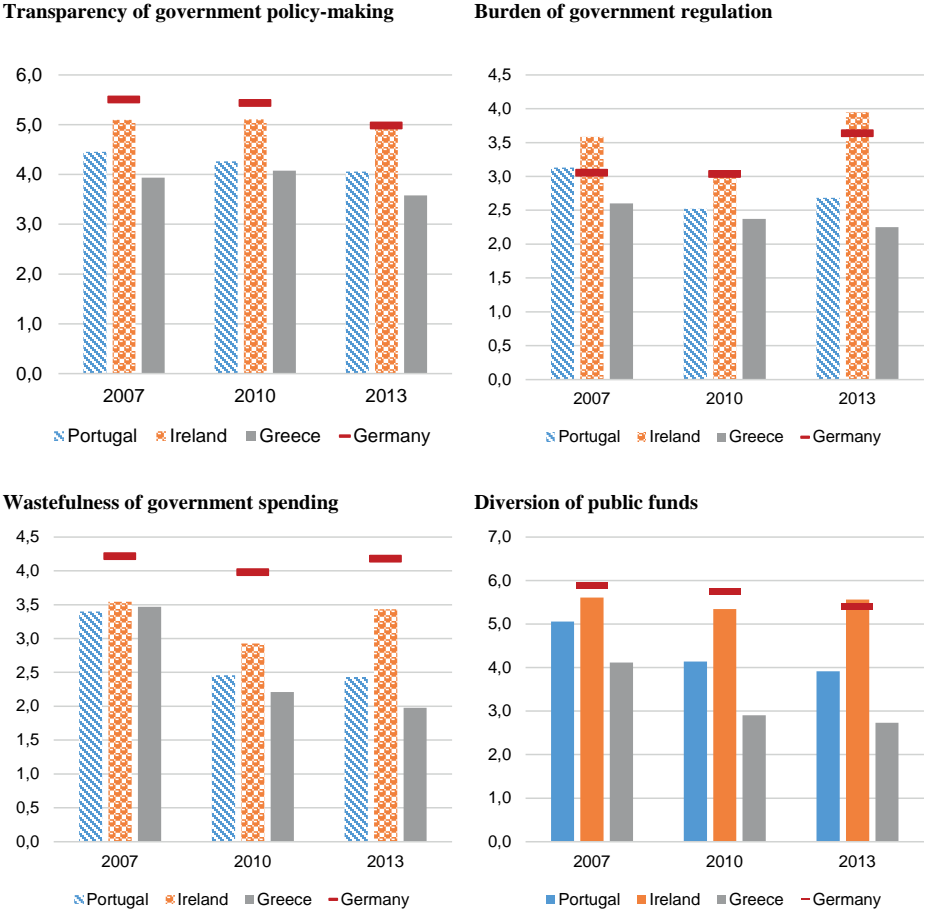
Figure 23. Public institutions, 1-7 (best)



Source: Own elaboration based on WEF data.

Even considering the single elements that constitute the overall index for Public Institution, the situation does not change (for Cyprus the disaggregated date are not available). While in 2013 Portugal has registered slight improvements for some indicators compared to the 2010 level (but still deterioration in comparison with the 2007 values), Greece has not been capable of reversing the worsening trend in any indicator. Conversely, Ireland has always improved (or at least preserved) the quality of its governance compared to the pre-crisis level, surpassing even the result of Germany as regards the burden of government regulation (Figure 24).

Figure 24. WEF Public institutions single indicators



Source: WEF and authors calculations.

## 4. CONCLUSIONS

Our evaluation suggests that the adjustment programmes for Portugal and Ireland have worked more or less as intended and indeed as many adjustment programmes beforehand. The fiscal adjustment is painful initially and leads to a deep recession during which financial markets often doubt the eventual success. But this is then followed by a recovery based essentially on export growth as domestic demand remains subdued. The strength of exports determines the strength of the recovery. In economic terms one would call this first expenditure reduction (fiscal adjustment) and then expenditure switching with exports increasing and domestic production outcompeting imports at the margin. Cyprus seems to be following this script although its main problem was not so much fiscal as financial.

Greece stands out because of the depth and length of its recession. We would argue that the depth of the recession could at least partially have been expected, given the initial conditions of the special case of a small but closed economy.

What makes Greece special is the lack of growth in exports despite a considerable fall in wages. The only explanation for this puzzling phenomenon must be that the Greek economy has remained so distorted that it has not responded to changing prices signals.

There is indeed little evidence that structural reforms have increased the adjustment capacity in any of the countries under consideration. But the starting point for Ireland and Portugal was already one of considerable quality. In Greece, by contrast, the quality of the institutions, as far as one can measure, it was already much lower than that of the other programme countries. And the little evidence that exists suggests that since the start of the programme many indicators have deteriorated. It could be that the Troika has been so insistent on fiscal adjustment in Greece because there was no progress on structural reforms (despite the special task force).

All in all, it appears that the fiscal problem has been resolved in Greece, more than in other countries, but no progress has been made on making the economy more competitive and improving the quality of the administration and governance of the country.

As a final remark, we observe that the EU-led macroeconomic adjustment programmes outside the euro area (e.g. Latvia) seem to have been much stricter, but the adjustment was quicker and followed by a stronger rebound. At the trough of Latvia's recession, the programme was also off-track and failure seemed imminent, but it turned out that the sharper-than-planned adjustment cleared the way for a solid recovery.

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