

Gros, Daniel; Alcidi, Cinzia; Belke, Ansgar; Coutinho, Leonor; Giovannini, Alessandro

Working Paper

State-of-play in implementing macroeconomic adjustment programmes in the euro area

ROME Discussion Paper Series, No. 14-05

Provided in Cooperation with:

Research Network "Research on Money in the Economy" (ROME)

Suggested Citation: Gros, Daniel; Alcidi, Cinzia; Belke, Ansgar; Coutinho, Leonor; Giovannini, Alessandro (2014) : State-of-play in implementing macroeconomic adjustment programmes in the euro area, ROME Discussion Paper Series, No. 14-05, Research On Money in the Economy (ROME), s.l.

This Version is available at:

<https://hdl.handle.net/10419/104789>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

R O M E

Research On Money in the Economy

No. 14-05 – April 2014

State-of-play in Implementing Macroeconomic Adjustment Programmes in the Euro Area

Daniel Gros, Cinzia Alcidi, Ansgar Belke,
Leonor Coutinho and Alessandro Giovannini

ROME Discussion Paper Series

"Research on Money in the Economy" (ROME) is a private non-profit-oriented research network of and for economists, who generally are interested in monetary economics and especially are interested in the interdependences between the financial sector and the real economy. Further information is available on www.rome-net.org.

ISSN 1865-7052

Research On Money in the Economy

Discussion Paper Series
ISSN 1865-7052

No 2014-05, May 2014

State-of-play in Implementing Macroeconomic Adjustment Programmes in the Euro Area*

*Daniel Gros, Cinzia Alcidi, Ansgar Belke,
Leonor Coutinho and Alessandro Giovannini*

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

NOTE: Working papers in the “Research On Money in the Economy” Discussion Paper Series are preliminary materials circulated to stimulate discussion and critical comment. The analysis and conclusions set forth are those of the author(s) and do not indicate concurrence by other members of the research network ROME. Any reproduction, publication and reprint in the form of a different publication, whether printed or produced electronically, in whole or in part, is permitted only with the explicit written authorisation of the author(s). References in publications to ROME Discussion Papers (other than an acknowledgment that the writer has had access to unpublished material) should be cleared with the author(s) to protect the tentative character of these papers. As a general rule, ROME Discussion Papers are not translated and are usually only available in the original language used by the contributor(s).

ROME Discussion Papers are published in PDF format at www.rome-net.org/publications/.

Please direct any enquiries to the current ROME coordinator

Prof. Dr. Albrecht F. Michler,

Heinrich-Heine-University of Duesseldorf, Department of Economics, Universitaetsstr. 1,

Build. 24.31.01.01 (Oeconomicum), D-40225 Duesseldorf, Germany

Tel.: ++49(0)-211-81-15372

Fax: ++49(0)-211-81-15261

E-mail: helpdesk@rome-net.org
michler@uni-duesseldorf.de



DIRECTORATE GENERAL FOR INTERNAL POLICIES
ECONOMIC GOVERNANCE SUPPORT UNIT (EGOV)

Committee study on the

**State-of-play in implementing
macroeconomic adjustment programmes
in the euro area**

Study on the request of the
Economic and Monetary Affairs Committee

February 2014

State-of-play in implementing macroeconomic adjustment programmes in the euro area

February 2014

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.

This study was requested by the European Parliament's Economic and Monetary Affairs Committee.

AUTHORS

Daniel Gros, Director, Centre for European Policy Studies
Cinzia Alcidi, LUISS Research Fellow, Centre for European Policy Studies
Ansgar Belke, Jean Monnet Professor, University of Duisburg-Essen
Leonor Coutinho, Europrism Research Fellow, Europrism Research Centre
Alessandro Giovannini, Researcher, Centre for European Policy Studies

RESPONSIBLE ADMINISTRATORS

Jost Angerer
Stanislas de Finance
Economic Governance Support Unit
Directorate for Economic and Scientific Policies
Directorate-General for the Internal Policies of the Union
European Parliament
B-1047 Brussels

LANGUAGE VERSION

Original: EN

ABOUT THE EDITOR

Economic Governance Support Unit provides in-house and external expertise to support EP committees and other parliamentary bodies in playing an effective role within the European Union framework for coordination and surveillance of economic and fiscal policies.

E-mail: egov@ep.europa.eu

This document is also available on Economic and Monetary Affairs Committee homepage, under section European Semester and Economic Dialogue at:
www.europarl.europa.eu/ECON

Manuscript completed in February 2014.

© European Union, 2014

DISCLAIMER

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

NOTE FROM THE AUTHORS

This briefing paper is based on official documents produced by the IMF and the European Commission and on analysis contained in recent economic literature.

The main purpose of this briefing paper is to present stylised facts in a systematic fashion and to summarise academic and policy analysis in order to provide a useful background against which to make an overall assessment of the macroeconomic adjustment being made in the four countries under programme.

Our assessment of the adjustment process is based exclusively on available facts and data and does not consider anecdotes or other accounts that could potentially lead to partisan judgements. Our tasks did not include comments on the democratic accountability of the Troika or an evaluation of its inner workings.

GLOSSARY

ECB	European Central Bank
EFSF	European Financial Stability Facility
EFSM	European Financial Stability Mechanism
ELA	Emergency Lending Assistance
EMU	Economic and Monetary Union
ESM	European Stability Mechanism
GLF	Greek Loan Facility
IMF	International Monetary Fund
PSI	private sector involvement
SBA	Stand-By Arrangement
SPV	special purpose vehicle

CONTENTS

Note from the authors	4
Glossary	4
CONTENTS	5
LIST OF TABLES	7
LIST OF FIGURES	7
Executive summary	8
1. Introduction	9
2. The feasibility of the macroeconomic adjustment	12
2.1 <i>Why the macroeconomic adjustment was suddenly needed</i>	12
2.2 <i>Multipliers and the impact of the fiscal adjustment</i>	16
2.2.1 The ‘fiscal multipliers’ debate	18
2.2.2 Concluding considerations on multipliers	19
2.3 <i>Comparing falls in output</i>	20
2.3.1 Investment	21
2.3.2 Exports	22
2.4 <i>Concluding remarks on the macroeconomic adjustment</i>	23
3. Greece	26
3.1 <i>The Greek tragedy: The unsustainability of public finances</i>	26
3.1.1 Debt and financing outcomes	27
3.1.2 The theoretical and practical issues in designing the programme	29
3.2 <i>Transforming Greece in a competitive economy</i>	30
3.3 <i>The feasibility of the adjustment programme</i>	31
4. Portugal	31
4.1 <i>Ensuring public finances and financial sector sustainability</i>	32
4.2 <i>Increasing external competitiveness and potential growth</i>	33
4.2.1 Export-driven growth	33
4.2.2 Exports and domestic capacity constraints	34
4.3 <i>Putting the Portuguese economy back on track</i>	35
4.3.1 Balanced assumptions behind the assistance programme	35
4.3.2 Concluding remarks	36
5. Ireland	36
5.1 <i>The wide instability of the financial sector</i>	36
5.1.1 Liquidity risk	37
5.1.2 Solvency risk	39
5.2 <i>The return to equilibrium of public finances</i>	41
5.2.1 Caveats	42
6. Cyprus	43
6.1 <i>Avoiding a banking sector collapse</i>	43
6.1.1 High degree of uncertainty	44

6.1.2	Fiscal consolidation and banking sector restructuring	45
6.2	<i>Revitalising the Cypriot economy</i>	47
6.2.1	Dealing with a credit crunch	48
6.2.2	Improving the Business Environment: Lower Costs and Better Regulation	48
6.3	<i>Reversing the upward trend in unemployment</i>	49
6.3.1	Deleveraging and unemployment	50
6.3.2	Activation policies and SME support	50
6.4	<i>Policy challenges</i>	51
7.	(Re)gaining competitiveness, assuring long-term growth	51
7.1	<i>Enhancing exports through price competitiveness</i>	52
7.2	<i>Enhancing growth through structural reforms</i>	55
8.	Conclusions	62
	References	63
	Appendix 1. Cyprus: Summary of Selected Data and Forecasts	67
	Appendix 2. Cyprus: Summary of Fiscal Consolidation Measures	68
	Appendix 3. Cyprus: Reform of Working Times in the Public Sector	69
	Appendix 4: Fiscal Structural Reforms	70
	Appendix 5. Cyprus: Recapitalisation of the Bank of Cyprus and Credit Cooperative Sector	72
	Appendix 6. Cyprus: Reforming the Wage Indexation System	73
	Appendix 7. Cyprus: EU2020 Compliance	73

LIST OF TABLES

Table 1. Changes in primary balance and in its components multipliers	15
Table 2. Simple Keynesian multipliers.....	17
Table 3. Degree of openness in the programme countries in 2009	17
Table 4. Changes in exogenous demand components	23

LIST OF FIGURES

Figure 1. Private and public flows, cumulated (2000-12)	12
Figure 2. Current account balance as % GDP (1999-2007)	13
Figure 3. Demand and competitiveness.....	14
Figure 4. Government debt (as % of GDP)	14
Figure 5. Gross fixed capital formation, total economy (€ bn)	21
Figure 6. Gross fixed capital formation in construction (€ bn)	22
Figure 7. Exports of goods and services, excluding oil (€ bn)	23
Figure 8. Structural balances	25
Figure 9. GDP growth, euro area and Greece.....	27
Figure 10. Greece, changes in general government primary expenditure components	27
Figure 11. Greek debt and privatisation receipts patterns (% of GDP)	29
Figure 12. Persistent government deficits and increasing public debt (% of GDP)	32
Figure 13. Indebtedness of the private sector and external debt (% of GDP)	32
Figure 14. Change in external balance of goods and services (% of GDP).....	33
Figure 15 Change in nominal unit labour cost (relative to EA average)	34
Figure 16. Insufficient conditions to foster economic growth.....	35
Figure 17. Government bond yields, Ireland and Greece	37
Figure 18. Government deficit, Ireland and Greece	38
Figure 19. Maturing debt (2011-15, in % of 2010 GDP), Ireland and Greece	39
Figure 20. Gross government debt (as % of GDP), Ireland and Greece.....	40
Figure 21. GDP growth, Ireland and Greece	40
Figure 22. Ireland, changes in general government primary expenditure components	41
Figure 23. Loans to non-financial corporations and households, annual growth rates	46
Figure 24. Total deposits of non-MFIs held with MFIs, annual growth rates.....	47
Figure 25. General government gross debt (Maastricht debt) and private debt in % of GDP.....	47
Figure 26. Trends in employment and unemployment in Cyprus	50
Figure 27. Changes in imports/exports of goods and services at current prices: 2009-13	52
Figure 28. Harmonised competitiveness indicators based on unit labour costs: indices for the total economy (2000 Q1=100).....	53
Figure 29. Harmonised competitiveness indicators based on GDP deflators (2000 Q1=100)	54
Figure 30. Relative export prices (index change 2008-13).....	54
Figure 31. Goods and services export performance (index change 08-13)	54
Figure 32. Development in Greek travel services	55
Figure 33. Reform responsiveness to policy recommendations	56
Figure 34. Employment protection indicators: Change 2008-13.....	57
Figure 35. Global Competitiveness Index, 1-7 (best).....	58
Figure 36. Labour market flexibility	58
Figure 37. Hiring and firing practices	58
Figure 38. Flexibility of wage determination	59
Figure 39. Pay and productivity	59
Figure 40. Doing Business indicators, distance to frontier (2009 and 2013)	59
Figure 41. Public institutions, 1-7 (best)	60
Figure 42. WEF Public institutions single indicators	60

EXECUTIVE SUMMARY

Many discussions of the macroeconomic adjustment or Troika's programmes in the euro area are dominated by the length and the depth of the accompanying recession.

This is particularly true for Greece, where the initial programme was indeed insufficient given the known starting conditions. That the required quick fiscal adjustment would have led to a severe economic downturn could have been anticipated at the time. However, the recession was deepened by other unexpected factors, such as the debt restructuring (so-called 'private sector involvement' or PSI) and political uncertainties, which depressed investment even further. Another reason for the length and depth of the recession is linked to exports, which have stagnated despite impressive falls in wage costs. This must be due to the lack of effective structural reforms, resistance to which was more difficult to anticipate and remains difficult to cure. The fiscal adjustment is now almost completed, but the country cannot get on a sustainable growth path until structural reforms foster stronger export growth.

By contrast, the programmes of Portugal and Ireland 'worked' 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. A full recovery based on exports will take more time given that the skills needed in exporting industries are quite different from those needed in the construction and other non-tradable sectors which had absorbed most employment during the boom years preceding the crisis.

In Cyprus, the fall in GDP has so far been less severe than initially feared and the programme is proceeding as planned.

It is still too early to find robust evidence in any country that the programmes have increased the long-term growth potential. Indicators of structural reforms based on legislative changes, such as those collected by the OECD, show considerable progress. But survey indicators that purport to capture the degree to which legislative changes have had an impact on labour markets or the functioning of the public administration show a continuing (albeit slight) deterioration for Greece and only modest improvement elsewhere.

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.¹ 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.²

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 latter *de facto* made permanent in the form of the European Stability Mechanism³ (ESM). On November 2010, Ireland officially requested financial assistance from the EFSF, followed by Portugal in April 2011.⁴

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

¹ 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.

² 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.

³ 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.

⁴ 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 €22.5 billion for Ireland and €26 billion for Portugal. For a clear description of the differences between the EFSF, EFSM and ESM, see Casale et al. 2012.

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).

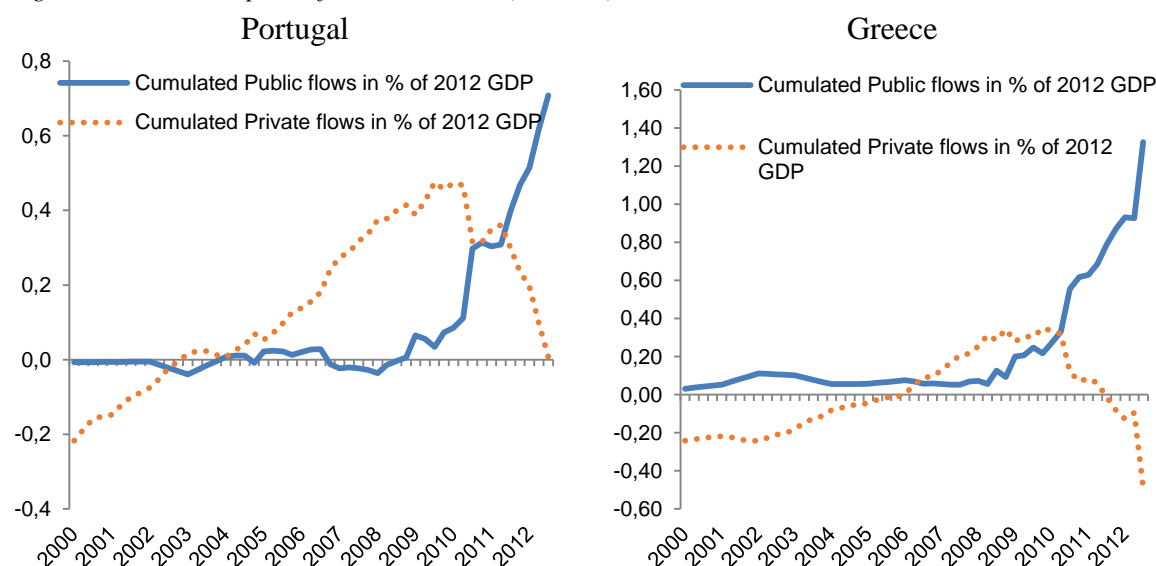
2.1 *Why the macroeconomic adjustment was suddenly needed*

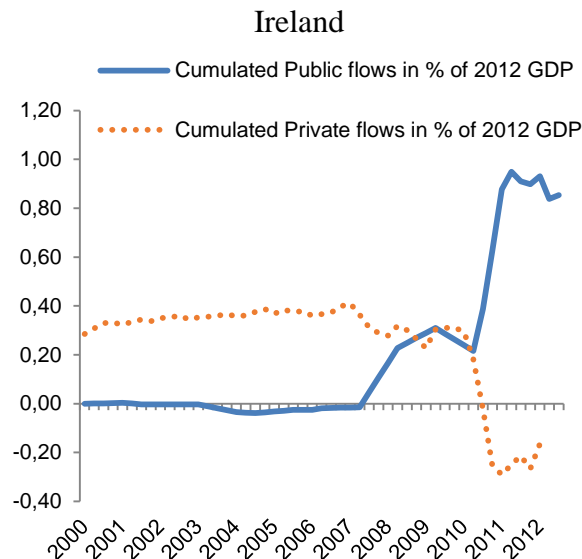
Soon after the creation of the EMU, significant amounts of capital, largely intermediated by the banking system, started to flow from the core to periphery: the elimination of the exchange rate risk appeared beneficial for both borrowers and lender and all four countries under analysis benefited from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



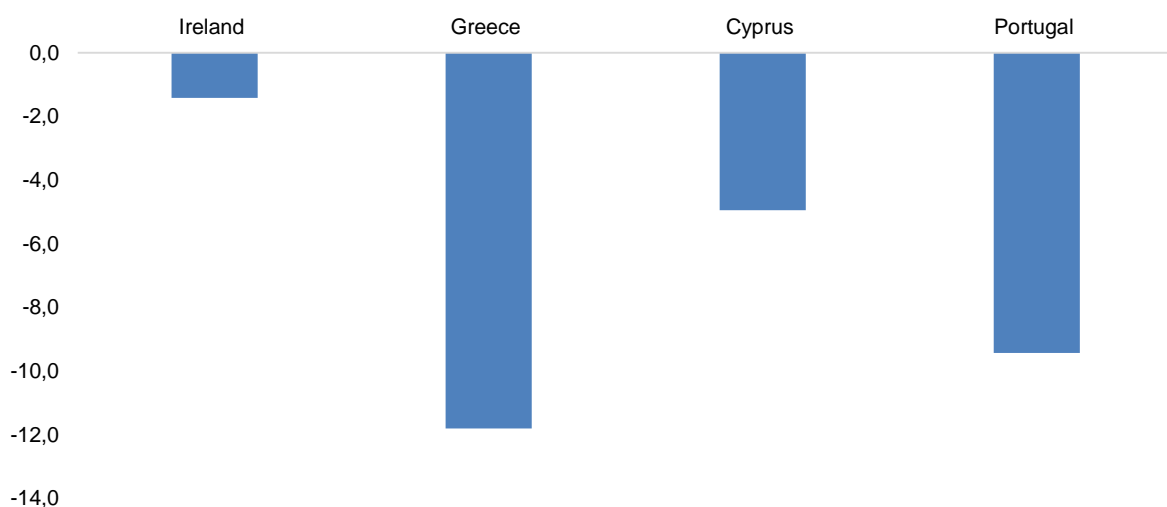


Note: The blue line denotes public flows; the orange line private flows. Private flows are computed following the definition contained in the MIP Commission report. It is calculated in a residual way from financial accounts after subtracting public flows. The latter are given by the sum of changes in 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)

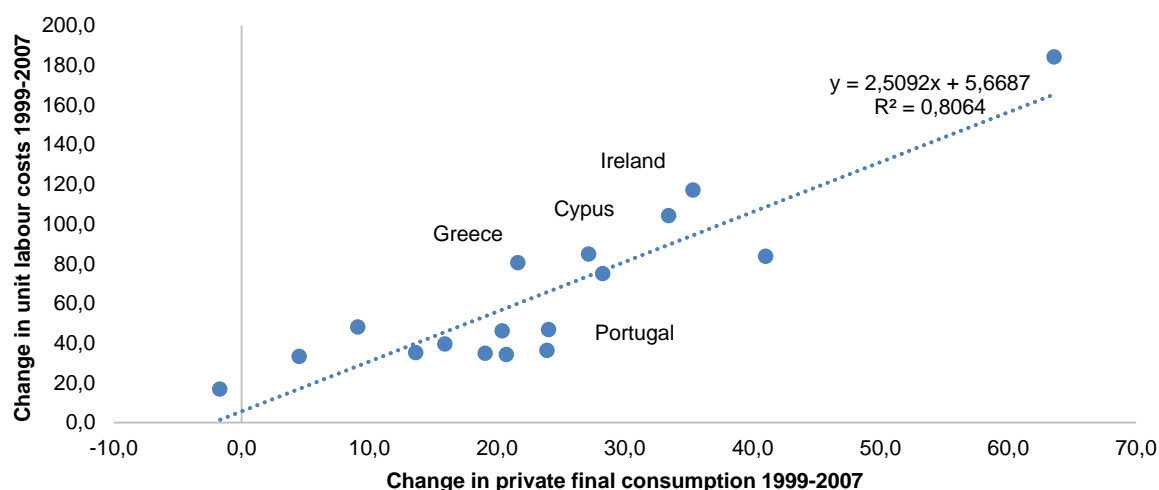


Source: European Commission Services (AMECO), 2013.

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

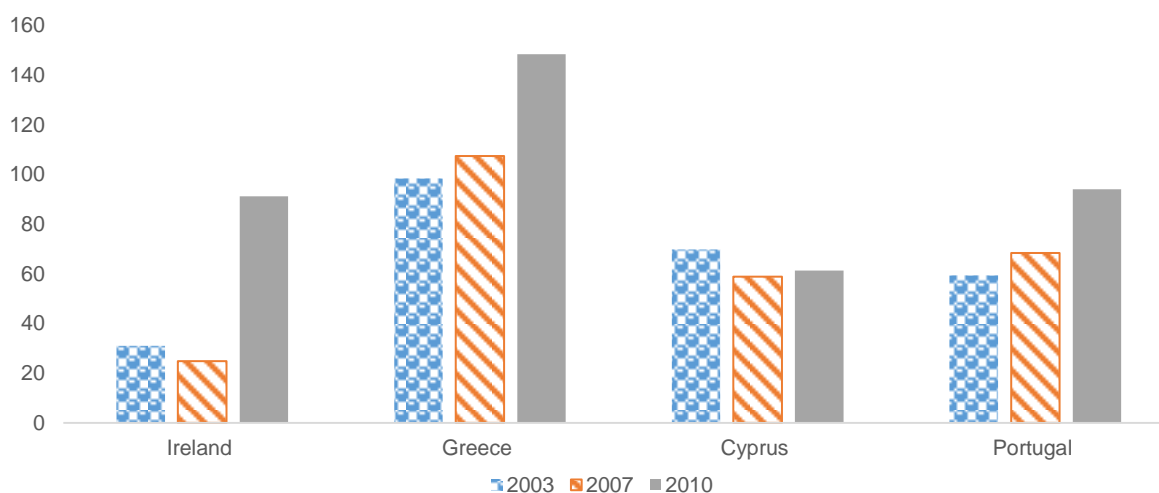


Sources: Eurostat and European Commission Services (AMECO), 2013.

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
Greece		(2009-14)	(2009-14)
1st plan	Primary deficit	-34.7	-14.5
	Revenue and grants	20.2	7.6
	Primary expenditure	-14.2	-6.8
2nd plan	Primary deficit	-33.9	-15.1
	Revenue and grants	-0.5	4.1
	Primary expenditure	-34.6	-11.1
Last review	Primary deficit	-27.1	-12.0
	Revenue and grants	-8.5	5.3
	Primary expenditure	-35.6	-6.7
Ireland		(2010-14)	(2010-14)
Plan	Primary deficit	-47.7	-30.2
	Revenue and grants	10.7	2.2
	Primary expenditure	-36.9	-28.0
Last review	Primary deficit	-44.5	-28.2
	Revenue and grants	4.8	0.5
	Primary expenditure	-39.7	-27.7

Portugal		(2010-14)	(2010-14)
Plan	Primary deficit	-15.6	-8.9
	Revenue and grants	5.0	0.9
	Primary expenditure	-10.7	-8.1
Last review	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).⁵

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

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

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).

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, 2010). 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.⁶

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.⁷

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

⁶ See Alcidi & Gros (2010) for more detailed calculations and description on Keynesian multipliers.

⁷ See Alcidi & Gros (2010) on the past European experience with large fiscal adjustments.

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.

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.⁸ 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.

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

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.

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.⁹

The literature suggests that indeed multipliers tend to be larger during booms than during busts.¹⁰ 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.

⁹ 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.

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

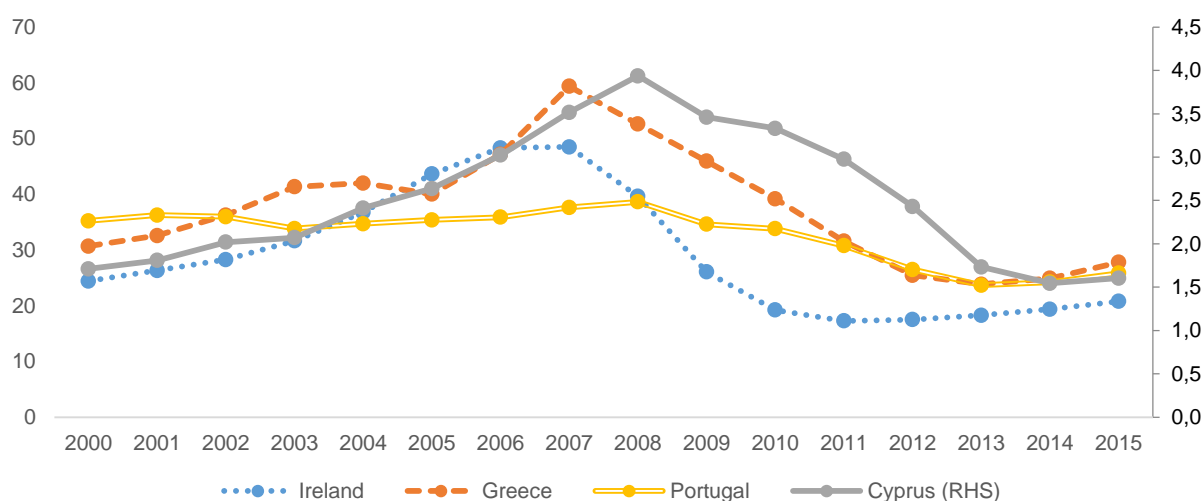
It follows in particular that, even in an economy characterised by a high multiplier (like Greece), a fiscal contraction does not have to have a large impact on output if it is offset by an increase in other components of demand, such as exports or investment. The extraordinary size of the output drop 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)

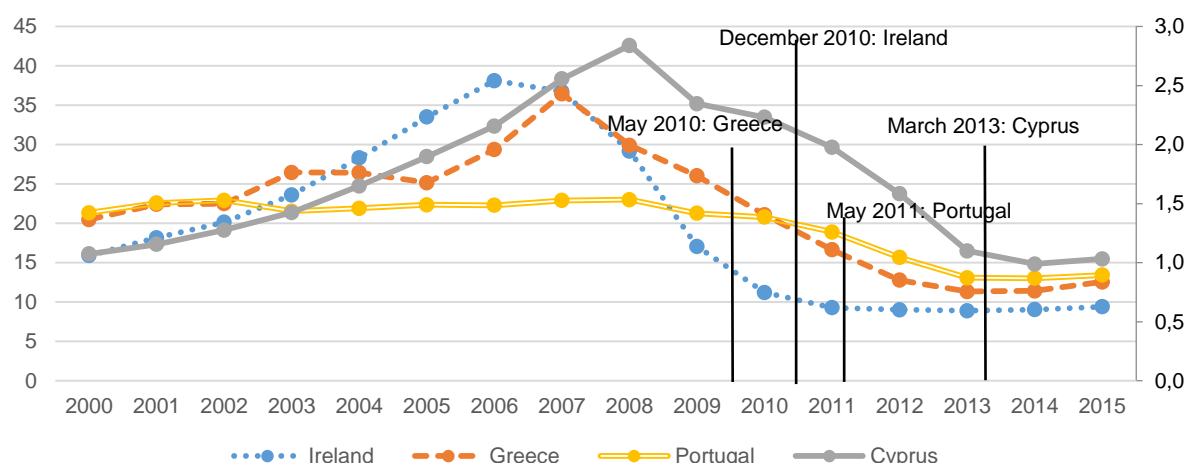


Source: European Commission Services (AMECO), 2013.

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.

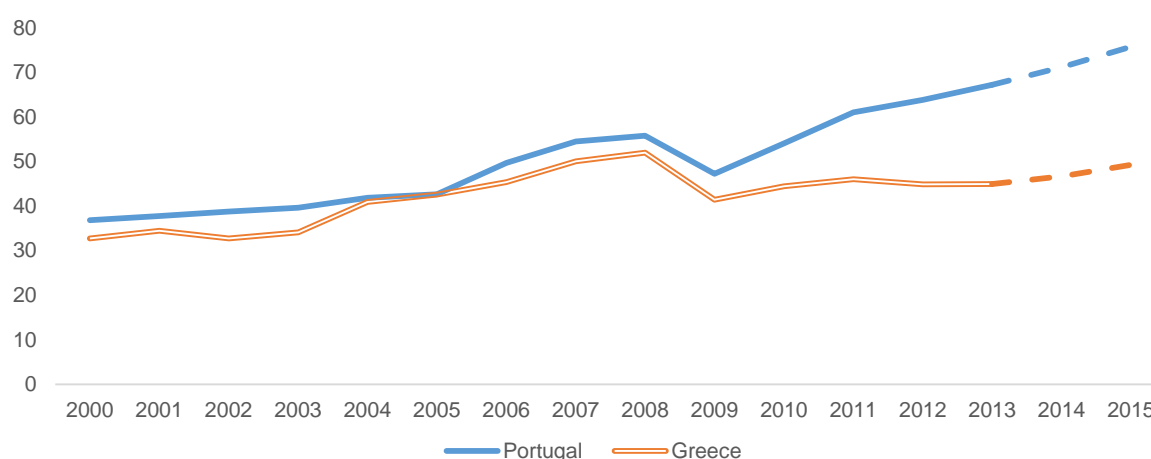
It is clear that within the euro area there is no scope for increasing exports via devaluation, and an ‘internal’ devaluation via lower domestic prices and wages takes time. However, even within this constraint, there are important differences among the programme countries, especially the two with the 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 competitiveness¹¹). Both countries also experienced a similar drop during the global trade crisis of 2009. However, from there onwards divergence set in.

¹¹ 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
Ireland	-7.36	-6.99	-12.2	15.81	1.25

Greece	2.66**	-23.29	-11.91	-1.56	13.25
Portugal	-2.70	-7.09	-8.07	7.18	2.71
Cyprus	-11.78	-7.88	-8.11	-2.34	7.57

Panel B: Change 2010-2013

Country	Fiscal balance	Real GDP	Investment	Exports	Imports
Ireland	5.85*	2.64	-4.51	13.27	-2.60
Greece	6.73**	-16.51	-10.16	1.08	10.80
Portugal	3.94	-6.12	-6.65	8.42	1.58
Cyprus	-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).¹² 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.

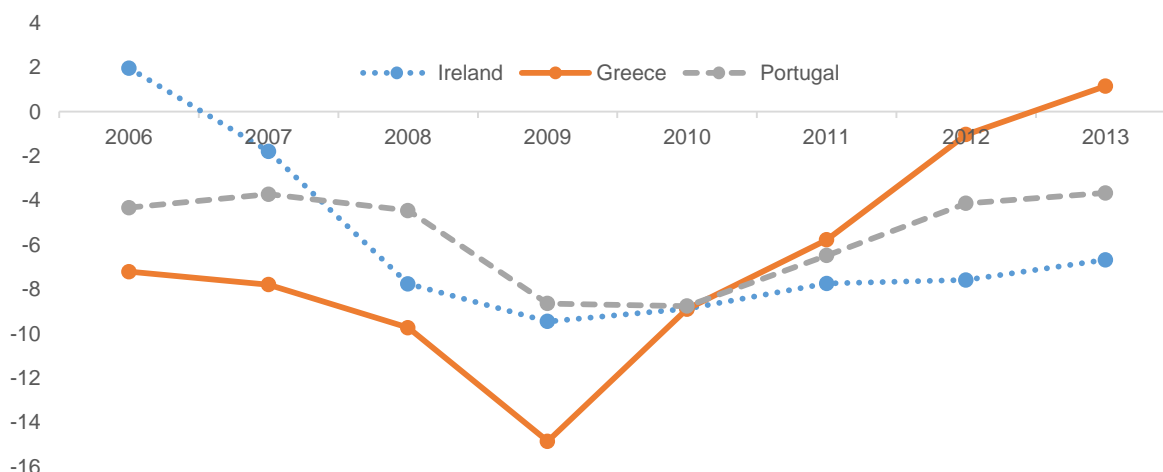
If one looks at structural deficits, a different picture emerges. As shown in Figure 8 the situation was very different before the crisis: Ireland was running a small surplus, Portugal a deficit of around 4% of GDP and Greece was clearly in the worst position with a structural deficit of over 7% of GDP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

¹² 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.

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 deficit 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 2012,¹³ 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.

¹³ 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.

3. GREECE

We start with a brief exposition of the events that led to the Greek crisis and finally to the first Greek programme and the programme strategy and implementation itself.

The build-up of imbalances was caused by a couple of intertwined factors. First of all, the euro accession led to an economic boom in Greece. What is more, fiscal policy was pro-cyclical and the current account deficit deteriorated considerably, especially when a construction boom developed. Finally, in 2009-10 it became clear that the reported Greek deficit and debt statistics had been wrong. The Greek crisis was then finally triggered by the facts that Greece's government-led growth model was threatened by the global financial crisis and that data revisions unsettled the markets. As far as the crisis response is concerned, the authorities initially sought a European solution. In this context, Greece agreed to a fiscal consolidation plan with the European Commission. Markets, however, doubted whether these steps would be adequate. Against this backdrop, a request for an IMF programme was made and the process of building a firewall began.

A key background condition to these developments was the fact that the ECB kept lending to the Greek banking system and thus provided, de facto, much quicker support than that later forthcoming from EU partner countries and the Troika.

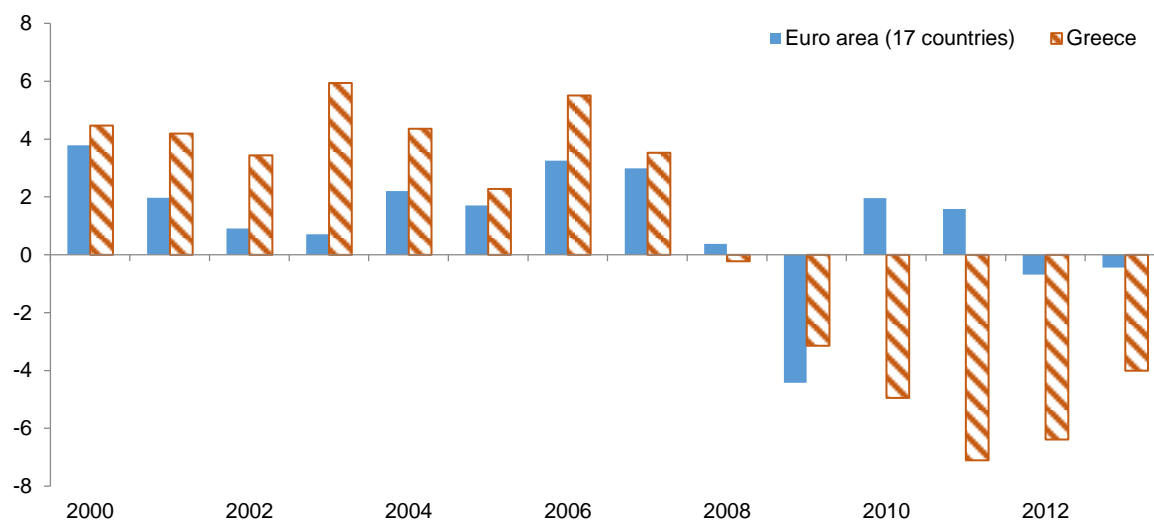
From the IMF perspective, the first Stand-By Arrangement (SBA) to support the Greek programme was exceptional: the access was the largest in IMF history. It was the first-ever programme with a member of the euro area. The Troika set-up was novel. Public debt would remain exceptionally high during the programme period. And the programme required the Fund's rules for exceptional access to be modified.

3.1 The Greek tragedy: The unsustainability of public finances

Up to 2008 the Greek economy grew strongly on the back of a consumption and investment boom which was financed by increasing government deficits (which had partially been hidden through accounting tricks). The booms led to an increase in wages and prices (and thus nominal GDP) which made the debt/GDP ratios look good although the underlying fundamentals had deteriorated.

Greece experienced a smaller fall in GDP during the 2008-09 recession, while euro area GDP fell by over 4% (see Figure 9). The main reason for this was an extraordinary jump in government spending of about 5% of GDP, which led to a jump in the deficit by about 5 points of GDP, from 10% in 2008 to 15% of GDP in 2009. This development vastly increased the adjustment need for fiscal policy and conveyed the impression that the subsequent fall in GDP was only due to the Troika programme.

Figure 9. GDP growth, euro area and Greece

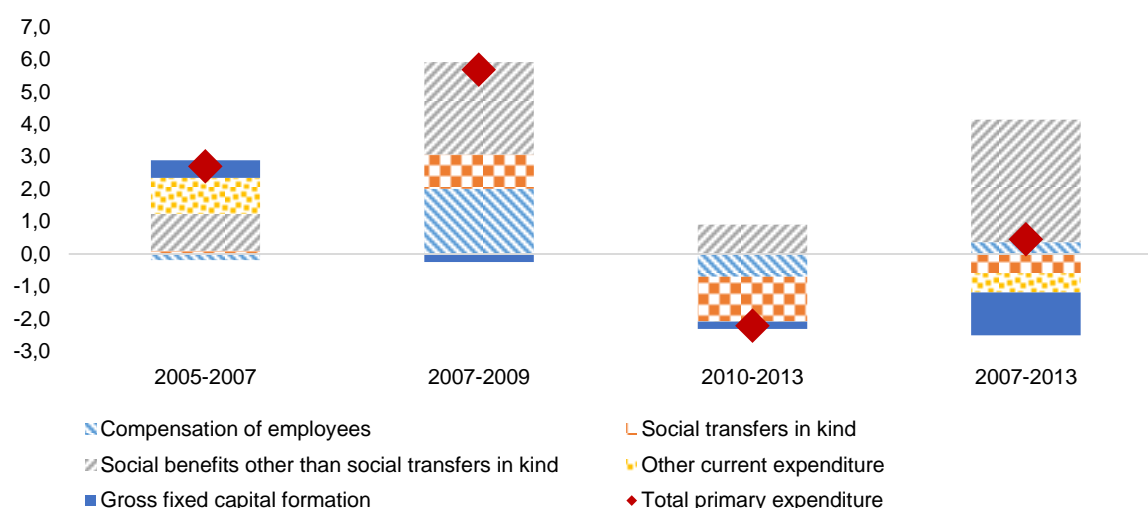


Source: European Commission Services (AMECO), 2013.

A substantial part of the adjustment need in fiscal policy was thus created by the splurge that took place just before the 2009 elections, and part of the subsequent fall in GDP was the counterpart to the somewhat smaller recession that Greece had experienced during 2009 thanks to that splurge. Hence, any assessment of adequacy of the Greek fiscal policy stance must be based on a horizontal view of fiscal policy, i.e. of a comparison of today with 2005 or 2007 and not only 2009.

In the IMF's judgement: Lower spending made up for around 50 percent of the adjustment in the primary deficit. As a result of the expenditure measures undertaken during the SBA-supported programme, primary expenditure declined by 4 percentage points of GDP in 2009–11, but still exceeded the 2005 level by about the same amount.

Figure 10. Greece, changes in general government primary expenditure components



Source: European Commission Services (AMECO), 2013.

3.1.1 Debt and financing outcomes

The first Greek programme was not successful. The reason was not so much the overrun of the fiscal deficit, but mainly the much larger-than-expected fall in GDP combined with substantial data revisions to the debt/GDP ratio. Instead of the 115% of GDP for end 2009 assumed at the beginning of the very first programme, public debt turned out to be around 130% of GDP, which is already above the benchmark level considered acceptable. These revisions had a strong impact on market

sentiment, driving spreads higher and thus making the fiscal adjustment more difficult and deepening the fall in GDP.

GDP in the end (2013) was almost 20% lower than originally planned for. In pure mechanical terms this implied already a much higher debt/GDP ratio. The debt level foreseen for 2012 (in the first programme) would have amounted to close to 150% of GDP at the level of nominal GDP also foreseen by the first programme. But with a GDP about 20% lower than foreseen, the same debt level would have meant a debt/GDP ratio of 180%.

The much larger fall in output was also the root cause of many of the difficulties that arose in adhering to the planned reduction in the (nominal) deficit. Part of the continuing problems that arose in programme implementation was of course due to the fact that many of the fiscal measures that were formally adopted by the Greek parliament were not fully implemented. However, another important part of the constant threat of missing the fiscal targets was due to the unanticipated fall in output (and hence revenues).

In the end, however, the fiscal targets were mostly achieved. There is strong evidence that the primary balance was reached in 2013 and that the overall deficit corresponds closely to what was planned in the first 'Troika' programme.¹⁴ The 2013 cash primary balance for Greece has been already published and indicates a significant surplus, although it should be kept in mind that official data by Eurostat will only be released in April 2014.

Part of the improvement in the deficit is due to the low interest rates on the official debt, which now constitutes the bulk of Greek public debt. Interest payments amount to a lower percentage of GDP in Greece (4.1% projected to rise to above 5% of GDP) as in Italy (currently 5.4% of GDP) although the Greek debt/GDP ratio is much higher. Moreover, much of Greek public debt is now very long term. This implies that the fact that the Greek debt-to-GDP ratio is at 175% of GDP, much higher than all other euro-area countries does not imply immediately that it is not sustainable.

The large fall in GDP could have been at least partially anticipated, as argued above, since it was known *ex ante* that the multiplier would be high for a relatively low-saving and closed economy. Part of the forecast error, however, was also due to the fact that (again as documented above) investment crashed and exports failed to increase as planned.

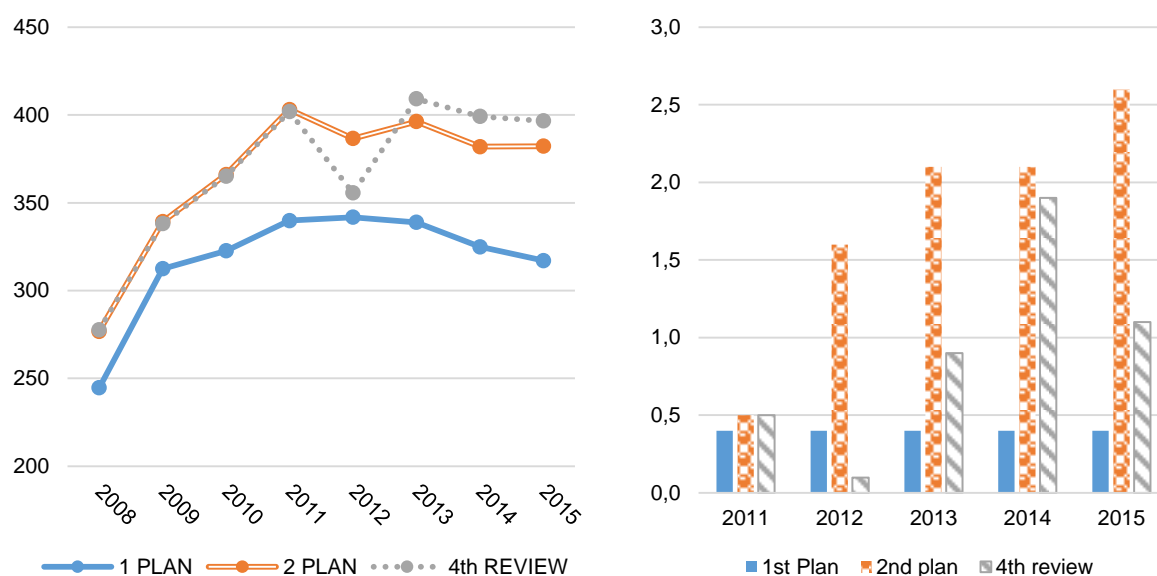
A vicious cycle thus developed whereby the fall in GDP fuelled political uncertainty and doubts in financial markets, which in turn had a negative impact on investment. This reduced GDP even further.

The PSI of March 2012 provided some debt relief. However, as emphasised in Gros (2013) only the debt held by foreign (private) institutions could be cut. The Greek banks and other financial institutions had to be compensated for their losses on Greek Government Bonds (GGBs) because otherwise the banking system would have collapsed. The impact of the PSI exercise on gross debt was further diminished by the fact that the Greek government had to take up loans to guarantee part of its repayment obligations.

Figure 11 shows the various forecasts for the public debt/GDP ratio from the first programme to the last review of the second programme. It is apparent that the debt ratio was continuously underestimated and that the PSI of 2012 provided only a temporary relief.

¹⁴ It should be noted that AMECO data for the Greek deficit in 2013 differ dramatically from the Troika's data included in the programme, 13.1% of GDP and 4.3% respectively. This is mainly due to the fact that Troika's review does not include the banks' recapitalisation, which is equivalent to 10.7% of GDP.

Figure 11. Greek debt and privatisation receipts patterns (% of GDP)



Sources: IMF (2010, 2012a and 2013a).

3.1.2 The theoretical and practical issues in designing the programme

The key assumptions of the first programme were that the multiplier was low (i.e. around 1) and that increased exports would compensate for a substantial part of the negative impact of the fiscal adjustment. If Greece had achieved a growth rate in exports of 6% p.a., in line with the actual growth rate during the early 2000s (and the same as Portugal achieved in the context of its programme), they could have offset almost one-half of the negative impact on demand coming from the fiscal adjustment. The fall in the ‘exogenous’ elements of demand (the sum of public and foreign) was thus about twice as large as initially assumed. Given that the multiplier was maybe about twice as large as expected, one can see why the fall in output was over four times as large as initially predicted.

Exports were expected to grow by about 6% per annum (the rate achieved by Portugal), but were in fact almost stagnant. Given that exports amounted (at the start) to about 20% of GDP, this implies a cumulative shortfall of (exogenous) demand of about 4.8% of GDP over the four-year period 2010-13.¹⁵ Compared to the fiscal adjustment needed of over 10% of GDP, this is not negligible. When considering longer periods of time, export growth assumes of course a much larger importance. On top of the disappointment over exports came the continuing fall in investment.

That exports could provide only a partial offset to the fiscal contraction was clear from the beginning since the ratio of exports to GDP was so low (Greece was characterised as the rare case of a ‘small closed economy’ by Gros, 2010). But over longer periods exports can provide a key offset to the negative impact of austerity.

Another key assumption was that structural reforms would increase rapidly the flexibility of the economy (thus allowing resources to shift to the export sector) and that investment would not collapse. Both of these assumptions proved wrong, however. As shown above, investment virtually collapsed. Whether this was due to the political uncertainties and the PSI or just a natural reaction to the deep recession cannot be disentangled ex post.

¹⁵ Resulting from the simple mathematical calculation: $4 \times 0.06 \times 0.2 = 4.8\%$.

Hence, the *standard* multiplier (impact of the deficit on domestic demand) remains one key element in the case of Greece. However, one has to take into account that a large multiplier also applies to other elements of demand, such as investment and exports (see above).

The export shortfall was difficult to anticipate and partially also the fall in investment. It remains to be seen what part of the very large fall in domestic demand was induced by fiscal tightening and what part was due to the 'freezing' of the banking system and the negative 'confidence' effects coming from the PSI (and the political uncertainty and the public talk about 'Grexit').

By the time the first programme for Greece was drawn up, the full extent of the fiscal problem was not totally known, but the subsequent 'revisions' were not the only reason why the programme derailed. The budget deficit in 2009, assumed to have been 13.6, was later revised to 15.6; debt as percentage of GDP, assumed to be 115, was later revised to 130. The latter was probably more important.

3.2 *Transforming Greece in a competitive economy*

Members of the Troika have been very critical of the pace of structural reforms. This is a judgement that is difficult to assess objectively since structural reforms consist of many small and large changes in laws and regulations that cannot easily be aggregated into one number like the deficit or the debt.

As discussed later in section 7, there are some indicators (notably from the OECD) that suggest that the crisis did spur the reform process, at least in the sense that laws and regulations were changed in the direction demanded by the programme. However, the survey-based indicators available from different sources show a (albeit small) deterioration, rather than an improvement.¹⁶ Product and labour-market reforms can have positive effects on growth, employment and productivity in the long run.¹⁷ In the short run, however, the impact of the reforms can be small or even negative because of adjustment costs. This is especially true in case of job protection and unemployment benefits reforms undertaken in severely depressed economies. (Alcidi and Gros, 2013).

It is difficult therefore to detect objective signs of structural reforms already at this stage. The one short-term result that one should have expected was lower price rigidities. But this does not seem to be the case. Delays in implementing service-sector reforms contributed to price rigidities. Despite reform attempts, professions like pharmacology and law, as well as the transport and energy sectors, remained closed to new entrants. Continuing protection caused prices of non-tradeables to remain elevated relative to the prices of tradeables until the end of 2012. In addition, the prices of tradeables compared with those of a majority of Greece's trading partners continued to increase at or above a comparable pace through the end of 2011. Only in 2012 did the relative prices begin to fall compared with Greece's trading partners.

The needed reallocation of resources into exports has not been adequately supported by relative price changes. This provides at least a partial explanation of the disappointing performance of Greek exports mentioned above.

These (ex-post) developments made it extremely difficult for the empirical achievements of Greek exports to meet the Troika expectations and to provide an offset to the massive fiscal tightening – in contrast, for instance, to Portugal with its higher degree of openness and lower debt level. Finally, there were *governance issues involved*. The capacity of countries to implement an adjustment programme depends in large part of the efficiency of the 'machine', i.e. the absence of corruption,

¹⁶ See for instance Schiantarelli (2010) for a comprehensive survey of the literature on the impact of product-market regulation on macroeconomic performance.

¹⁷ Among others, see e.g. Bouis and Duval (2011) who provide an illustrative assessment of the impacts on potential GDP over a 5 to 10-year horizon of structural reform scenarios in the areas of product and labour markets.

etc. (Pisani-Ferry, Sapir and Wolff, 2013). This is why relatively clean countries like Ireland and Spain (and now Cyprus) have been fairly successful. In countries with low levels of government efficiency, reforms may be passed by parliaments but are not really implemented on the ground. This means that in countries with low levels of government effectiveness the ‘reforms’ that have been ‘adopted’ produce more social inequality and less increase in productivity. The result is that reforms become quickly very contentious in countries like Greece.

3.3 The feasibility of the adjustment programme

The Greek programme followed in most aspects the standard IMF approach. The IMF has applied its approach (fiscal adjustment plus structural reforms) in hundreds of cases, mostly with success. There had been another case just before Greece needed support, namely Latvia, which maintained a tight peg to the euro and thus was also forced to adjust without any devaluation. At the time there seemed to be little reason to doubt the standard IMF approach.

What made Greece unique was mainly the size of the required fiscal adjustment, the size of the existing debt and the size of the financial support (relative to GDP) required (which in turn was due to the outsized deficits and debt).

Most discussions about the Greek programme have centred around two issues: the speed of the fiscal adjustment and the timing of the debt reduction. The two are related. A materially slower adjustment would have required either even more support or a much earlier debt reduction exercise. The former seemed politically difficult to justify in major creditor countries, and the latter was opposed (at least until late 2011) by most EU policy-makers.

Given the very difficult starting position in terms of debt and these (political) constraints, the programme had to make unrealistic assumptions to be justifiable in terms of debt sustainability and other parameters, like the SGP.

Many academic observers argued from the outset for a ‘hair cut’ and questioned the feasibility of the fiscal adjustment. From the official point of view the adjustment appeared large, but doable given the precedents even in Greece.¹⁸ However, it was a programme of the type that did work in Latvia, but could not work in the case of a much more closed and less flexible economy with a much higher public debt. The latter could only have been addressed through an earlier and larger haircut. The structural deficiencies were always more difficult to address, but their extent was not known from the outset. These structural deficiencies were probably the root cause of the poor export performance, which contributed substantially to the recession.

4. PORTUGAL

The Portuguese economy had suffered from low output and productivity growth for a number of years even long before the programme. This had led to huge external and fiscal deficits as consumption remained above income. Persistent deficits led over time to high debt levels, which in turn drove up Portugal’s refinancing costs in capital markets to levels deemed unsustainable.

On 7 April 2011, Portugal requested financial assistance, and a 3-year Economic Adjustment Programme for the period 2011 to mid-2014 was negotiated in May 2011 between the Portuguese authorities and officials from the European Commission, the ECB and the IMF as a joint financing

¹⁸ Episodes of comparable large fiscal adjustments include Greece, where in at least two instances (in 1978 and 1990) the annual contraction in the primary deficit amounted to over 7% of GDP (see Tsibouris et al., 2006). However, the required adjustment under the Troika programme had to operate without the safety valve of devaluation and in a very weak global growth environment.

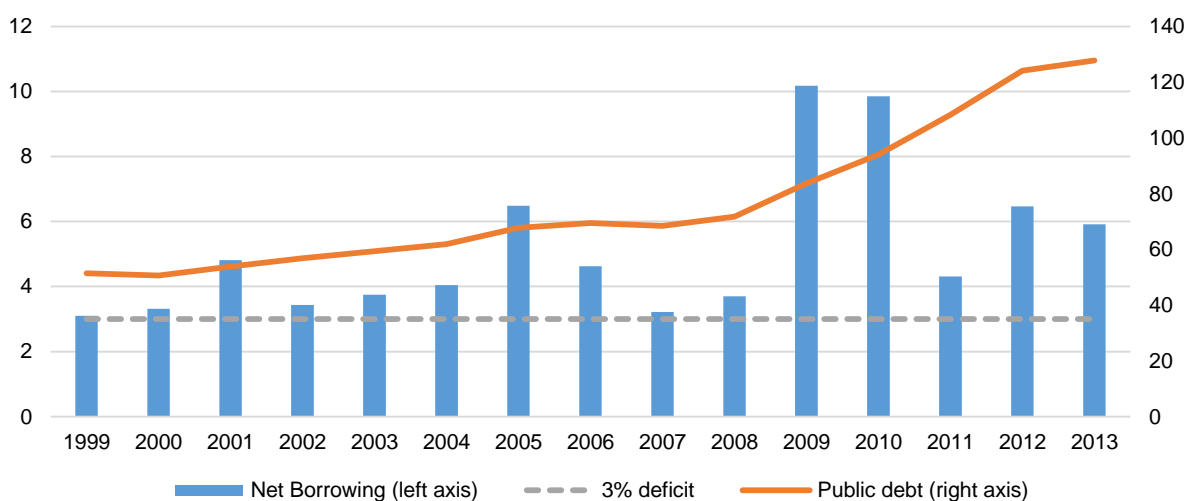
package. It contains reforms to promote growth and jobs, fiscal measures to reduce the public debt and deficit, and measures to ensure the stability of the country's financial sector.

In general, the Portuguese government demonstrated a strong willingness to put in place the measures envisaged in the Economic Adjustment Programme. So, the expected end of the programme for Portugal has been officially welcomed by the Troika.

4.1 Ensuring public finances and financial sector sustainability

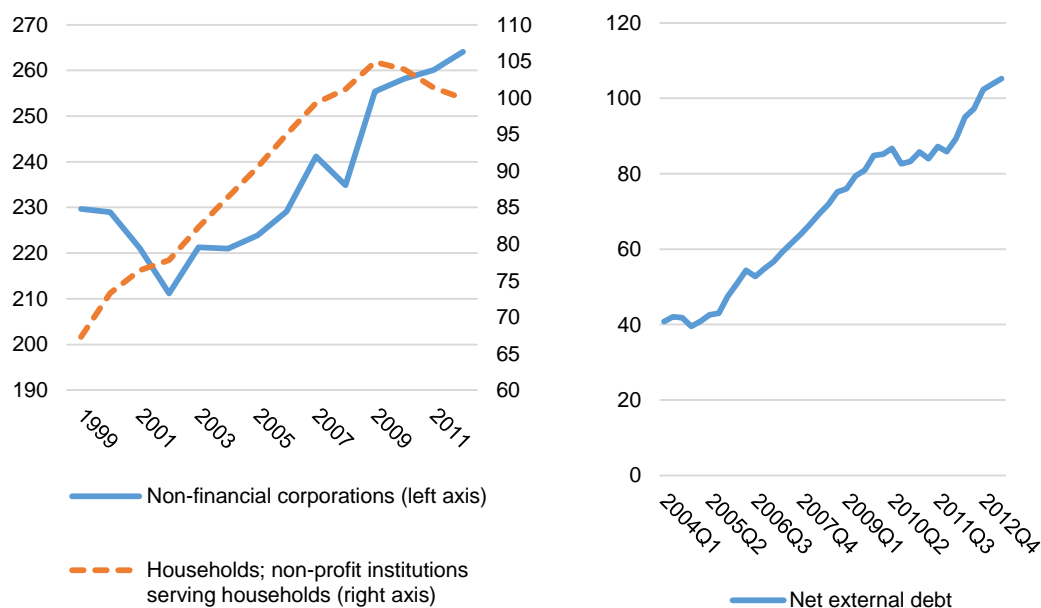
In a nutshell, the main problems that needed to be addressed by the Portuguese programme were unsustainable public finances and internal and external debt accumulation by Portuguese households and firms.

Figure 12. Persistent government deficits and increasing public debt (% of GDP)



Sources: European Commission Services (AMECO), 2013.

Figure 13. Indebtedness of the private sector and external debt (% of GDP)



Source: Eurostat, 2014.

In Portugal, the excess spending was not financed only or even mainly by the government, but by banks (and partly at least by branches and subsidiaries of Spanish banks in Portugal). And it became clear that the losses that Portuguese banks are likely to experience when their customers (both

households and firms) cannot service their debt as the economy spirals downwards would in all likelihood become public debt – just as happened in Ireland and Spain (see Gros, 2011a).

The main assumptions of the programme seem to have been appropriate to the situation just described. The contractionary effects of the fiscal adjustment were certainly large, at least in the short run. But, as expected, they could be compensated to a very significant extent by export growth. In the case of Portugal, exports amounted to about 30% of GDP at the start (more now). This implies that a growth rate of exports of 6% p.a. could contribute an impulse of about 1.8% to growth, which when cumulated over 3 to 5 years, makes a difference of 5.4 to 9% in the level of demand. Export growth of this magnitude did materialise, thus limiting the fall in GDP.

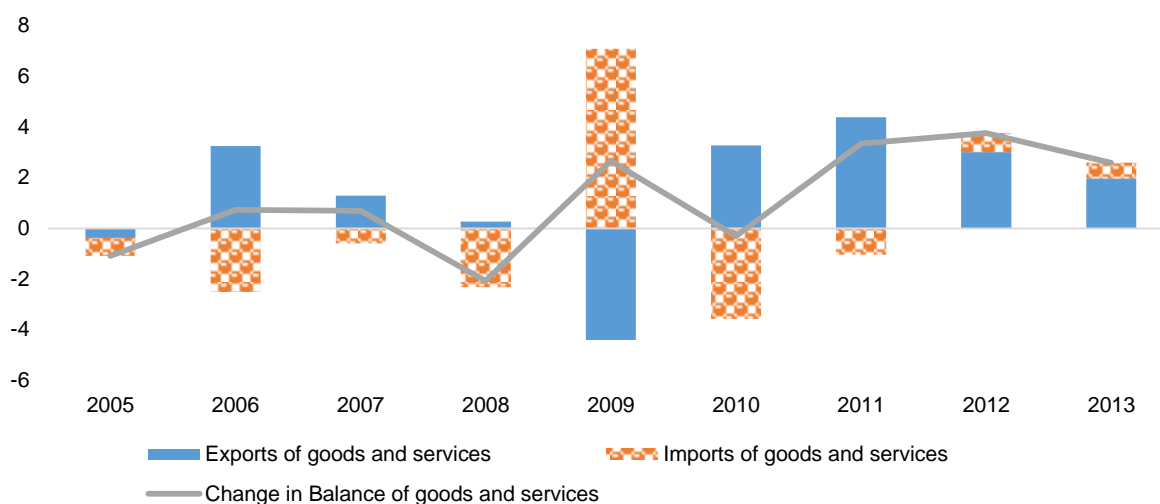
4.2 *Increasing external competitiveness and potential growth*

The key problem of the country seems to have been what Eichengreen (2010) called “bad external imbalances” — to be distinguished from the “good imbalances” that foster convergence through higher investment in tradeables and productivity growth. “Bad external imbalances” may arise when capital flows to less developed countries fail to boost investment rates (as in Greece and Portugal). This problem seems to have been successfully addressed, at least if one looks at the outcome in terms of exports.

4.2.1 Export-driven growth

In the case of Portugal as it stands we feel it is legitimate to speak of an export-driven growth. The Portuguese balance of goods and services has reached the turning point, on the back of a strong export performance. Moreover, the country’s current account is in surplus for the first time since the late 1960s.

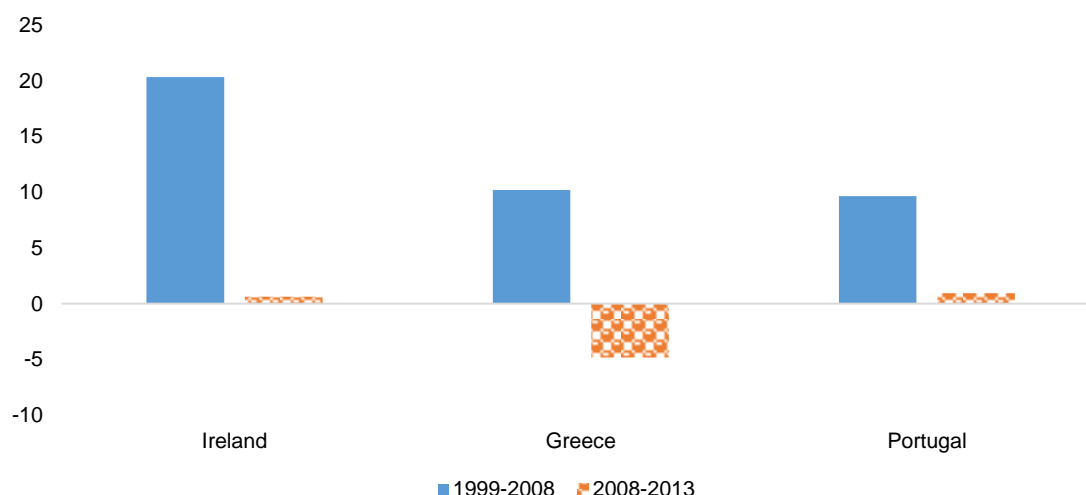
Figure 14. Change in external balance of goods and services (% of GDP)



Source: European Commission Services (AMECO), 2013.

Finally, unit labour costs in Portugal are adjusting, leading to competitiveness gains and progressively repositioning the economy in euro-area competitiveness.

Figure 15 Change in nominal unit labour cost (relative to EA average)



Source: European Commission Services (AMECO), 2013.

Prima facie, the previous figures seem to suggest that the Portuguese export performance is driven by a parallel increase of international price competitiveness. But a comparison with 1999 falls too short, because Portugal exhibited imbalances/a lack of competitiveness already far before the crisis, and thus was not internationally competitive when entering EMU. Looking at changes instead of levels of competitive indicators in this context is thus rather misleading. This view is clearly supported by the absence of improvement for Portugal according to the WEF indicators (as opposed to OECD indicators).¹⁹ Also the IMF correctly acknowledges as a side-remark that focusing on labour-cost-based indicators could be misleading, as the strong export performance to date may be related to non-price competitiveness factors (IMF, 2013a, p. 20). Besides wage, monetary and fiscal policies, also non-price factors such as quality, image and technology on both the import and the export side surely cause current account imbalances. Unfortunately, these non-price determinants of current account balances have been by far neglected in the Troika assessments and also in the political debate in general.

4.2.2 Exports and domestic capacity constraints

For Portugal, the empirical results by Belke, Oeking and Setzer (2013) suggest a *substitutive relationship between domestic and foreign sales* when the economy is close to peak or trough. When capacity utilisation is very low, firms react to a fall in domestic demand by increasing their efforts to export or enter the export market. Similarly, if the economy operates at high capacity utilisation, capacity constraints imply that an increase in domestic demand triggers a reallocation of resources from external to domestic clients. By contrast, a positive link is identified between domestic demand and exports during normal economic conditions. This general pattern is in line with the prevalence of hysteresis and the band of inaction due to switching costs for suppliers between serving the domestic and foreign market. It is likely that during this interval, the short-run liquidity channel dominates, whereby the cash flow generated by exports is used to finance domestic operations and the existence of increasing returns dominates the capacity constraints channel (Berman et al., 2011).

The fact that capacity utilisation has been as much a driver of Portuguese exports as international competitiveness in recent years has nevertheless been disputed by the Portuguese Ministry of Finance and is also not sufficiently taken into account by the Troika.²⁰ Export growth in the past

¹⁹ See section 8 of this briefing report on the assessment of structural reforms.

²⁰ However, the Banco de Portugal was clearly aware of this. See, for instance, Esteves and Rua (2013).

few years in Portugal was not as spectacular and surprising as the government claims. It was fairly predictable.²¹

4.3 Putting the Portuguese economy back on track

The programme became necessary for Portugal also because the country faced a number of problems which held back growth, as summarised in the following figure.

Figure 16. Insufficient conditions to foster economic growth



Source: Gaspar (2012), p. 7.

This led to the disappointing pre-programme performance of the Portuguese economy in comparison to most of its European partners. In the period 1999 to 2010, the GDP of Portugal only grew at an annual average rate of 1%, compared with 1.4% in the euro area.

4.3.1 Balanced assumptions behind the assistance programme

In general, we do *not* think that the assumptions made by the Troika were *over-optimistic* in the case of Portugal, especially as far as growth is concerned. Admittedly, there was clearly insufficient recognition of political resistance to change in some member states and this may have also affected the Troika's analysis of the interplay between fiscal consolidation and growth. Hence, as a result, fiscal targets may not have been fulfilled. But this is relevant for Greece but much less so for Portugal as the country's high responsiveness rate for undertaking reforms (see start of this section on Portugal) demonstrates.

Let us also refer to the multiplier debate again, but this time not from the perspective of the competitiveness issue as in section 2.2 (ECB, 2012, pp. 82 ff., European Commission, 2013a, pp. 41 ff., and IMF, 2012a). Fiscal multipliers are difficult to assess with certainty. One should recall in this respect that the IMF claimed to have underestimated the fiscal multiplier in its growth forecasts

²¹ Exports may be seen by some as a bright (if not the brightest) spot in all of Portugal's adjustment process under the bail-out. But similar breakthroughs have happened in the 1970s and 1980s only to be followed by Portuguese companies' retreating to the comfort zone of their internal market each time they regained strength. Has the paradigm shifted since then? Is this trend of growing exports sustainable this time, and will it be able to help Portugal churn out decent economic growth in a few years?

Externally, there remains considerable uncertainty surrounding the strength and durability of the recovery in Europe, which has first-order implications for Portuguese exports because Portugal has extended its export shares especially to the extra-EU (IMF, 2013a, p. 8, IGCP, 2013, p. 21).

prior to October 2012 but that, as antipodes, the Commission stated in November 2012, followed by the ECB in the following month that eventual forecast errors of growth were not due to the underestimation of fiscal multipliers. This expression of public disagreement between the Commission and the ECB on the one hand and the IMF on the other has been addressed extensively in our Briefing paper, not least by pointing at reasons why the (negative) multiplier of fiscal contraction was lower for Portugal than for Greece (see section 4.2 and section 2).

4.3.2 Concluding remarks

Portugal has complained to MEPs over the handling of bail-out by the ‘Troika’ (Wise, 2014). However, our analysis in this section concurs with the analysis of the Troika that the Portuguese pre-crisis model was unsustainable, being based on immense current account deficits and indebtedness. Fiscal adjustment and structural reforms were unavoidable.

A slower adjustment path on the fiscal side would not have been possible with an eye on government debt (currently 129% of GDP), because debt sustainability would have been even more doubtful. Moreover, the figures on the structural deficit shown above suggest that the adjustment has so far been quite gradual (only about 4.5% in three years, representing one-half of the Greek figure) and the remaining deficit will require further efforts.

Structural reforms seem to have been successful in unleashing export growth, which could lay the basis for a new, sustainable growth model.

5. IRELAND

At the time the EU-IMF assistance programme²² started (in late 2010), the Irish economy had just been hit by and was suffering from a banking crisis. The dimension of the latter was unprecedented and linked to the burst of a huge housing bubble; it caused the Irish GDP to fall by 6.3% in 2009 and let unemployment increased from 4.7% in 2007 to 13.7% in 2010. And even more detrimental in the end, it sent the government balance down to a deficit in 2010 amounting to 30% of GDP, from a surplus in 2007 (0.2%).

The objectives to be pursued against the financial assistance consist of i) an instantaneous strengthening and encompassing repair of the banking sector, ii) an ambitious fiscal adjustment to regain sustainability of public finances and to correct excessive deficits by 2015 and iii), finally, the implementation of growth-friendly structural reforms, especially labour market reforms, in order to facilitate a return to a sustainable and robust growth path.

5.1 *The wide instability of the financial sector*

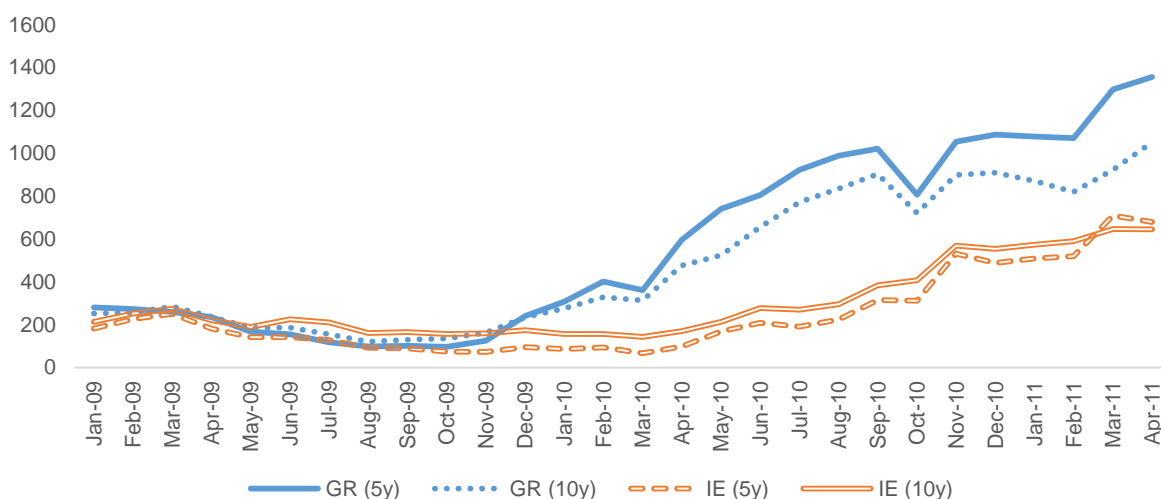
As the Irish case presents relevant differences from the two countries previously analysed, in this section, we compare the Greek and the Irish economic and financial situation until around 2011, with a focus on the latest developments before the programme and more recent ones after its start. We argue that Ireland was much better positioned than Greece with respect to liquidity, solvency and competitiveness. In addition, Ireland performed better in a number of political and institutional

²² The Economic Adjustment Programme for Ireland comprises a joint financing package amounting to €85 billion. It contains contributions from the EU/EFSM (€22.5 billion) and euro area member states (EFSF) €17.7 billion. Moreover, it includes bilateral contributions from the United Kingdom (€3.8 billion), Sweden (€0.6 billion) and Denmark (€0.4 billion) and significant funding from the IMF (€22.5 billion). Finally, Ireland itself was contributing through the Treasury cash buffer and investments of the National Pension Reserve Funds (see http://ec.europa.eu/economy_finance/assistance_eu_ms/ireland/index_en.htm).

aspects. From a fundamental point of view, it was clear already in 2011 that contagion risks to Ireland should therefore be contained.

The Irish variant of the crisis should be characterised in the first instance as a banking crisis. The foremost priority thus was a recapitalisation and stabilisation of the banking system. This target was reached very early in the programme, stopping the deposit outflow. Ireland has also achieved some progress in deleveraging the size of the banking system, (IMF, 2013b).²³ An integrated US banking system saved Nevada after a local real estate boom turned to bust. Without an integrated banking system in the EU, the same was not true of Ireland (Gros, 2012). The euro area debt crisis intensified around mid-2011. The rating of Greek sovereign debt has been downgraded to the lowest level among countries currently rated, and secondary market yields have skyrocketed (Figure 17).

Figure 17. Government bond yields, Ireland and Greece



Note: 2 and 10 years, spread to DE, in basis points.

Sources: Bloomberg and ECB.

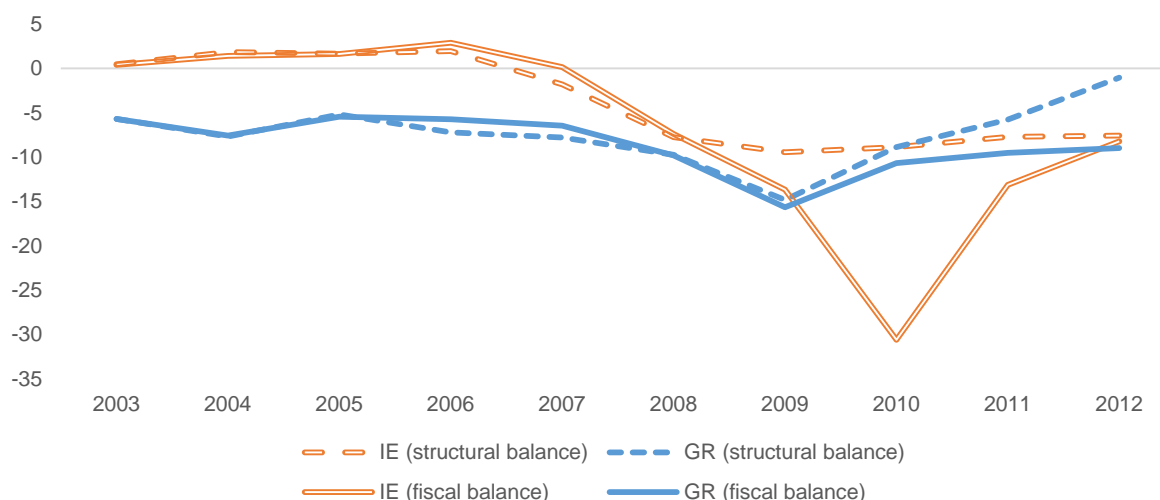
5.1.1 Liquidity risk

The semi-inverted yield curves for Ireland and Greece showed in 2011 that risk premia for bond yields with two-year maturity were the highest, suggesting that despite discussions on a new multi-annual assistance programme for Greece, investors expected that financial assistance would not be enforceable as of 2013. It also provided some evidence that liquidity risk, which is typically related to maturing debt, government cash deficits and/or contingent liabilities, plays a large role.

Irish financing needs were driven much less by the maturity of outstanding debt. Until end-2015, only €34 billion (22% of GDP 2010) of government bonds and IMF/EU loans were falling due. Refinancing risks for Ireland were also lowered by the fact that Ireland disposes of substantial external assets. A large share of these assets was held by pension funds and life insurance companies. Markets anticipated that these external assets would reduce financing needs to the extent that these external assets could be mobilised (Gros, 2011a).

²³ At the start of the program, the Irish banking system had assets of around 500% of GDP on board.

Figure 18. Government deficit, Ireland and Greece



Source: European Commission Services (AMECO).

Let us continue with some observations about the government cash deficit. In terms of fiscal policy, both countries had committed to an ambitious consolidation process, but both were also still running large public deficits of around 10% of GDP in 2011 (Figure 18). The Greek government aimed to reduce the fiscal balance from more than 15% of GDP in 2009 to below 3% of GDP in 2014, while the Irish planned to bring the public deficit to 3% of GDP by 2015, from a trough of 32% of GDP in 2010 (including support of the banking sector). The European Commission's staff at that time expected the fiscal programme targets for the coming years to be achieved although consolidation measures for the coming years needed to be further specified.

With respect to contingent liabilities, concerns vis-à-vis Ireland were at around mid-2011 not necessarily based on the direct financing needs by the Irish sovereign but rather related to the contingent liabilities arising from the Irish banking sector. It was often argued at that time that the size of the potential further write-downs in the Irish banking sector was the real risk that the Irish fiscal position was facing, as for instance through the infamous promissory notes, adding a substantial dimension of uncertainty.²⁴

However, significant steps had been taken to revitalise the banking system. Above all, the comprehensive March 2011 banking stress test had been a major step towards restoring the Irish banking system to health. This exercise was based on very severe stress assumptions. The results implied that, after eliciting contributions from subordinated bondholders, up to €19 billion were needed to completely deleverage the banking system to more sustainable levels and to provide the banks with the adequate levels of recapitalisation to cover lifetime losses. This suggested that total banking support remained well below the €35 billion earmarked for banks in the programme. It was therefore unlikely around mid-2011 that the need for banking support exceeded the amount foreseen in the programme.

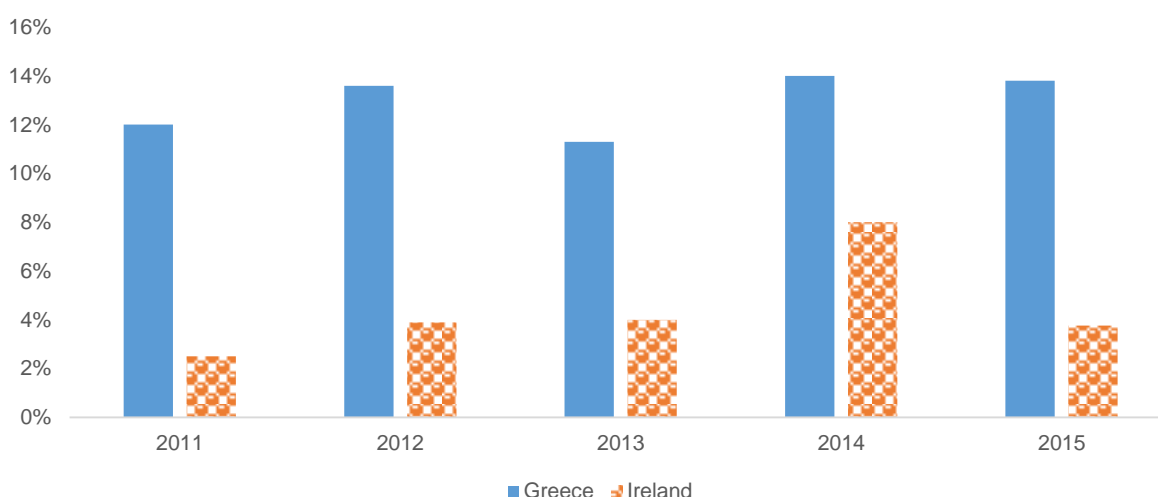
In Greece, the banking system had remained stable so far at around mid-2011. The liquidity situation of the Greek banks was tight, and, as for Irish banks, the dependency on Eurosystem liquidity was acute. Asset quality had deteriorated amid a weaker economic environment and capital

²⁴ In February 2013, the Irish Bank Resolution Corporation (IBRC) provided with the promissory notes was liquidated. However, "rather than the Central Bank of Ireland taking possession of the promissory notes, an agreement was reached to rip up the promissory notes and instead provide the Central Bank with €25 billion in new very long-dated bonds" (Whelan, 2013). This deal improved significantly the sustainability of the sovereign but came at the cost of creating new doubts over the central bank's independence.

ratios had fallen. In terms of funding, only €1.5 billion out of €10 billion earmarked under the programme for the Hellenic Stability Fund had been disbursed.

Taking these elements together, it was clear already around mid-2011 that the financing needs in the coming years would be much lower for Ireland than for Greece (Figure 19). The situation prevailing created an immediate liquidity risk for Greece. Under the EU-IMF programme, Greece was supposed to issue bonds of close to €30 billion in 2012 and close to €40 billion in 2013. It was very unlikely that this would happen and Greece would start to regain its market access with an issue of T-bills amid the conditions of strong demand, a competitive interest rate and significant presence of international investors. To relieve funding pressure, the Greek government had announced that it had raised €50 billion (close to 20% of GDP) by 2015 through the sale of public assets. Many investors regarded it as highly unlikely, however, that the full sum would be realised, in particular in the short-term. Financing needs were much better covered in the case of Ireland. Under assumptions current around mid-2011, there was no need for the Irish sovereign to issue any medium-or long-term debt before 2013. Privatisation potential for Ireland was much lower than for Greece, but it could still amount to around €3 billion until 2015.

Figure 19. Maturing debt (2011-15, in % of 2010 GDP), Ireland and Greece



Source: Bloomberg.

5.1.2 Solvency risk

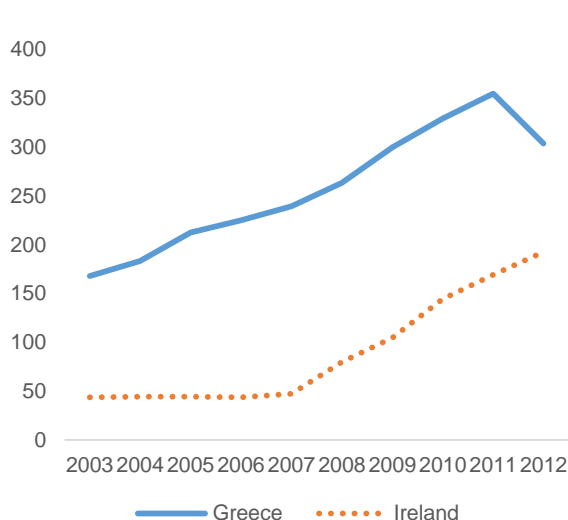
Liquidity considerations aside, many investors worried that Greece and Ireland may ultimately have an underlying solvency problem. General government gross debt increased by 35% of GDP for Greece and even 80% of GDP for Ireland from 2007 to 2010 (Figure 20)²⁵. Looking ahead, the sustainability of public finances required that the primary deficit would be large enough to offset the ‘snowball effect’, i.e. the difference between the interest and the growth rates. Simulating the future path of Ireland’s debt, ECFIN analyses at that time suggested that concerns about debt sustainability are exaggerated.

A review of the experience of other successful fiscal adjustments in the EU shows that, while substantial, Ireland's and Greece's consolidation needs were not unprecedented. Other countries

²⁵ Since Greece, however, did not use the low interest rates in the pre-crisis period to reduce debt, or at least did not use the inflowing capital for productive purposes, its starting point was substantially worse. From 2001-07 Greece had an average annual GDP growth of 4.3%, but still recorded a fiscal deficit of more than 5% a year. If the debt ratio at the beginning of the financial crisis had not been at over 100% of GDP, but at around 60%, or even 25% like in the case of Ireland, the financial crisis-induced increase in the debt ratio would not have had these serious implications.

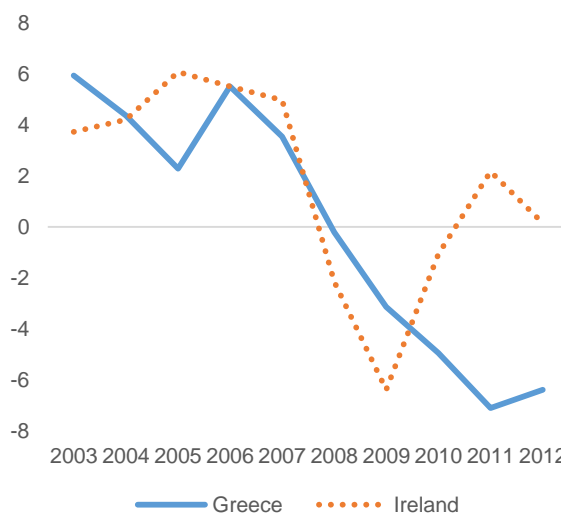
(e.g. Belgium) have succeeded in the past in achieving and then sustaining large improvements in the primary balance, which then have resulted in sharp declines in the debt ratio even without overly supportive growth (but also, importantly, without unduly hindering growth). Also, Ireland's own history can be taken as an example as the economy recorded budgetary surpluses in nine out of ten pre-crisis years.

Figure 20. Gross government debt (as % of GDP), Ireland and Greece



Source: European Commission Services (AMECO).

Figure 21. GDP growth, Ireland and Greece



Source: European Commission Services (AMECO).

The fiscal stress in the euro area was, however, not simply about the magnitude of the fiscal adjustments that need to be made; it was also about a shortfall of credibility. Solvency is generally affected by political and institutional considerations which influence the government's ability and willingness to which extent it will make good its debt payments.

The political challenges the Greek economy was (and partly still is) facing: street discontent was rising, internal party dissent became pressing, and opposition parties and trade unions were opposing the austerity measures. This created the risk that the politico-economic equilibrium shifted against further contractionary measures which are required when the budget deficit reduction targets are not met. This challenge had also to be seen against the historical background. According to Reinhart and Rogoff's calculations, Greece spent 50% of the time between 1800 and 2008 in default or restructuring (Reinhart and Rogoff, 2010).

Furthermore, the tolerance for corruption in Greece aggravated the challenge to achieve a significant increase in taxation via higher tax rates. There was the risk that increases in tax rates simply increased the size of the shadow economy without generating more tax revenues.²⁶ Its more stable political and institutional framework suggested already in mid-2011 that Ireland has a higher administrative and socio-political ability to adapt to increased demands on public finances. The OECD "cost of collection ratio", an efficiency measure comparing the annual administration costs incurred by a revenue body with the total revenue collected over the course of a fiscal year, showed in 2011 that the administration costs of collecting 100 units of revenue are much lower in Ireland (1.08) than in Portugal (1.44) or Italy (1.2), although somewhat higher than in Spain (0.97) (OECD, 2011). This signals relatively high Irish efficiency in tax collection and/ or high tax compliance.

²⁶ As correctly set out in the programme, fiscal adjustment had therefore to be combined with efforts to reduce the level of corruption, so that fiscal policy adjustment did not rely on expenditure cuts alone, which in turn risks violating the principle of social justice.

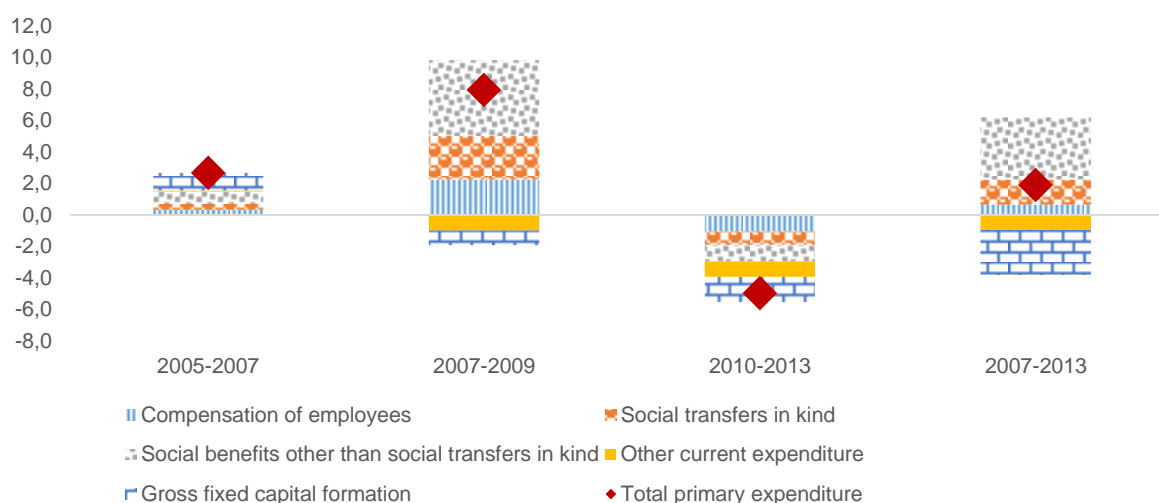
Moreover, the political costs of a default are higher in Ireland since the country would lose its outstanding reputation for an investment-friendly rule-of-law-abiding jurisdiction. (Reinhart and Rogoff, 2010, do not record any debt default or restructuring for Ireland since its independence.) This may imply that there should be a higher political willingness to repay the debt.

5.2 *The return to equilibrium of public finances*

Concerning the fiscal side, if one disregards the increase in the fiscal deficit brought about by the rescue to the banking sector in 2010, the fiscal consolidation effort that emerges from the data is rather small.

As shown in the Figure 22, between 2007 and 2009, total primary expenditure increased and then fell significantly during the years 2010-13. But if one neglects the increase after 2007, the overall change does not show a dramatic tightening in the fiscal stance.

Figure 22. Ireland, changes in general government primary expenditure components



Source: European Commission Services (AMECO).

This argument is supported by the behaviour of the structural deficit as shown in Figure 8 above.

Quite pragmatically, the Irish achieved this impressive degree of consolidation through equally focusing upon spending and revenue measures and also regarding fairness issues. Taking this adjustment as a starting point, Ireland can be envisaged to arrive at a primary balance this year and very soon also at a declining path of government debt. In these respects, we agree with the IMF (2013b).

The Irish have also adopted a wide array of institutional reforms to eliminate the driving forces of the crisis. The Irish Government reinforced the medium-term fiscal framework and created a fiscal council which in the meantime has conveyed the impression to be credible. What is more, financial regulation and supervision have been reworked and improved (European Commission, 2013a, IMF, 2013b).

Ireland also started to regain its market access with an issue of T-bills amid strong demand, a competitive interest rate and significant presence of international investors around mid-2012.²⁷ The country's access strengthened continuously, above all in the wake of the ECB's announced Outright Monetary Transactions (OMT) (IMF, 2013b). This was mainly because its strong programme implementation had addressed the acute uncertainties around public debt that prevailed at the end of

²⁷ All these characteristics are not valid for Greece.

2010. The deficit target for 2011 was met and the budget for 2012 continued fiscal consolidation at a steady pace. Decisive actions on the banking sector during 2011 identified and met the banks' capital needs in a credible way, at an overall cost below expectations. Perhaps most importantly, markets gained confidence in Ireland's capacity to recover from the banking crisis as export-driven growth was quite strong in 2011 at 2.2%; investors we talked with considered that important" (IMF, 2013b).

Seen on the whole, thus, Ireland's success in regaining market access mirrored unwavering implementation of necessary policies, combined with the country's signalled potential to economically shuffle off its deeply-rooted banking crisis. Ireland confirmed its successful market access of 2012 by means of issues of sovereign bonds, including maturities up to 10 years in January and March 2013 which were subscribed rather well (European Commission, 2013a; IMF, 2013b).

5.2.1 Caveats

With an eye on the severe problems Ireland was opposed to, it does not seem possible to do all the reparation framework and to solve all these issues within a relatively short time span of three years. The Troika did well to acknowledge this from the outset, (IMF, 2013b).

One of the remaining pressing Irish problems is the still large overhang of debt that waits to be treated. Here, the focus should be on private household debt which still takes values of nearly 200% of disposable income and sovereign debt projected by the IMF (2013a) to reach its peak level at 124% of GDP in 2013. Hence, Ireland must continue both with repairing private balance sheets and fiscal consolidation, although they are time-consuming (European Commission, 2013a; IMF, 2013b).

Another virulent Irish problem is that the country's banks are not yet offering lending to the necessary extent to the economy. Moreover, there is only small progress in dealing with impaired assets such as nonperforming loans. Finally, the profitability of Irish banks is clearly improvable. These facts must not be overlooked in spite of Ireland's undeniable progress in recapitalizing and stabilizing its banking system (IMF, 2013a, p. 8; IMF, 2013b).

In Ireland, bailing in senior bank bondholders may have been preferable in the same way as in the Greek case earlier debt restructuring would have been desirable. However, this would have improved the sustainability of the programme by much less than in Greece. Moreover, it may have impacted the funding of Irish banks negatively (see also Pisani-Ferry, Sapir and Wolff, 2013).

On the issue of Banking Union and the benefits for Ireland: given the above analysis of Ireland's strengths which cannot be debated away, the Irish government should acknowledge that a banking union is capable of delivering more shock-absorbing capacity than could ever be delivered by any fiscal capacity which is currently envisaged for the euro area. In the United States, banking problems are treated at the federal level (the US is a banking union), whereas in the euro area, the responsibility for losses of the banking sector stays national. In this vein, Nevada and Ireland both experienced an exceptionally strong housing boom and bust (Gros, 2012a). However, the main difference between Nevada and Ireland is that Nevada did not suffer any local financial crisis and that the federal state government did not have to be bailed out when the boom turned into bust.

In general, the Troika did well to treat Ireland in a more relaxed fashion than Portugal and Greece with an eye on the fact that foreign debt was much larger in case of the latter two countries and the Troika had to deal with foreigners' claims.

6. CYPRUS

Cyprus is currently undertaking an adjustment programme linked to the financial assistance it has requested in order to recapitalize and restructure its previously oversized banking system, strongly affected by the Greek PSI. The recapitalisation of banks has required a bail-in of uninsured deposits, which has imposed significant losses on corporations, including small and medium enterprises, and households, impairing their ability to finance their operations and meet financial obligations. It has hampered confidence in the banking system and required the implementation of capital controls.

Although the adjustment programme for Cyprus is on track, there are many risks looming in the horizon, mostly related to financial sector stability, privatisations, and GDP growth developments.

Expectedly, unemployment and social exclusion are on the rise in Cyprus, undermining the achievement of the EU2020 objectives for employment and poverty reduction, while other EU2020 objectives (e.g. research and development and innovation) are also at risk due to limited funding. To boost competitiveness and employment, measures have been taken to contain wage costs and improve and expand activation policies. Notably, the Cypriot workforce is the second most qualified workforce in the EU27. The liberalisation of services markets in Cyprus and elsewhere and programs to foster innovation should support the absorption of this pool of highly qualified people into high value added activities. On this front, the programme foresees structural reforms in goods and services markets with a special emphasis on tourism.

As regards the energy sector, reforms to lower energy costs, support renewables, and take advantage of newly discovered natural gas resources are also expected to have an important impact on competitiveness, employment, growth, and energy targets.

6.1 *Avoiding a banking sector collapse*

It is important to notice that the Cyprus financial crisis was not originated by high levels of government debt, as for instance in the case of Greece. Although Cyprus did breach the 3% ceiling for the government budget deficit in 2010 due to lower than expected growth, which was a consequence of the global crisis, its debt-to-GDP ratio was 61.3% in 2010, relatively close to the 60% benchmark and significantly below the EU average (80.2%). Nevertheless, in July 2010 the Council initiated an excessive deficit procedure for Cyprus, issuing a recommendation to the country with a view to bringing an end to the excessive deficit situation by 2012. Despite sizeable consolidation efforts implying an average fiscal effort in structural terms estimated at 2.4% of GDP, significantly above the average annual fiscal effort of at least 1.5% required, the country was not able to bring the 2012 general government deficit below the 3% threshold (reaching 6.3%).

The failure to stabilize public finances was due to lower than expected growth, by-product of several shocks including the explosion of a weapons cache in July 2011 that destroyed the country's main power plant, and the credit crunch that ensuing the losses imposed on banks by the Greek debt restructuring. Failure to contain the liquidity drain in the banking sector and the continuing deterioration in public finances, despite a €2.5 billion bilateral loan obtained from Russia, led the country to seek financial assistance from Europe.²⁸ Under the circumstances, Cyprus was given a four-year extension of the deadline (to 2016) for the correction of its excessive deficit.

It is important to observe that Cyprus, before the start of the programme, had built an oversized and poorly managed banking sector (total assets reached about 800% of GDP), and a heavy exposure to

²⁸ The Russian loan obtained in 2011 was originally to be repaid by 2016, but the authorities have renegotiated the loan's terms so that repayment may take place in eight biannual instalments of about €300m between 2018 and 2021, and the original interest rate of 4.5% was reduced to 2.5%.

Greece, not only directly through government bonds and private credit, but also indirectly due to the country's dependence on Greece as a major trading partner (about 20% of Cyprus total imports and exports). In 2011, Cypriot commercial banks held about €5 billion in Greek government bonds, on which the Greek PSI imposed losses of about €3.6 billion (20% of GDP) that were further aggravated by an increasing trend in non-performing loans in both the Greek and the Cypriot market, devastating the sector (IMF, 2011). Following the Greek debt restructuring, concerns about the solvency of Cypriot banks started to rise and deposit outflows started to increase, particularly as uncertainty grew on the timing and nature of a possible government intervention.

In June 2012, Cyprus made a request for financial assistance from the EU, but it took some time for the terms to be agreed upon. To meet the deposit outflow banks relied increasingly on Emergency Liquidity Assistance (ELA) by the Central Bank of Cyprus (CBC), which reached 60% of GDP in late 2012 (largely concentrated in Laiki Bank).

When the level of emergency liquidity assistance to Cypriot banks became unsustainable, on March 25, 2013, measures were taken to avoid the collapse of the system while minimizing the strains on fiscal sustainability, jump-starting the financial assistance programme to Cyprus. During the implementation of the measures a week bank holiday was imposed, following which capital controls were introduced. The agreed financial assistance to Cyprus amounts to up to €10 billion, (€9 billion from the ESM and €1 billion from the IMF), a sum which has been estimated to be adequate to finance debt redemption, fiscal deficits, and most importantly the recapitalisation of a downsized financial sector, until the end of Q1-2016.²⁹

6.1.1 High degree of uncertainty

GDP forecasts for Cyprus are characterized by a high degree of uncertainty, mainly because the impact of the downsizing of the financial sector is very difficult to estimate. In recent times it has close similarities only to the Icelandic case, and even this comparison must be taken with caution, due to differences related to the exchange rate regime and the structure of the economy. According to European Commission and IMF reports (Appendix 1 includes a summary of selected data), the programme design has been based on the assumption of a steep recession, followed by a swift recovery after two years (European Commission, 2013d;;IMF, 2013d).

Regarding the depth of the recession, the programme assumes a cumulative GDP growth of -12.6% estimated for 2013-2014, that can be decomposed into about -6.6% due to fiscal consolidation (with an implied fiscal multiplier of 1), a negative wealth effect from the conversion of deposits into equity of about -3%, a deleveraging effect of about -2.5%, and a retrenchment due to the imposition of capital controls of about 0.5% (Cyprus Ministry of Finance, 2014). Recent data, however, reveals that the growth outcome for 2013 may be better than initially projected (around -7.7% instead of -8.7% according to Troika estimates, and -5.5 according to the Ministry of Finance latest forecasts; see IMF, 2013e).

This can be due to the fact that it is difficult to predict how the cumulative effect of the crisis is spread over time, in fact, alternative forecasts suggest that the annual contraction could be lower but protracted over a longer period of time, with growth resuming only in 2017, possibly 2016 (see Papadopoulou and Spanos, 2013). These alternative estimates also suggest that the largest annual GDP fall may not occur in 2013 as assumed in the program, but instead in 2014. This would be more similar to what has been experienced in Iceland, where the largest fall in GDP was registered

²⁹ Since the approval of the adjustment programme by the European Stability Mechanism (ESM) Board of Governors and the IMF executive board, the first two tranches of the €10 billion of agreed financial assistance have already been released. The first tranche amounted to €3.1 billion (€3 billion from the ESM, paid in two instalments, and €86 million from the IMF), and the second tranche amounted to €1.6 billion (€1.5 billion in the form of ESM notes was earmarked for the recapitalisation of the cooperative sector, and the remaining €86 million from the IMF).

in the Q4-2009, a full four quarters after the decision to allow Iceland's three largest banks to collapse in Q4-2008.

6.1.2 Fiscal consolidation and banking sector restructuring

To help Cyprus regain stability in public finances, the programme initially targeted the achievement of general government balances of -6.5% in 2013, -8.4% in 2014, -6.3% in 2015, and -2.9% in 2016, and primary surpluses of 3% of GDP in 2017 and 4% of GDP in 2018, to be maintained thereafter. This should be achieved in particular through a significant and permanent reduction in the growth in expenditure on the public sector wage bill, social benefits, and discretionary spending, while minimizing the impact of these measures on the most vulnerable groups. It is important to note that the deficit projected for 2016 is below but probably statistically indistinguishable of -3%. Given the high uncertainty surrounding GDP estimates for Cyprus, the margin of error allowed in the programme to ensure compliance by 2016 may be too narrow.

So far, Cyprus has implemented the agreed consolidation measures with relative ease. Although exceptional (one-off) compensation of provident and retirement funds in Laiki Bank (amounting to 1.8% of GDP) has led to the revision of the 2013 budget target from -6.5% to -8.3% of GDP, budget execution to date indicates that budget developments for 2013 remain on track, with the general government balance expected to settle at -7.8% of GDP, well below the revised target, on account of better than expected GDP growth for 2013.

In addition, the 2014 budget deficit is now also forecast to be better than original estimates (-7.1% rather than -8.4%).³⁰ The 2014 deficit projection however should be taken with caution due to the uncertainty associated with GDP forecasts. Budgetary performance in 2015 and 2016 hinge on the expectation of a gradual recovery and to a reduction in lump-sum retirement payments, which should compensate the higher interest bill expected to accompany.

Complementing fiscal consolidation, a range of fiscal structural reforms (pensions, health-care, tax and public administration) are also being undertaken. Given the temporary nature of many of the fiscal measures implemented so far to reduce budget deficits, long-lasting fiscal sustainability will hinge on the implementation of these reforms. It is however too early to make an assessment of their design and implementation, since most of the reform plans are still being discussed. Further, to support the effective implementation of the consolidation effort, the new Fiscal Responsibility and Budget System Law (FRBL) is being enacted. It is important, however, to ensure that the law is fully implemented, and that a truly independent Fiscal Council is promptly established and operational to help monitor the compliance with the new budgetary framework. Also crucial for the success of the programme are developments in the privatisation plan (see Appendix 3).

To support the financial reform and regain financial sector stability, Cyprus adopted a new bank resolution law requiring the participation of bank creditors, in order of seniority, in the recapitalisation of troubled banks, with creditors' claims converted into equity.³¹ It is important to note that in this case, recapitalizing the two largest banks with government funds was not an option, since this would have increased government debt (mostly held domestically) to unsustainable levels.

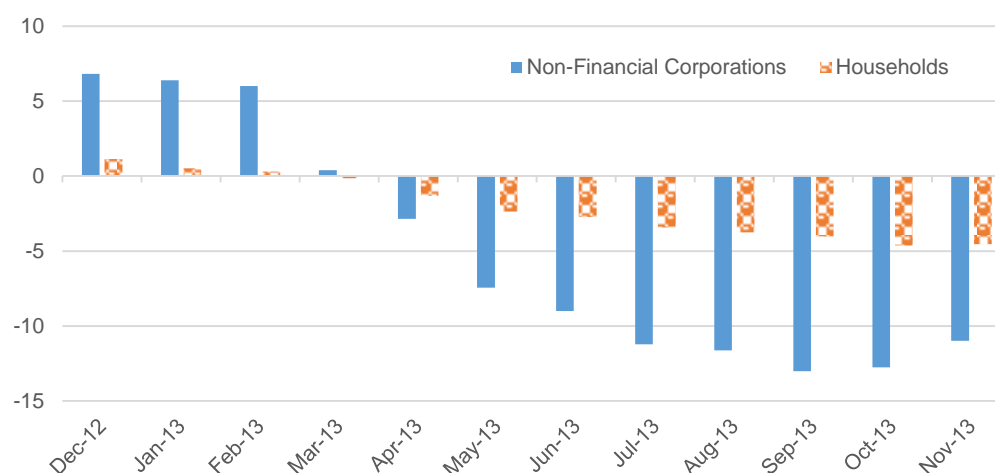
³⁰ The improved projection is due to carryover effects from the better than expected performance in 2013, to a reduction in the public sector wage bill, and to additional consolidation measures of 0.3% of GDP to be implemented in the 2014 budget, anticipating measures originally planned for subsequent years. Appendix 2 gives a summary of fiscal consolidation measures.

³¹ Under the new resolution law, the central bank was initially given the responsibility of taking decisions under the new Resolution Authority, however, in August 2013, the law was amended to give it shared responsibility with the finance minister and the head of the security and exchange commission, with decisions being now taken by majority, limiting therefore significantly the authority of the central bank in this area.

Notwithstanding this fact, both bailed-in imposed losses in Laiki Bank and in the Bank of Cyprus, as well as the restrictions imposed on the use of a significant share of the remaining portion of uninsured deposits have deteriorated the asset and liquidity position of both households and businesses, and small businesses in particular, and may have significantly impaired their ability to operate and meet their liabilities, creating a snow-ball effect of non-payments and capital losses for the bank, which is difficult to quantify a priori. Government funds (ESM financial assistance) will be used however to recapitalize the credit cooperative sector, estimated to need overall €1.5 billion.³²

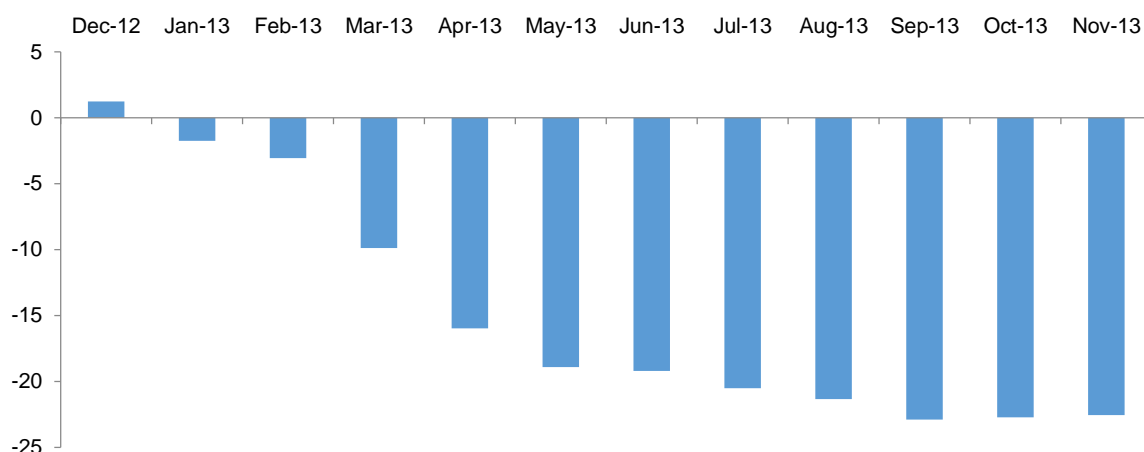
A crucial decision in the case of the Cyprus programme was the choice to resolve only one of its two large troubled banks in the hope that the surviving would soon recover. This was clearly a different strategy than that followed by Iceland, where the three largest banks were resolved. Although it is still premature to judge the selected strategy, the restructuring of the surviving Bank of Cyprus is proving to be a difficult and lengthy process and it is yet to be seen whether it can regain the trust of the public, as the bank's deposits and loans continue to decline contributing to the downward trends registered also for the overall banking system, shown in Figures 23 and 24. This uncertainty has protracted the lifting of capital controls, which restrict access of banks to sustainable sources of financing.

Figure 23. Loans to non-financial corporations and households, annual growth rates



³² The recapitalisation process requires the cooperative sector to undergo a deep restructuring coordinated by the Cooperative Central Bank (the parent institution), with the aim of merging the current 94 individual credit institutions into at most 18 and increasing efficiency.

Figure 24. Total deposits of non-MFIs held with MFIs, annual growth rates



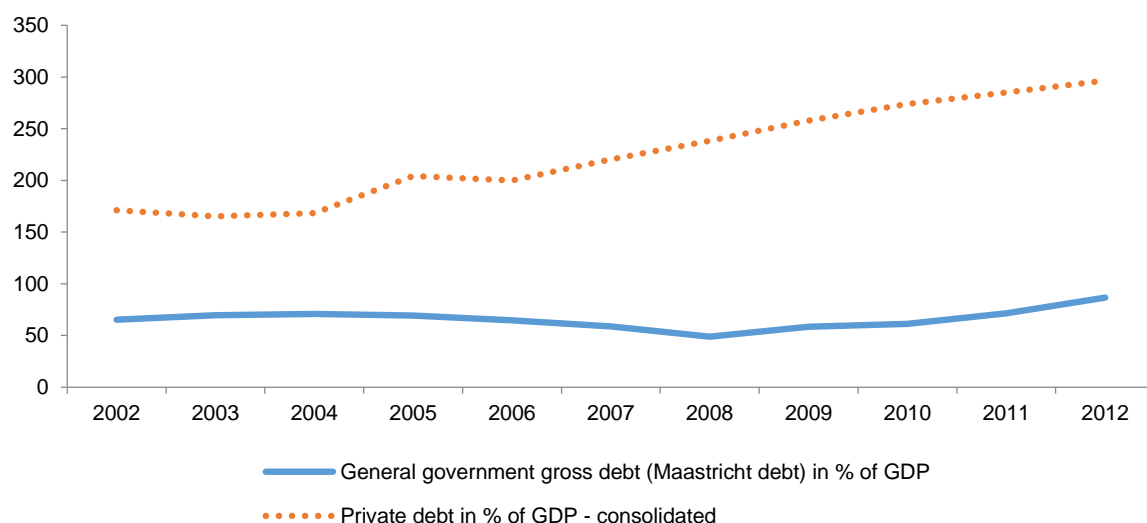
Source: Central Bank of Cyprus, Monetary and Financial Statistics, December 2013.

6.2 Revitalising the Cypriot economy

Even before the start of the program, the European Commission identified Cyprus as experiencing an erosion of its external competitiveness, and mounting external imbalances. Although fiscal imbalances have emerged mostly as a result of the sharp recession and the need for financial sector support, other imbalances had been steadily building up for some time.

The low lending rates and the easy access to credit that followed EU accession led to a rise in property prices, an unsustainable increase in private sector indebtedness (see Figure 25), and an economic boom which drove wages up through the automatic indexation system (COLA), despite slower productivity growth. These trends led to losses in cost and price competitiveness, which were translated into growing trade and current account deficits (Appendix 1 summarises the data).

Figure 25. General government gross debt (Maastricht debt) and private debt in % of GDP



Source: Eurostat.

Large imbalances were mounting in particular in the financial sector, the fourth largest in the euro area (after Luxembourg, Ireland, and Malta), with total consolidated assets of about 800% of GDP

in 2011, largely concentrated in two banks with large exposures to Greece. It can be said that Cyprus experienced in fact some form of “resource curse”, not due to the abundance of natural resources yet, but to the large influx of portfolio investments and FDI, with this windfall being used to finance excessive consumption and housing, rather than road infrastructure (including pedestrian infrastructure) and public transport, which in Cyprus is lagging behind that of its European counterparts, and to reform institutions and improve the business environment to enable other sectors of the economy to flourish.

6.2.1 Dealing with a credit crunch

The programme has assumed that a permanent downsizing and restructuring of the Cyprus financial sector would be sufficient to make it sustainable and supportive of economic growth, but it is taking time for Cypriot banks to regain access to sustainable sources of funding that can enable them to restart a healthy flow of credit into the economy. Without its firms regaining access to finance, Cyprus will be unable to broaden its external market (currently largely dominated by Greece), and to shift its supply structure towards higher value added goods and services that can help it sustain higher export revenue, for instance in the tourism industry, which has become relatively more important after the downsizing of the financial sector. A healthy financial sector will also be crucial for Cyprus to successfully pursue its ambition to become a future energy hub in the Mediterranean.³³

6.2.2 Improving the Business Environment: Lower Costs and Better Regulation

Given the importance of re-starting a healthy flow of credit to the economy as a means of restoring the country’s competitiveness and growth, the programme envisages a set of measures to strengthen the banking sector. Emphasis has been put into recapitalizing banks, reinforcing regulation and supervision, and increasing financial transparency.

One of the highest risks in this area lies on the failure to contain the increase in non-performing loans and strategic defaults associated to falling collateral values, which threat to further undermine banks’ solvency. According to Cyprus Central Bank data, non-performing loans have been increasing in 2013, to reach, in November, 39.11% of total credits among Cyprus commercial banks and 44.39% in the cooperative credit sector.³⁴ Failing to stall this trend and restore confidence in the banking sector will protract the imposition of capital controls, undermining the competitiveness of the banking sector, still heavily reliant on emergency liquidity, but it is still early to know whether the action plan which is being adopted will be sufficient.

In addition to financial sector reform aimed, amongst other objectives, at reducing firms’ financing costs, the programme also includes measures aiming to reduce the costs of labour and bringing these more in line with productivity developments, including a reform of the prevailing wage indexation system (COLA), with a tripartite agreement being pursued with social partners for the application of the reformed system in the private sector.³⁵

³³ The discovery of large deposits of natural gas off Israel’s Mediterranean coast have prompted Cyprus to auction licences for the exploration and exploitation of potential natural gas deposits off its own south coast. For the purpose of granting licenses for the exploration and exploitation of natural gas, Cyprus has defined an exploration area divided into 13 blocks. The first exploration license, for “Block 12” was granted in 2008 to the US firm Noble Energy (Noble), which in December 2011 announced a gas discovery indicating an estimated gross resource range of 5 to 8 trillion cubic feet (Tcf), with a gross mean of 7 Tcf. It is important to note that the design of the programme was based on these preliminary indicative estimates, which were what was available at the time. In 2012, another five exploration licenses were granted to the Italian Eni in consortium with South Korean Kogas (Blocks 2, 3 and 9), and to the French Total (Blocks 10 and 11).

³⁴ Bank of Cyprus Aggregate Banking Sector Data (Licensing and Supervision), February 2014.

³⁵ Details on the reform of COLA are included in Appendix 6.

Further reforms to boost competitiveness target the better functioning of product and service markets, and include the full implementation of EU law in general and the Services Directive in particular; liberalisation of regulated professions; elimination of bottlenecks in the issuance and transfer of title deeds in the housing market, which currently suffers from delays of more than three years, posing problems to property tax collection and collateral seizures; and the reform of current aviation policies which make Cyprus one of the most expensive air travel destinations in Europe.³⁶

Additional structural reforms are aimed at making the energy market more efficient, as a means for reducing energy costs. On this front, the authorities are committed to reforming the sector's market organisation and regulation in order to make it more open, transparent, and more competitive, on the basis of the principle of independent regulatory oversight, and on EU targets for energy efficiency, renewable energy and carbon emissions. Finally, the programme pays particular attention to the developments regarding the potential monetisation of natural gas deposits by Cyprus, but although there are high hopes for the sector, recent appraisals have revised downwards the estimates of resource stocks, lowering its commercial potential.³⁷

6.3 *Reversing the upward trend in unemployment*

Before the start of the program, in 2012, employment in Cyprus had already dropped considerably below the EU2020 target of 75%, to 70.2% (it dropped from 76.5% in 2008 at the start of the global economic downturn as shown in Appendix 7), while unemployment, typically low before the crisis, increased to 11.9%.³⁸ The negative labour market trends, depicted in figure 26, can be attributed to the economic recession already felt in 2012, as private and public sector deleveraging was starting to take place.

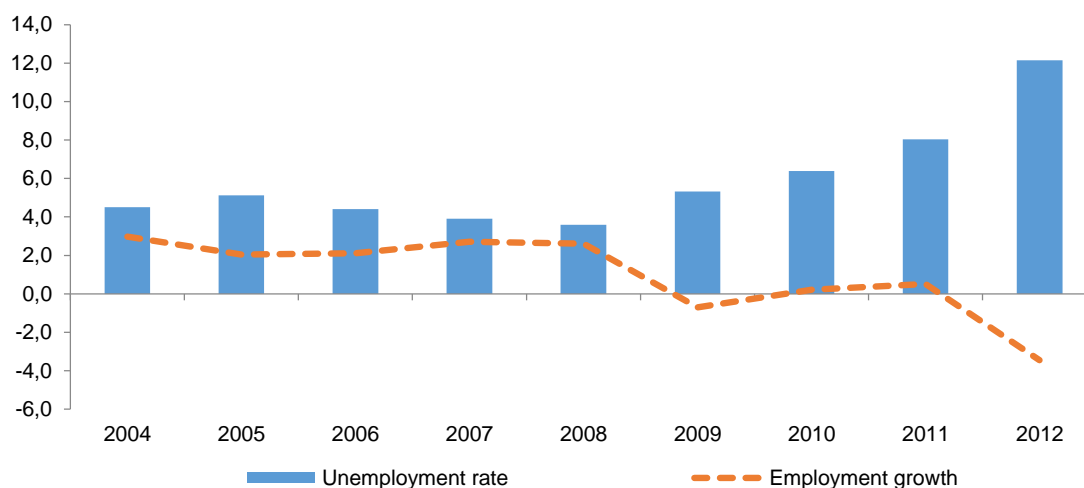
It is important to note that as the global economic crisis (2008-2009) started to unfold without Cyprus being significantly affected initially, the country received a significant influx of migrant workers, mainly low skilled. As a result, in 2011, one out of five persons in the labour force were non-Cypriot, and many migrant workers have remained in the country even after the crisis, undeclared or illegal, despite the enhancement of inspections.

³⁶ On this, the authorities are waiting for the approval by the European Commission of the plan submitted for the restructuring of Cyprus Airways. Other measures which are expected to have a positive impact on the Tourism sector include support for projects aiming to improve the tourism product, and subsidies to prolong the tourism season by two months.

³⁷ Appendix 6 summarizes developments in natural gas exploration in Cyprus.

³⁸ Employment in Cyprus is concentrated in services (76.9% in 2012), followed by industry (20.2% in 2012), and lastly by agriculture (2.9%). Virtually all businesses in Cyprus can be classified as small and medium enterprises, since they employ less than 250 persons and register an annual turnover of less than €50 million. According to the Central Bank of Cyprus the country has about 62,000 active SME's.

Figure 26. Trends in employment and unemployment in Cyprus



Source: Cystat.

The Cypriot population, on the other hand, is relatively high skilled, with the share of 30-34 year old having completed tertiary or equivalent education having reached 49.9% in 2012, well above the EU2020 target of 40%, and with 34.5% of its labour force having tertiary education, making it the country with the second most highly qualified workforce among the EU27. This level of skills, however, has not been properly utilized due to the country specialisation in low-skilled, low-technology sectors, and to its poor performance in terms of research and development (R&D), with only about 0.5% of GDP invested in R&D (mostly targeted at the public sector), compared to an EU2020 target of 3%. Until recently many young graduates were hoping to join the Cypriot oversized public sector, which represented 16.4% of the employment in 2012.

6.3.1 Deleveraging and unemployment

Following the restructuring of the Cypriot banking system, employment is expected to continue to fall in 2013-2014 alongside the expected fall in GDP growth. Unemployment is expected to accompany the deterioration of economic conditions, and is now projected to reach a peak of 19.8% in 2014, according to official estimates. At the same time, youth unemployment is now rising to unseen levels, reaching 40% of the 15-24 labour force, becoming one of the highest levels in Europe. Contributing to this trend is the difficult financing conditions faced by SME's in Cyprus, which have seen a substantial share of their working capital directly wiped out through the bail-in of uninsured deposits in the two major banks. Total losses of these companies through the deposit bail-in are estimated to amount to about €1 billion (about 6% of GDP).

With tightened credit supply, companies are expected to struggle to survive. Although there are a number of EU policy instruments providing financing for SMEs under structural and other EU funds, the exceptional circumstances in Cyprus involve a number of difficulties in the access of SMEs to these programmes.

6.3.2 Activation policies and SME support

In order to stimulate employment and growth amidst the adverse effects of deleveraging both by the public and the private sector, the authorities have announced in April 2013 a range of employment activation schemes, which should be complemented with an action plan to support youth employment, under the European Council of June, 2013, to be integrated into the broader set of activation policies, in consistency with the reform of the social welfare system (see Appendix 4)

and with budgetary targets, and further steps are being taken to increase employment in technical jobs with the operation of Post-Secondary Institutes of Vocational Education and Training.³⁹

However, many efforts need to be made (and work has started) to develop a coherent and consistent framework for the continuous monitoring and evaluation of all existing programmes to improve their efficiency. It is further important to note that the liberalisation of services markets in Cyprus and elsewhere and programs to foster innovation should support the absorption of the pool of highly qualified Cypriots into high value-added activities. Little attention has been paid, however, to expenditures in R&D, with the Cypriot target for R&D expenditure remaining particularly low at 0.5%.

Complementing activation policies, the authorities have also announced a number of initiatives to support SMEs, which are expected to have a positive impact on economic activity, together with reforms in the energy sector, incentives for the development of renewables, and natural gas exploitation, which should reduce the costs of energy (while helping to achieve EU2020 energy targets). It is important to note however that these efforts are likely to have a relatively small impact unless SMEs regain access to credit and liquidity facilities enabling them to operate and invest.

6.4 Policy challenges

It is important to note that the adjustment programme has just started in Cyprus, and that any assessment of its implementation and impact is still premature. The next six months, however will be crucial for future developments. In particular, it is important to monitor in this period the design and implementation of strategies to deal with arrears and strategic defaults to avoid snowball effects and a further erosion of banks' assets that can put further strains on the system, and to follow up on the progress along the road map for lifting capital controls. In fact, a protracted period of low confidence in the banking sector and the further tightening of credit supply conditions due to the relatively large and increasing share of non-performing loans (NPLs) in the domestic banking system and steeper than expected drop in real estate prices is one of the major risks affecting the economic recovery and the programme as a whole.

Among the set of fiscal structural measures that the Cypriot authorities need follow up on are the adoption of the new FRBSL legislation and the establishment of a truly independent Fiscal Council. These reforms are crucial to enable the government to achieve the agreed primary surplus targets established in the program. But not least important is the reform of the public administration, which is needed for improving efficiency while containing costs in the long-term. The follow up on the privatisation process in the next few months is equally important given that it is expected to raise discontent and due to its relevance for the success of the program.

As regards labour reforms, it is important to follow up on the negotiations for the adoption of the reformed wage indexation in the private sector. Potentially stronger and more protracted contraction of the economy, accompanied by worse than expected employment developments is a possibility that should be taken into account. Wage moderation can help to counter some of the downward risks to growth, which include among others a worsening of economic conditions in trade-partner countries and persistently lower consumer and business confidence in Cyprus.

7. (RE)GAINING COMPETITIVENESS, ASSURING LONG-TERM GROWTH

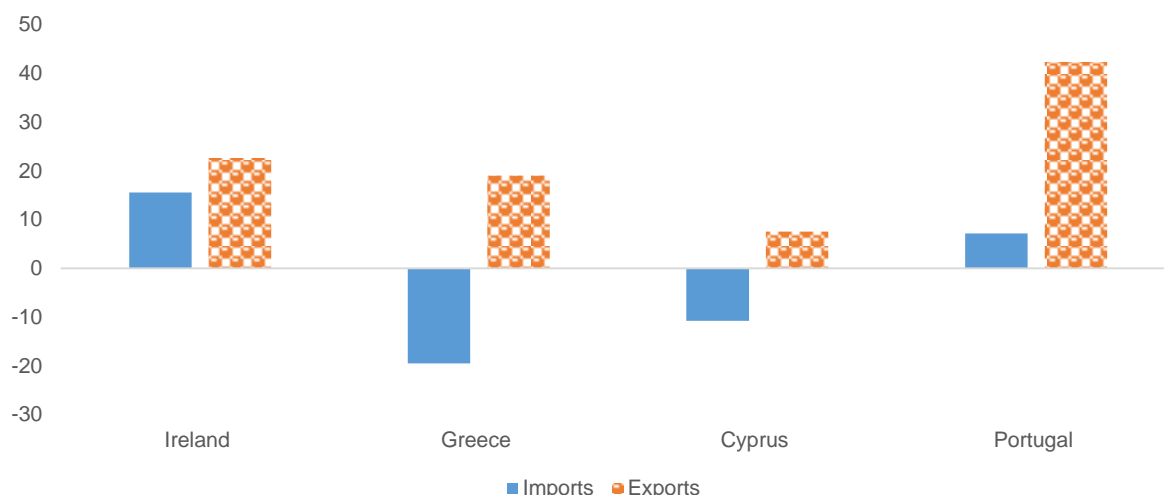
³⁹ Announced activation programmes include three new employment schemes, the continuation of schemes previously in place for the promotion of innovation and women and youth entrepreneurship, and tax relief for companies hiring new recruits.

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.

Figure 27. Changes in imports/exports of goods and services at current prices: 2009-13



Source: European Commission Services (AMECO).

Figure 27 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.

7.1 Enhancing exports through price competitiveness

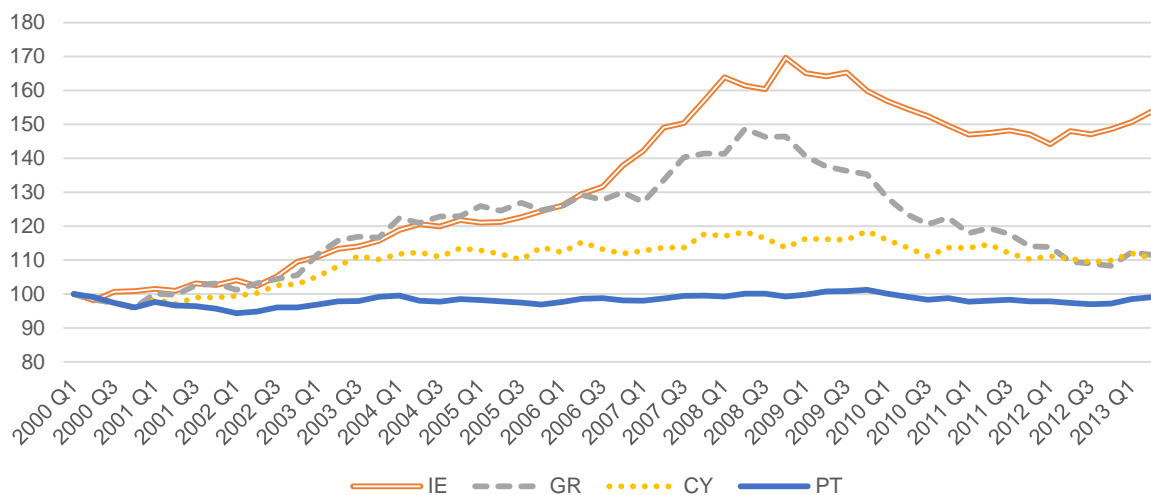
What has driven this gain in competitiveness? The first instrument described above, i.e. the internal devaluation, implied the need for peripheral countries to reduce their wages and consequently the domestic prices: the underlying economic mechanism foresees that if wages are reduced, the costs

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.

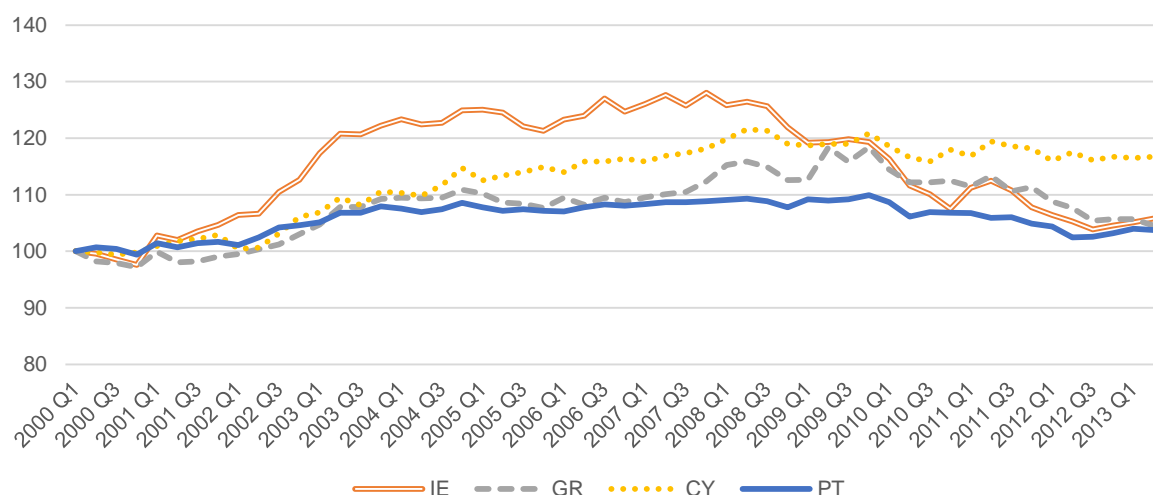
Finally, the case of Ireland is particularly interesting: while it registered a sharp decline in terms of UCL it has not yet reached the “pre-bubble” levels, as its index is now equal to that of 2007, still 50 points higher than the level of the index in 2002. The country has adjusted, instead, in terms 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 28. Harmonised competitiveness indicators based on unit labour costs: indices for the total economy (2000 Q1=100)



Source: European Central Bank.

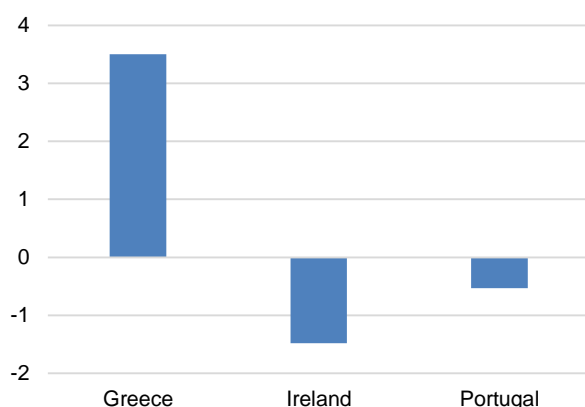
Figure 29. Harmonised competitiveness indicators based on GDP deflators (2000 Q1=100)



Source: European Central Bank.

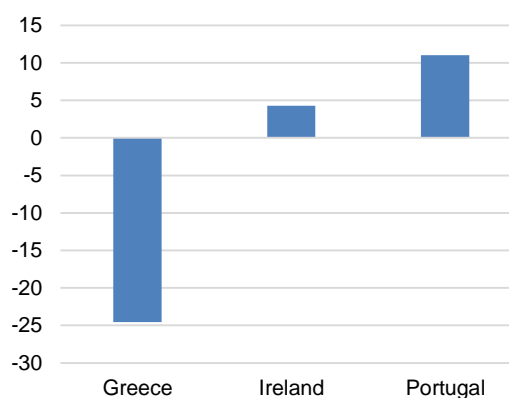
A natural question would therefore arise: why has Greece, despite the relevant adjustment both in terms of prices and in terms of labour costs, not seen its exports increase as has Portugal or Ireland? Figure 31 shows, in fact, how the performance of Greek exports (measured as gains in export market share) has largely deteriorate in the last years, in total contrast to that of Portugal and Ireland. Figure 30 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 30. Relative export prices (index change 2008-13)



Source: OECD.

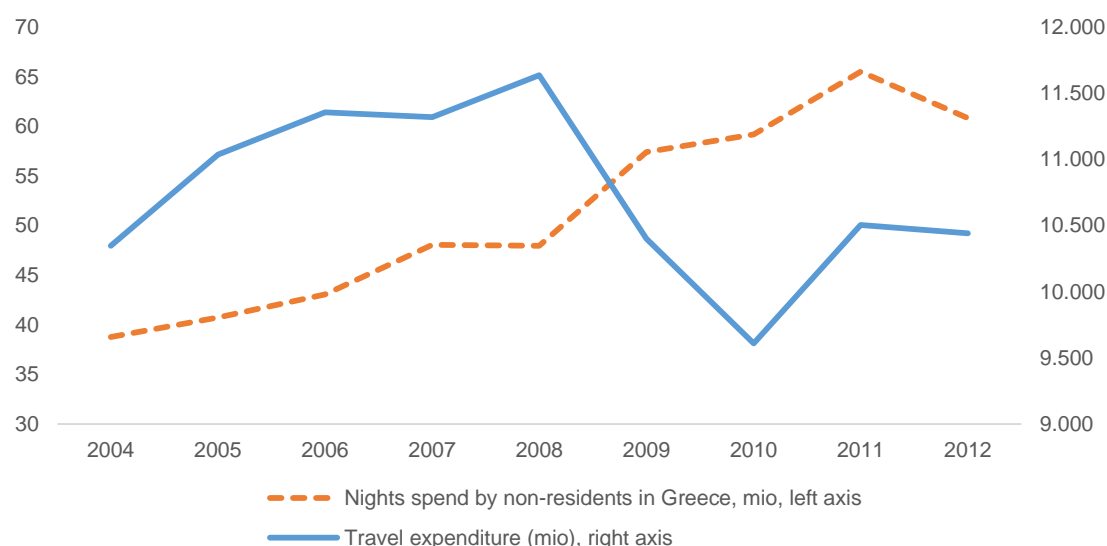
Figure 31. Goods and services export performance (index change 08-13)



Source: OECD.

Good news, however, comes from the service sector that with tourism represent a central element of the Greek economy (see Figure 32): 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 32. Development in Greek travel services



Source: Eurostat.

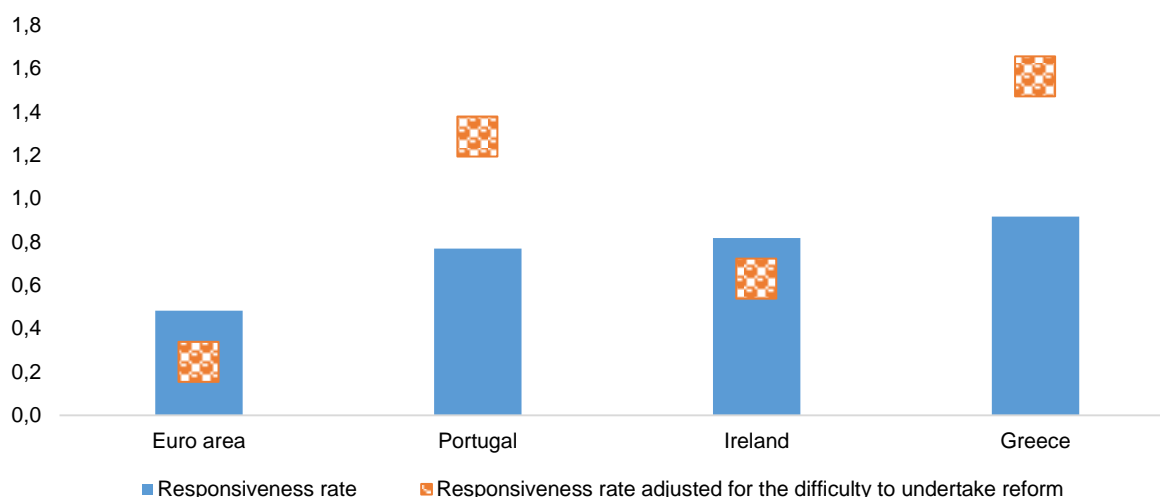
7.2 Enhancing growth through structural reforms

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 33 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.⁴⁰ 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 and Gros, 2013).

⁴⁰ 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.

Figure 33. Reform responsiveness to policy recommendations



Source: OECD.

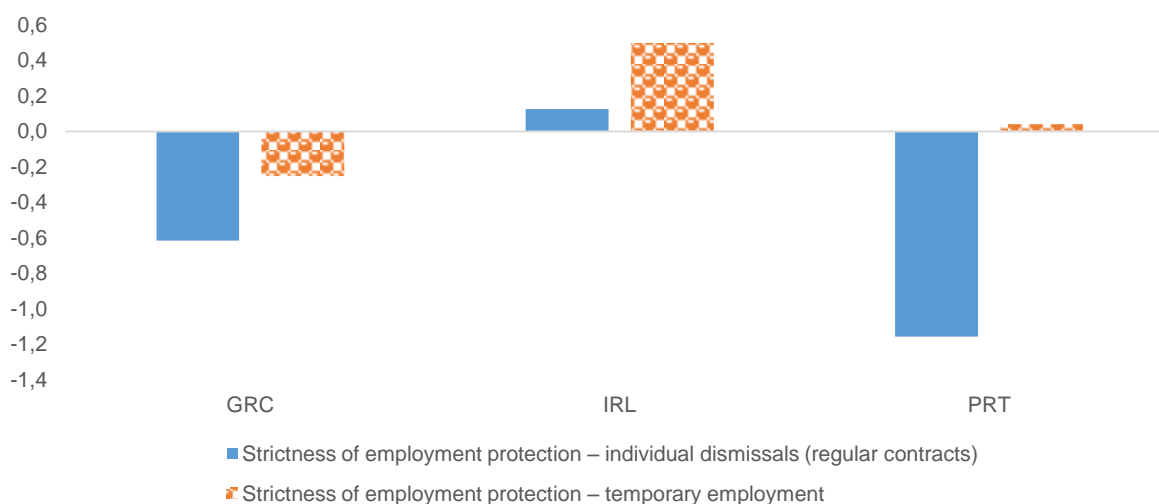
The OECD yearly recommendations focus on two large set of policy issues, labelled as labour productivity and labour utilisation (Alcidi & Gros, 2013) and in most cases the reforms approved were part of the programme assistance.⁴¹

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?

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 34): 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.

⁴¹ A recent paper by the IMF (Barbuk 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).

Figure 34. Employment protection indicators: Change 2008-13



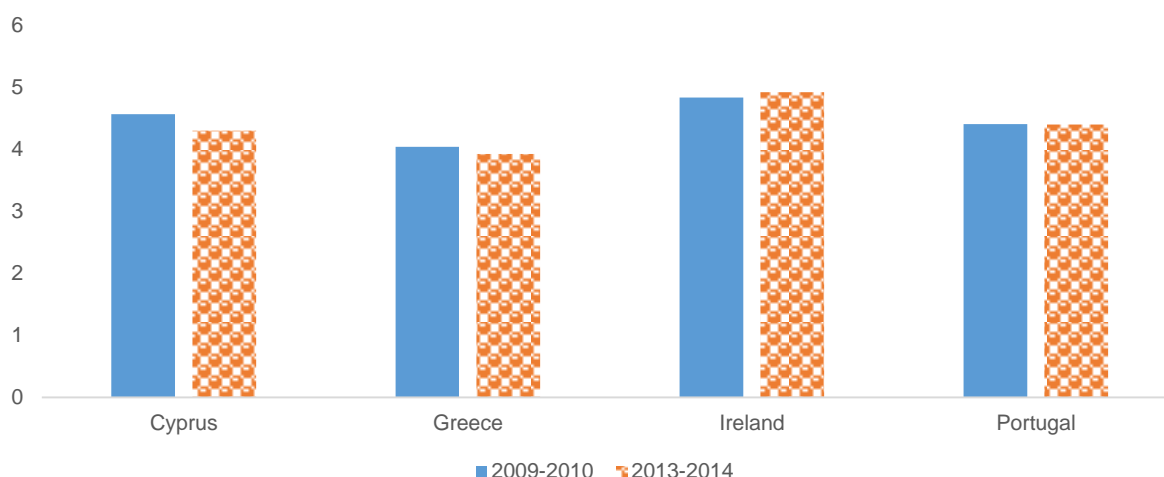
Source: Own elaboration based on OECD data.

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 35. 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 35. 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 36 and 37).

Figure 36. Labour market flexibility

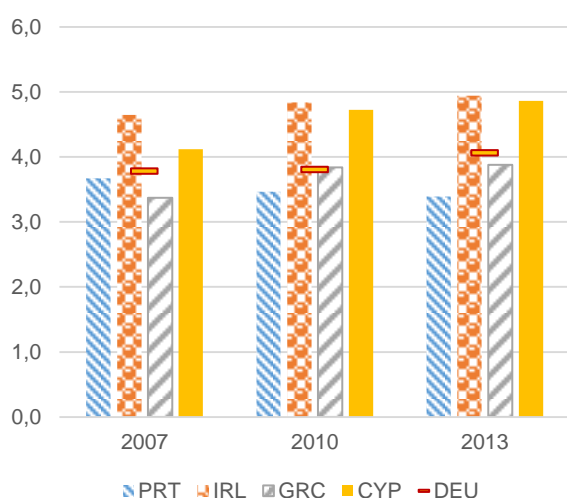
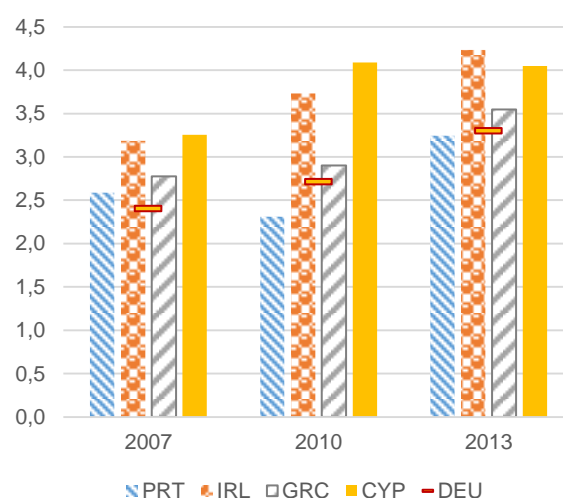


Figure 37. Hiring and firing practices



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 38. Flexibility of wage determination

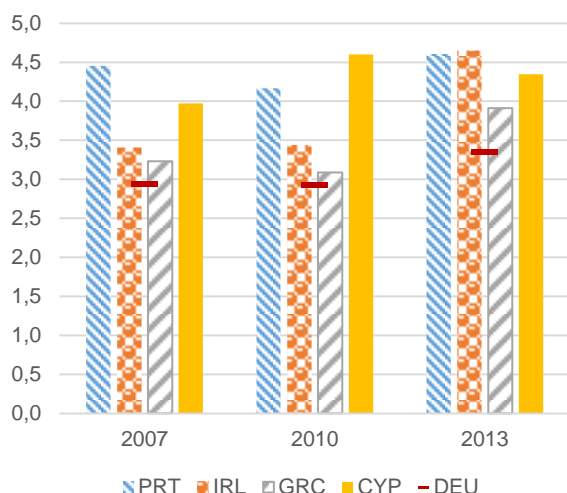
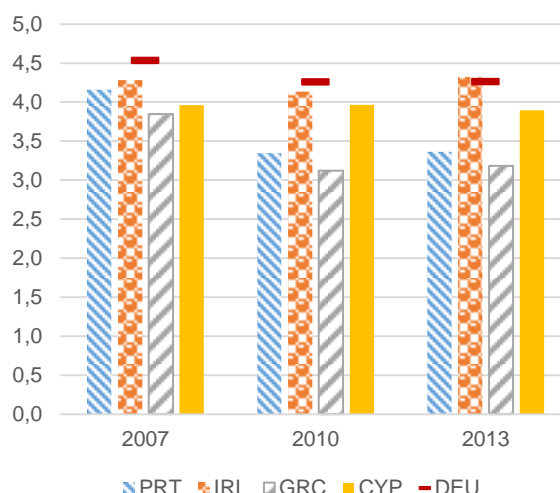


Figure 39. Pay and productivity

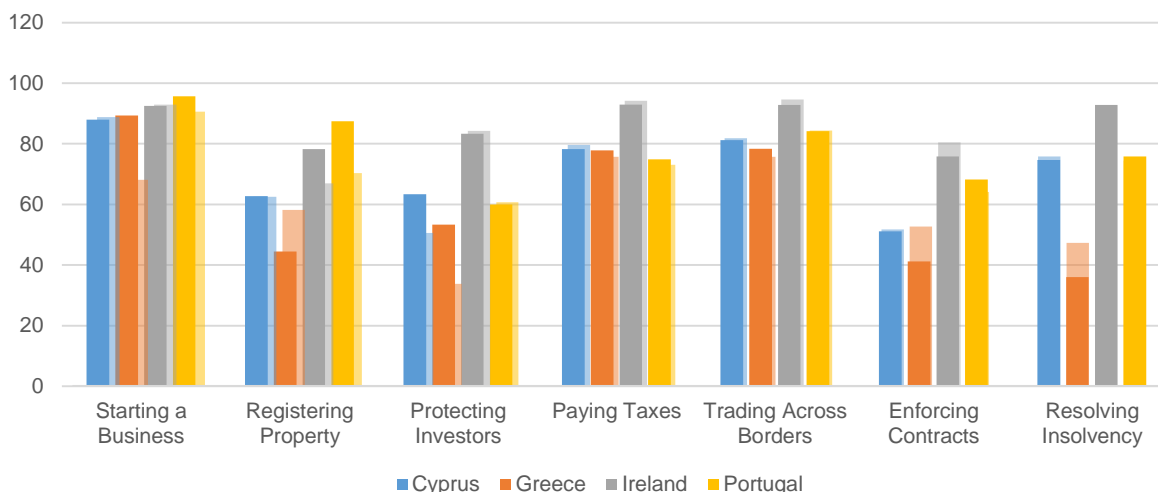


Source: Own elaboration based on WEF data.

Moving to a second set of indicators of structural reforms, the emerging picture is not necessarily the same. Figure 40 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 policies 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 40. Doing Business indicators, distance to frontier (2009 and 2013)

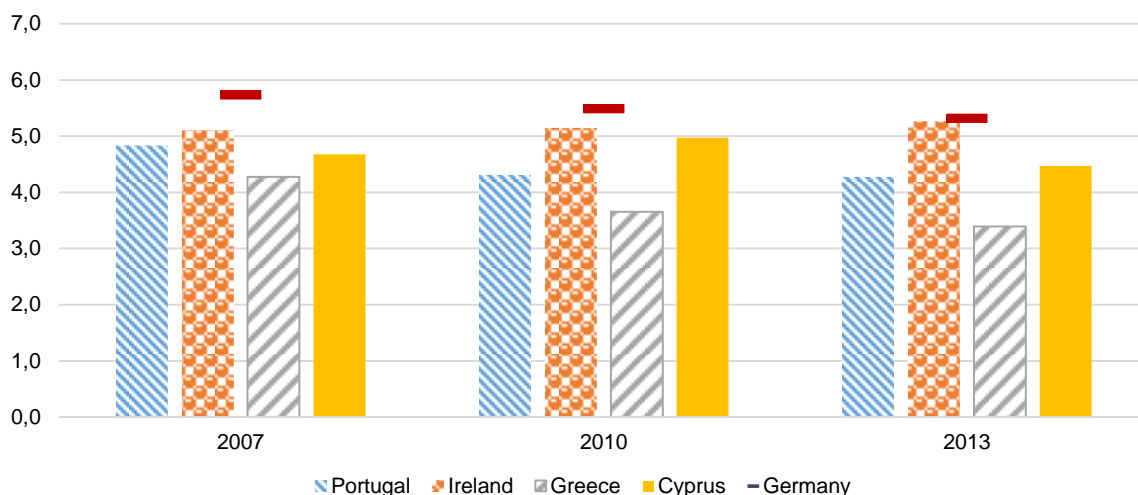


Source: Own elaboration based on World Bank data.

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 41 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 41. Public institutions, 1-7 (best)

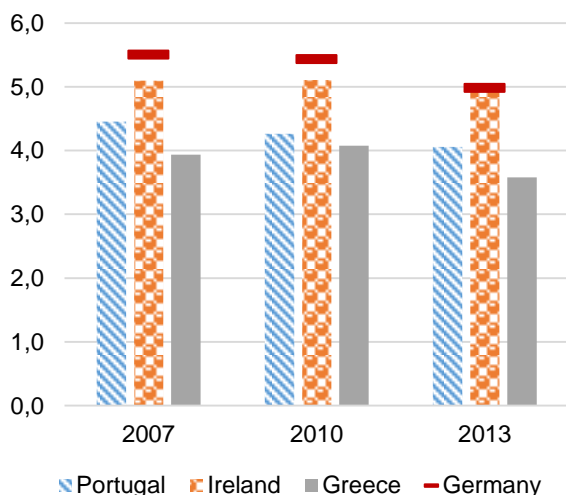


Source: Own elaboration based on WEF data.

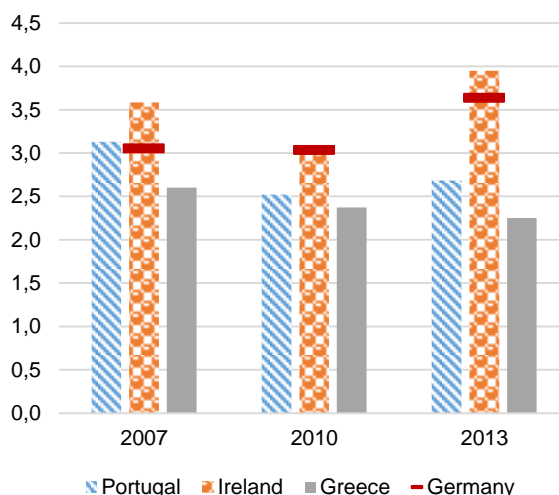
Even considering the single elements that constitute the overall index for Public Institution, the situation does not change (for Cyprus the disaggregated data are not available). While in 2013 Portugal has registered slight improvements for some indicators compared to the 2010 level (but still deterioration 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 42).

Figure 42. WEF Public institutions single indicators

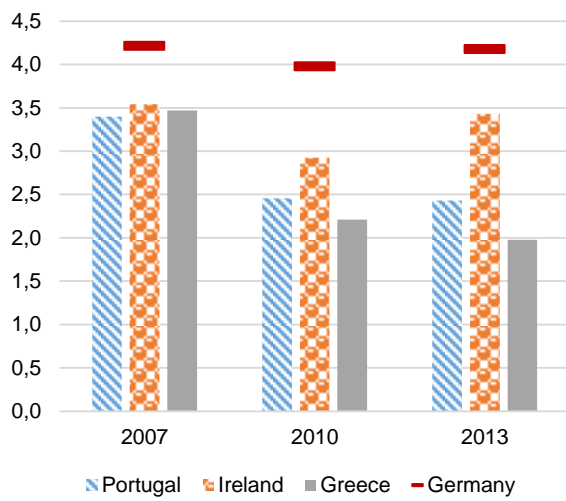
Transparency of government policy-making



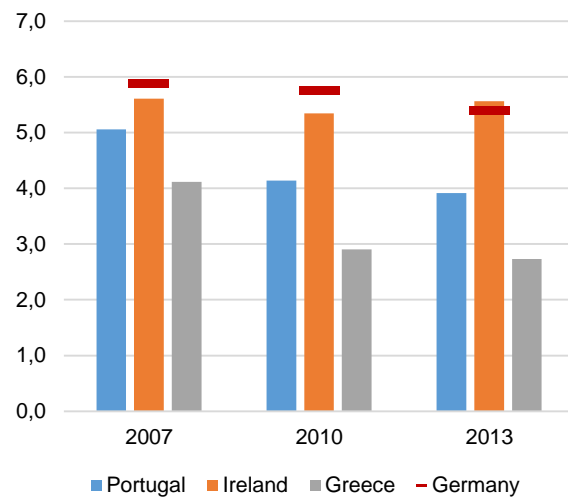
Burden of government regulation



Wastefulness of government spending



Diversion of public funds



Source: WEF and authors calculations.

8. 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, 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.

REFERENCES

- Alcidi, C. and D. Gros (2011): Adjustment Difficulties and Debt Overhangs in the Eurozone Periphery, CEPS Working Documents No. 347, CEPS, Brussels.
- Alcidi, C. and D. Gros (2013): Country Adjustment to a ‘Sudden Stop’: Does the Euro Make a Difference?, European Economy - Economic Paper No. 492, Directorate General Economic and Monetary Affairs (DG ECFIN), European Commission.
- Auerbach, Alan and Y. Gorodnichenko (2010): Measuring the Output Responses to Fiscal Policy, NBER Working Paper 16311, National Bureau of Economic Research, Cambridge/MA.
- Barkbu, B., J. Rahman and R. Valdés (2012): Fostering Growth in Europe Now, IMF Staff Discussion Note/12/07, International Monetary Fund, Washington, D.C., June.
- Barrell R., D. Holland and I. Hurst (2012): Fiscal Consolidation: Part 2. Fiscal Multipliers and Fiscal Consolidations, OECD Economics Department Working Papers, No. 933, OECD Publishing, Organisation for Economic Cooperation and Development, Paris, web: <http://dx.doi.org/10.1787/5k9fdf6bs78r-en>.
- Belke, A. (2013a): Debt Mutualisation in the Ongoing Eurozone Crisis – A Tale of the ‘North’ and the ‘South’, The New Palgrave Dictionary of Economics, Online Edition, Eds. S.N. Durlauf and L.E. Blume, Palgrave Macmillan, Houndmills, Basingstoke, web: http://www.dictionaryofeconomics.com/article?id=pde2013_D000273.
- Belke, A. (2013b): Towards a Genuine Economic and Monetary Union – Comments on a Roadmap, Politics and Governance 1, pp. 48-65.
- Belke, A., and M. Goecke (2005): Real Options Effects on Employment: Does Exchange Rate Uncertainty Matter for Aggregation? German Economic Review 6, pp. 185-203.
- Belke, A. and C. Dreger (2013): Current Account Imbalances in the Euro Area: Does Catching Up Explain the Development?, Review of International Economics 21, pp. 6-17.
- Belke, A. and G. Schnabl (2013): Four Generations of Global Imbalances, Review of International Economics 21, pp. 1-5.
- Belke, A., Oeking, A., and R. Setzer (2013): Exports and Capacity Constraints – A Smooth Transition Regression Model for Six Euro Area Countries, Ruhr Economic Paper, No. 449, University of Duisburg-Essen, Essen, Paper presented at the ECB, Frankfurt/Main, 21 November, 2013, and at the IMF, Washington, D.C., 13 December, 2013.
- Berman, N., A. Berthou, and J. Héricourt (2011): Export Dynamics and Sales at Home. CEPR Discussion Paper No. 8684, Centre for Economic Policy Research, London.
- Bouis, R. and R. Duval (2011): Raising Potential Growth after the Crisis: A Quantitative Assessment of the Potential Gains from Various Structural Reforms in the OECD Area and Beyond OECD Economics Department Working Paper no. 835, Organisation for Economic Cooperation and Development, Paris.
- Casale, A., A. Giovannini et al. (2012): The Implications for the EU and National Budgets of the Use of EU Instruments for Macro-Financial Stability, European Parliament Study, Pol. Dept. D – Budgetary Affaires/BUDG, May.

- Costa, C.S. (2014): The Portuguese Adjustment Programme, Meeting with European Parliament Delegation, 6 January – Background Information, Banco de Portugal, Lisbon.
- Cyprus Ministry of Finance (2014): Cyprus Macroeconomic Outlook in Brief, Nicosia, January.
- ECFIN (2011): The Economic Adjustment Programme for Ireland, Brussels, May.
- Eichengreen, B. (2010): Imbalances in the Euro Area, University of California Berkeley, mimeo.
- Esteves, P.S. and A. Rua (2013): Is There a Role for Domestic Demand Pressure on Export Performance? ECB Working Paper Series No. 1594, ECB, Frankfurt/Main.
- European Central Bank (2012): The Role of Fiscal Multipliers in the Current Consolidation Debate, Monthly Report, Frankfurt/Main, December, Box 6, pp. 82-85.
- European Central Bank (2013): Country Adjustment in the Euro Area, Monthly Bulletin, May, European Central Bank, Frankfurt/Main.
- European Commission (2011): The Economic Adjustment Programme for Greece – Third Review Winter 2011, European Economy, Occasional Papers 77, Brussels, February
- European Commission (2012): Box I.5: Forecast Errors and Multiplier Uncertainty, Autumn 2012 Forecast, European Economy 7/2012, Brussels, pp. 41-43.
- European Commission (2013a): The Economic Adjustment Programme for Portugal - Eighth and Ninth Review, Occasional Papers 164, Brussels.
- European Commission (2013b): Statement by the EC, ECB and IMF on the Tenth Review Mission to Portugal, Memo, Brussels, 16 December.
- European Commission (2013c): Economic Adjustment Programme for Ireland – Autumn 2013 Review, Occasional Papers 167, Brussels.
- European Commission (2013d) “The economic adjustment programme for Cyprus,” Occasional Paper 149, May.
- Gaspar, V. (2012): Portugal: Restoring Credibility and Confidence, MINISTÉRIO DAS FINANÇAS, Washington, D.C., 19 March.
- Gomes, S., Jacquinot, P., Mohr, M., and M. Pisani (2011): Structural Reforms and Macroeconomic Performance in the Euro Area Countries: A Model-based Assessment, Banco de Portugal Working Paper No. 13, Banco de Portugal, Lisbon.
- Gros, D. (2008): Fiscal Policy and the Credit Crunch: What Will Work?, Voxeu.org, 21 December (www.voxeu.org/article/fiscal-policy-and-credit-crunch-what-will-work).
- Gros, D. (2011a): Privatisation Is No Salvation, Voxeu.org, 22 June, web: <http://www.voxeu.org/article/privatisation-no-salvation>.
- Gros, D. (2011b): Greece and Portugal - Similar Fundamentals but Different Outcomes?, CEPS Commentaries, Centre for European Policy Studies, Brussels, 17 February.
- Gros, D. (2011c): How to Make Ireland Solvent, CEPS Commentaries, Centre for European Policy Studies, Brussels, 13 May.
- Gros, D. (2011d): Can Austerity Be Self-defeating?, Voxeu.org, 29 November 2011, <http://www.voxeu.org/article/can-austerity-be-self-defeating>.

- Gros, D. (2012a): Austerity is Unavoidable after a Bout of Profligacy, Voxeu, 19 July 2012, <http://www.voxeu.org/article/austerity-unavoidable-after-bout-profligacy>.
- Gros, D. (2012b): Banking Union: Ireland vs. Nevada, an Illustration of the Importance of an Integrated Banking System, CEPS Commentaries, Centre for European Policy Studies, Brussels, 18 October.
- Gros, D. and C. Alcidi (2010a): The European Experience with Large Fiscal Adjustments, Voexu.org, 28 April, web: <http://www.voxeu.org/article/european-experience-large-fiscal-adjustments>.
- Gros, D. and C. Alcidi (2010b): Is Greece Different? Adjustment Difficulties in Southern Europe, Centre for European Policy Studies, Brussels, 22 April web: <http://www.voxeu.org/article/greece-different-adjustment-difficulties-southern-europe>.
- Gros, D. and C. Alcidi (2010c): Fiscal Policy Coordination and Competitiveness Surveillance: What solutions to What problems?, CEPS Policy Brief, Centre for European Policy Studies, Brussels, 7 September.
- Honohan, P. (2013): Governor's Statement No. 30, 2013 Annual Meetings World Bank Group and International Monetary Fund, Washington/DC.
- IGCP (2013): Portugal – The Way Forward, Agência de Gestão da Tesouraria e da Dívida Pública, 17 December.
- International Monetary Fund (2011), Cyprus: 2011 Article IV Consultation – Staff Report, IMF Country Report 11/331, November.
- International Monetary Fund (2012a): October 2012 World Economic Outlook (WEO), Washington/DC.
- International Monetary Fund (2012b): Ireland: 2012 Article IV and Seventh Review Under the Extended Arrangement—Staff Report; Informational Annex, Staff Supplement; and Public Information Notice, IMF Country Report No. 12/264, Washington, September.
- International Monetary Fund (2013a): Twelfth Review under the Extended Arrangement and Proposal for Post-Program Monitoring, IMF Country Report No. 13/366, Washington/DC, 19 December.
- International Monetary Fund (2013b): Ireland's Economy Back from the Brink, But Continued Progress Needed, IMF Survey, Washington/DC, 19 December.
- International Monetary Fund (2013c): Portugal – Eighth and Ninth Reviews under the Extended Arrangement and Request for Waivers of Applicability of End-September Performance Criteria, Washington/DC.
- International Monetary (2013d) Cyprus: Request for Arrangement under the Extended Fund Facility, IMF country report, No. 13/125, April.
- International Monetary (2013e) Second review under the extended arrangement under the extended fund facility and request for modification of performance criteria, IMF Country Report No.13/374, December.
- Minsky, H. (2008): Stabilizing an Unstable Economy, McGraw Hill Professional.

- OECD (2011): Tax Administration in OECD and Selected Non-OECD Countries: 2010 Comparative Information Series, OECD Publishing, Organisation for Economic Cooperation and Development, Paris.
- OECD (2013): Economic Policy Reforms 2012. Going for Growth, Organisation for Economic Cooperation and Development, Paris, web: www.keepeek.com/Digital-Asset-Management/oecd/economics/economic-policy-reforms-2012_growth-2012-en.
- Papadopoulou, N., and A. Spanos (2013): A Small Macroeconometric Model for the Cyprus Economy, Central Bank of Cyprus Working Paper 2013-02, Nicosia.
- Pesaran, H.M., and B. Pesaran (1997): Working with Microfit 4.0 – Interactive Econometric Analysis, Oxford University Press.
- Pisani-Ferry, J., A. Sapir and G. Wolff (2013): EU-IMF Assistance to Euro-Area Countries: An Early Assessment, Bruegel Blueprint 19, Bruegel, Brussels, May.
- Reinhart, C. and K. Rogoff (2010): This Time Is Different – Eight Centuries of Financial Folly, Princeton, NJ: Princeton University Press.
- Sanchez, J.L.D. and A. Varoudakis (2014): Tracking the Causes of Eurozone External Imbalances: New Evidence, Voxeu.org, 6 February (www.voxeu.org/article/causes-eurozone-external-imbalances).
- Schiantarelli, F. (2010): Product Market Regulation and Macroeconomic Performance: A Review of Cross Country Evidence, in : Loayza, N. and L. Servén (eds): The Microeconomic Underpinning of Growth, World Bank, Washington, D.C.
- Sinn, H.W. (2013): Austerity, Growth and Inflation - Remarks on the Eurozone's Unresolved Competitiveness Problem, CES-ifo Working Paper No. 4086, Munich.
- Tsibouris, G.C., Horton, M.A., Flanagan, M.J. and W.S. Maliszewski (2006): Experience with Large Fiscal Adjustments, Occasional Paper no. 246, International Monetary Fund, Washington/DC.
- Whelan, K. (2013): Ireland's Promissory Note Deal, Forbes, 11 February.
- Wise, P. (2014): Portugal Complains to MEPs over Handling of Bailout by 'Troika', Financial Times, 7 January.

APPENDIX 1. CYPRUS: SUMMARY OF SELECTED DATA AND FORECASTS

Table 1: Key Macroeconomic Developments

	Forecats	2011	2012	2013	2014	2015	2016
GDP growth	Program April 2013	0.5	-2.4	-8.7	-3.9	1.1	1.9
	Program Revised			-7.7	-4.8	0.8	1.9
	MoF October 2013 ¹			-7.0	-4.5	0.5	1.0
	MoF January 2014 ¹			-5.5	-4.5	0.5	1.0
	Sp&P (2013) ²			-5	-5.6	-4.1	-1.5
Employment growth	Program April 2013	0.4	-4.2	-8.4	-3.8	1	1.7
	Program Revised			-6.3	-4.4	0.8	1.7
	Sp&P (2013)*			-4.5	-5.6	-5.2	-2.2
Unemployment rate	Program April 2013	7.9	11.9	17.5	20	19.2	18
	Program Revised			16.7	19.8	19	17.7
	Sp&P (2013)*			17.5	20.1	22.1	21.8

Sources: EU Commission and *Papadopoulou, N., and Spanos, A. (2013), "A Small Macroeconometric Model for the Cyprus Economy", Central Bank of Cyprus Working Paper 2013-02.

Table 2: Key Budgetary Developments and Revised Forecats (% of GDP)

	2010	2011	2012	2013	2014	2015	2016
EDP budget balance	-5.3	-6.3	-6.4	-7.8	-7.1	-6.1	-2.8
Primary budget balance	-3	-4	-3.3	-3.6	-3.1	-2.1	1.2
EDP gross debt	61.3	71.5	86.6	113.7	122.1	126.2	123.5
Net Debt*	37.6	42.6	54.7	62.4	-	-	-

Sources: EU Commission and *ECB (Liabilities – Assets; 2013 data corresponds to 2013: Q2)

Table 3: Key External Developments and Revised Forecats (% of GDP)

	2010	2011	2012	2013	2014	2015	2016
Trade Balance Goods	-26.8	-24.3	-21.7	-17.2	-15.4	-15.4	-15.5
Trade Balance Services	20.6	20	19.1	19.4	19.8	19.9	20.2
Trade Balance	-6.2	-4.3	-2.6	2.2	4.4	4.5	4.7
Current account deficit	-9	-4.7	-6.8	-1.4	0.3	0.2	0

Source: European Commission

APPENDIX 2. CYPRUS: SUMMARY OF FISCAL CONSOLIDATION MEASURES

Fiscal Measures with Impact in 2012 and 2013

The main fiscal measures implemented so far on the expenditure side include a scaled reduction in the emoluments of public and broader public sector pensioners and employees, a freeze on the increments and general wage increases in the public and broader public sector (including state officials, permanent secretaries and members of the house of representatives), and the suspension in the public sector of the automatic system for wage indexation to inflation, known as COLA (cost of living agreement), until the end of the program. There has also been a reduction in the allowances for public sector employees (such as secretarial services, representation, hospital allowances, and daily overseas subsistence allowance) as well as a reduction of certain benefits and privileges for state officials and senior government officials (e.g. business class travel, duty free vehicles).

A series of measures have also been implemented to reduce social security and pension expenditures. Social security expenditures have been reduced (by about €113 million) through the abolition of a number of redundant and overlapping schemes. Pension expenditures have been reduced through, among other measures, a freeze on public sector pensions, an increase in the statutory retirement age by 2 years, and the introduction of an early retirement penalty of 0.5% per month of early retirement so as to make it actuarially neutral.

Additional expenditure measures include the reduction of transfers to state owed enterprises and semi-public institutions (about €25 million); budget reductions for semi-governmental organizations through activity reducing measures; reduction of expenditures related with housing schemes (at least €36 million); and a series of measures aimed at reducing health care expenditures. These measures consist mainly of reduction of exemptions, increases in fees to reflect associated costs, introduction of financial disincentives to discourage the use of emergency care for non-urgent situations, as well as the provision of unnecessary laboratory tests and pharmaceuticals.

In order to ensure the sustainability of expenditure reduction, a plan for downsizing the public sector through a reduction in the number of employees started to be implemented. The first phase of this plan consists of a freeze on hiring at the entry level and restrictions on other types of recruitment to one for every four retirees until 31 December 2016, and of the adoption of measures to enforce mobility of civil servants within and across ministries and other government entities. The second phase of the plan foresees the abolition of at least 1880 permanent jobs over the period 2013-16.

On the revenue side, the main fiscal measures with effect so far include the introduction of a temporary contribution in the public, broader public, and private sectors on gross earnings and pensions to be levied until 31 December 2016; an increase in the statutory corporate income tax rate to 12.5% and in the tax rate on interest income to 30%; an increase in the standard VAT rate from 17% to 18% (in 2013) and to 19% in (2014), which is still well below the EU average (21.3% in 2013), and well below the maximum rate applied in Europe (27% in Hungary); an increase in the fees for public services by at least 17% of the current values; and the inclusion of pensionable and tax-free allowances of state officials (including permanent secretaries and members of the house of representatives) in the calculation of their taxable income, and the introduction of a contribution of 6.8% on their pensionable earnings. Additional revenue measures implemented include the increase in the bank levy on deposits from 0.095% to 0.11% in 2012 and to 0.15% in 2013, with 25/60 of the revenue to be deposited on a Financial Stability Fund; increases in excise taxes (tobacco products, beer, ethyl alcohol, and oil products); and the introduction of a tax of 20% on gains distributed to winners of betting by the Greek Organisation of Football Prognostics S.A. (OPAP) and the National

Lottery for winnings of €5,000 or more. Additional measures targeting an increase in revenues include the abolition of all exemptions in place regarding the payment of the annual company levy. In addition, new legislation ensures that pension entitlement accrued after January 2013 are considered as personal income and are taxable even if received in the form of a lump-sum payment. Employees have the option to convert lump-sum payments into an actuarially equivalent annuity.

Fiscal Measures with Impact in 2014

This fiscal consolidation has been further reinforced in the 2014 budget, which reflects a reduction in total social transfers by about €28.5 million, to be achieved by streamlining and better targeting child benefits and educational grants, and by abolishing social cohesion benefits provided by the welfare services. The 2014 budget also includes 3% wage reduction for public and broader public sector employees.

The budget also introduces a fee on monthly transportation cards for the use of public transportation services by students and pensioners. On this front it is important to note that the usage of public transportation is already relatively low in Cyprus, that traffic congestion and CO2 emissions are significant problems in urban areas. The 2014 budget also foresees savings in expenditures on education through a range of measures, including a reduction in the number of teachers seconded to the Ministry of Education and Culture; the removal of 1:1.5 teaching time ratio from evening schools of general and technical and vocational education; the elimination of teaching time concession to teachers for being placed in two or more educational districts; the elimination of mentor components for pre-service and in-service training for newly appointed teachers; and the reduction of the cost of afternoon and evening programmes. It is important to note however, that schools schedules in Cyprus are already relatively strict and do not support extending parents working hours, or an increase in women participation into the labour force. Reforms of working schedules should be coordinated with changes in school schedules in order to be feasible.

On the revenue side, the 2014 budget foresees an increase the standard VAT rate from 18% in 2013 to 19% in 2014, and of the reduced VAT rate from 8% to 9%. It is also foreseen an increase in social security contributions by an additional percentage point on pensionable earnings (0.5 of a percentage point from employees and 0.5 of a percentage point from employers, and 1 percentage point in the case of self-employed persons). Taxes on motor vehicles have increased through the introduction of an annual road tax, changes in registration fees, and excise duties, including motor fuel duties, following the recommendation of a study undertaken by the University of Cyprus, on the basis of environmentally-friendly principles.

The authorities are also committed to take permanent additional expenditure and revenue measures amounting to about ⅓% of GDP in an effort to advance part of the future consolidation effort. These measures include further reductions of public sector allowances, measures to streamline overtime compensation, further reduction of pension payments and the abolition of income tax exemption for certain pension schemes, the reduction of the tax-free threshold for lottery gains and the introduction of a contribution of 3% on salaries of casual employees in the public sector receiving gratuity.

APPENDIX 3. CYPRUS: REFORM OF WORKING TIMES IN THE PUBLIC SECTOR

Prior to reform, the regular working time for the public sector was mornings from 7:30 to 14:30 Monday to Friday, and Wednesday afternoon from 15:00 to 18:00 (excluding the period from 1st of

July to 31st of August). In January 2013, public servants were given a choice of starting work at 7.30am or 8.30am and finishing at 3pm or 4pm, accordingly. From 1st of September 2013, a choice was given between regular working times of 8am to 3.30pm or from 9am to 4.30pm. Following strong opposition from labour unions, and also due to the fact that school hours have not been changed, with limited after school facilities, regular working times are to be set back by half an hour, starting in January 2014, with regular working times now changing to 7:30 to 15:00, or 8:30 to 16:00. To reduce overtime related costs to the public sector wage bill, working time is to be made more flexible so as to cover - as a minimum - service hours from 7:00 until 17:00 in the entire public sector and service hours from 7:00 to 19:00 for public sector services with extended operating hours (including, but not limited to, healthcare and security), under regular working time. It is not easy, however, to see how this will operate in practice.

APPENDIX 4: FISCAL STRUCTURAL REFORMS

Pension Reform

With regards to pension reform, the Cypriot authorities have already introduced a series of measures (including limiting entitlement, increase in contributions, and increase in retirement age), which according to the results of the actuarial study are sufficient to ensure the long-term financial sustainability of the system through 2060. Additional measures aimed at further ensuring this sustainability include legislation limiting total annual public pension benefits to 50% of the official's carrier for Members of the House of Representatives (prior action), and guaranteeing that all reforms that apply to public sector employees also apply to the broader public sector and to hourly-paid public employees.

Health Care Reform

Structural reforms aimed at improving the cost-effectiveness of the health care system include the restructuring of public hospitals according to the action plan approved by the Council of Ministers end-June 2013, to be completed by the second quarter of 2015. In addition, the authorities should submit by January 2014 a plan to implement a National Health System, to be in place end-2015. There is also a commitment on the adoption of a coherent regulatory framework for pricing and reimbursement of goods and services based on the actual level of costs incurred (with an interim report due by Q4-2013). In addition there should be a review of eligibility criteria for free health services, in line with eligibility criteria for social assistance, and possibly the establishment of a system of family doctors to serve as gate-keepers to access to further levels of care.

Revenue Administration Reform

Another important set of reforms for increasing the sustainability of public finances target the improvement of revenue administration. On this front measures are being taken for the integration of the Inland Revenue Department and VAT services into a new function-based tax administration, including the establishment of a High-Level Steering Committee and an Executive Technical Committee to oversee the implementation of reforms. The final reform implementation plan was to be approved by the government by Q4-2013, along with a work program of joint audits to target high-risk taxpayers and large traders. In addition, legislative amendments will increase the collection enforcement powers of the revenue administration. Immovable property tax reform is also underway, and a new system of market valuations for estimating the tax base is to be adopted by Q3-2014, on the basis of technical assistance and various studies. It is important to note that property tax collection has been made extremely cumbersome by the long delays in the transfer of property rights from developers to property buyers, which can take several years in Cyprus. In cases where the registered property owner is still the developer, the latter pays the property tax and can

claim it from the unit holder. In cases where the unit holder pays an amount that is higher than they would have paid had they owned the property at the time of the taxation, the unit holder can claim back the difference from the Income Tax authorities once the title deed is issued. This is a bureaucratic process difficult to administrate, which will benefit significantly from the reform of the system for issuing and transferring title deeds, foreseen in the package of structural reforms for the housing market, and due by Q4-2014. The current complexity of the system has led to non-negligible non-compliance, as shown in a list presented by the Inland Revenue Department to parliament on December 18, 2013, detailing individuals and companies who failed to pay the immovable property tax by the due date (November 15), including thirty two property development companies representing about €10 billion in uncollected taxes (Politis Newspaper, December 19, front page).

Public Administration Reform

A thorough reform of the public administration is also an important priority of the adjustment program. The public sector represents a large share of the public sector in Cyprus and reforms are essential to ensure an efficient use of resources, while guaranteeing the quality of the services provided, and the effective implementation of the public financial management system reforms. Reforms of the working times for the public sector in order to increase productivity, increase the time-span for communicating with western Europe, including Brussels, and reduce overtime payments, have been had strong opposition from Trade Unions and have been difficult to implement (see Appendix 3). In addition, an independent external review is being undertaken by the World Bank and the UK public administration (due by Q3-2014), with the view of introducing an appropriate system of public sector remuneration and working conditions (e.g. annual vacation leave, sick leave, maternity leave, working time), in relation to the private sector, to other EU countries, and to best practices; and with the view of introducing a new performance based appraisal system in the public sector, for development and promotion purposes, linking performance with the remuneration system. A reform will then be implemented on the basis of the findings of this review, in consultation with the programme partners, by Q4-2014. There will also be sectoral reviews focusing on reforming the organisational structure and size of relevant ministries, services, and independent authorities, organized in batches, the first of which should be implemented in Q2-2014 (Ministries of Agriculture, Education and Health, as well as local government and the Department of Registrar of Companies and Official Receiver), and the last in Q1-2016 (remaining Ministries).

Reform of State-Owned Enterprises and Privatization

To improve efficiency and reduce the risks to public finances, the authorities are to adopt legislation regulating the creation and the functioning of State Owned Enterprises (SOEs) at the central and local levels, which will enhance the monitoring powers of the central administration, including reporting on SOEs in the context of the annual budgetary procedure (draft law due by Q4-2013). In addition, existing SOEs are to be restructured or privatized according to plans submitted by the government. The privatization process includes the privatization of important state-owned enterprises, including the Cyprus Telecommunications Authority (Cyta) and the Cyprus Port Authority (CPA) by the end of 2015, and of the Electricity Authority of Cyprus (EAC) by September 2017. In the case of Cyta, the privatization plan foresees employee participation, with the percentage to be decided by March 2015; with the remaining shares to be offered to a strategic investor. The privatization of Cyta is seen as relatively easier, since the company already operates in relatively competitive environment. In the case of ports, the government will auction licences for their commercial exploration, while the Cyprus Port Authority (CPA) will retain only regulatory functions. The privatization of the Electricity Authority of Cyprus (EAC) is seen as relatively more complex, as the company has been negatively affected by a combination of high costs and low demand, and is therefore planned to be finalized only by tend of 2018. The privatization plan

foresees the unbundling of EAC operations into electricity generation, high voltage transmission network, low voltage distribution network, and electricity supply. Other state owned organizations to be privatized include the Cyprus Stock Exchange and the State Lottery. The plan also envisages the selling of: (i) the Cyprus State Fair Authority's immovable property; (ii) other real estate owned by the state; (iii) the state's 51% stake in Forest Industries; and (iv) the state's 11.9% stake in the Pancyprian Bakers Company.

Welfare System Reform

The reform of the Welfare System is centred on the introduction of a new Guaranteed Minimum Income (GMI) scheme, which aims to ensure adequate and equitable protection of vulnerable groups, while preserving work incentives. The system is based on the definition of minimum consumption basket covering basic needs in order to achieve a decent standard of living. The cost of this basket will define the GMI. The final design of the reformed social welfare system, including decisions on the type, level and eligibility criteria for GMI and any remaining benefits (including targeted education and child benefits), consistent with the 2014 and medium-term budget ceilings, should be approved by the Council of Ministers by end-March 2014, after consultation with social partners, and the reform is to be implemented by end-June 2014 (existing structural benchmark). As part of the reform, all the relevant competences and responsibilities related to the administration and provision of all social benefits are to be transferred to the Ministry of Labour and Social Insurance, which should be appropriately equipped in terms of financial and human resources (to be reassigned from other departments of the public administration as needed by April-2014). Only benefits related to education and displaced persons will remain under the administration of the Ministry of Education and Culture, and the Ministry of Interior, respectively.

APPENDIX 5. CYPRUS: RECAPITALISATION OF THE BANK OF CYPRUS AND CREDIT COOPERATIVE SECTOR

The recapitalization process of the Bank of Cyprus, finalized in July 2013, resulted in a 47.5% (€3.9 billion) conversion of uninsured deposits into equity. The restructuring raised the bank's share capital to approximately (€4.7 billion) as of end of September 2013, implying a shareholder structure of 81.4% for bailed-in depositors, 18.1% for Laiki Legacy, and 0.5% for other shareholders. The only shareholder holding a share higher than 5% is Laiki Legacy. At the end of September 2013 the bank's total equity, including accumulated losses amounted to 2.8bn, implying a Core Tier 1 capital ratio of 10.2%, and a capital ratio of 10.4%. Following this recapitalization the bank has exited resolution and regained ECB counterparty status. A General Meeting took place on September 10, 2013, to appoint a new Board of Directors, and on 22 October the Board of Directors appointed a new CEO.

Due to the uncertainty regarding deposit outflows and non-performing loans, and to the still limited funding options for the Bank of Cyprus, 37.5% of its initial uninsured deposits (about €3.1 billion) have been converted into time deposits with the bank, equally split into time deposits with maturities of 6, 9, and 12 month subject to restrictions on termination as stipulated in the capital controls legislation in place, and extendable by another 6, 9, 12 months, if the liquidity position of the bank remains unchanged. Adding to the 15% of initially uninsured deposits freed in 2013, in January 2014, the Bank of Cyprus has also decided to release the batch of time deposits maturing in January (the 6-month deposits), as a sign of stability.

Under way is also the restructuring of the credit cooperative sector, which included 93 credit cooperatives. An assessment of the capital needs and viability of individual institutions, which included all credit cooperatives, indicates that the sector remains solvent overall but it is

undercapitalized. Its capital needs are estimated to amount to €1.5 billion (to ensure a core Tier 1 ratio of 9% at the sectoral level and 4% at the individual level, in line with European practices for credit cooperatives). Following the approval of the restructuring plans submitted to the European Commission, the sector will be recapitalized by this amount (already deposited in the form of bonds in a Central Bank of Cyprus account to boost confidence in the system). The funds are to be initially injected in the Cooperative Central Bank (CCB), which will be 99% state-owned and will act as parent bank of the consolidated credit cooperative institutions, being the central service provider and taking responsibility for all strategic and operational aspects of the sector, including risk policy and management, as well as strategic management and monitoring of NPLs. To insure absence of political interference in this sector, legislation has been passed, establishing a Management Unit under the Ministry of Finance to manage the State's majority stake in the sector, under technical independence, and guaranteeing that the sector, including the Cooperative Central Bank, will operate on a commercial basis, without political interference in its business decisions. The authorities have argued that this structure would be easier to manage than an independent resolution fund, for instance. The restructuring of the sector envisages its consolidation into at most 18 institutions by the end of March 2014, based on efficiency, viability, and logistical grounds, while trying to preserve the role of these institutions. Cooperative credit institutions that subsequently become unviable will be required to merge with viable ones. Upon completion of each legal merger, the Cooperative Central Bank will inject capital into them to ensure compliance with the 4% individual core Tier 1 ratio, taking a 99% stake. This process should be finalized by the end of March 2014. As of December, 2013, the first mergers had been completed (38 credit cooperative institutions have been merged into 9 entities) according to the agreed timetable. This restructuring plan envisages the possibility for the sector to exit state control. Following the capital injection, and provided adequate capital ratios are maintained, the credit cooperative institutions and the Cooperative Central Bank will be able to buy back shares from the state and regain their mutual status, but no specific timetable was defined for this process to take place.

APPENDIX 6. CYPRUS: REFORMING THE WAGE INDEXATION SYSTEM

As embedded in the 2013 budget and in the Medium-Term Budget, the reform foresees partial rather than full indexation, with the rate of wage indexation being set at 50% of the rate of increase of the underlying price index over the previous year, to take place on the 1st of January each year, and therefore at a lower frequency than before (every 12-months instead of 6-months). It also allows adjustments to be suspended in case of adverse economic conditions, such that if in the second and third quarters of a given year negative rates of growth of seasonally adjusted real GDP are registered, no indexation will be effected for the following year (under this umbrella, the COLA has been now suspended for the wider public sector until the end of the programme).

APPENDIX 7. CYPRUS: EU2020 COMPLIANCE

Table 4: Headline Targets, National Targets and National Level

EU2020 Compliance					
Objectives	EU Target	Cyprus Target	Cyprus 2008	Cyprus 2011	Cyprus 2012
Employment Rate	75%	75-77%	76.50%	73,4%	70.20%
Poverty/Social Exclusion	Lift at least 20m. people	19.3% people at risk (or lift	23.50%	23.70%	na

	out of risk	27,000 out of risk)			
Early School Leavers	10%	10%	11.90%	11.30%	11.40%
Tertiary Education (30-34 yrs)	40%	46%	44.70%	45,8%	49.90%
Investment in R&D	3%	0.50%	0.49%	0.49%	na
CO2 Emissions	-20% from 1990	-5% from 2005	na	2.70%	na
Renewable Energy	20%	13%	4.80%	6.80%	na
Energy Efficiency (reduction of energy consumption in Mtoe)	20% or 368 Mtoe	14.30%	na	4.30%	na
Source: European Commission					



DIRECTORATE GENERAL FOR INTERNAL POLICIES
ECONOMIC GOVERNANCE SUPPORT UNIT (EGOV)

CAT QA-01-14-108-EN-C

Contact: egov@ep.europa.eu
For more information: www.ep.europa.eu/econ

PE 497.740
ISBN 978-92-823-5386-8
doi: 10.2861/52715

The following ROME Discussion Papers have been published since 2007:

1	2007	Quo vadis, Geldmenge? Zur Rolle der Geldmenge für eine moderne Geldpolitik	Egon Görgens Karlheinz Ruckriegel Franz Seitz
2	2007	Money and Inflation. Lessons from the US for ECB Monetary Policy	Ansgar Belke Thorsten Polleit
3	2007	Two-Pillar Monetary Policy and Bootstrap Expectations	Peter Spahn
4	2007	Money and Housing – Evidence for the Euro Area and the US	Claus Greiber Ralph Setzer
5	2007	Interest on Reserves and the Flexibility of Monetary Policy in the Euro Area	Ulrike Neyer
1	2008	Money: A Market Microstructure Approach	Malte Krueger
2	2008	Global Liquidity and House Prices: A VAR Analysis for OECD Countries	Ansgar Belke Walter Orth Ralph Setzer
3	2008	Measuring the Quality of Eligible Collateral	Philipp Lehmbecker Martin Missong
4	2008	The Quality of Eligible Collateral and Monetary Stability: An Empirical Analysis	Philipp Lehmbecker
5	2008	Interest Rate Pass-Through in Germany and the Euro Area	Julia von Borstel
1	2009	Interest Rate Rules and Monetary Targeting: What are the Links?	Christina Gerberding Franz Seitz Andreas Worms
2	2009	Current Account Imbalances and Structural Adjustment in the Euro Area: How to Rebalance Competitiveness	Ansgar Belke Gunther Schnabl Holger Zemanek
3	2009	A Simple Model of an Oil Based Global Savings Glut – The “China Factor” and the OPEC Cartel	Ansgar Belke Daniel Gros
4	2009	Die Auswirkungen der Geldmenge und des Kreditvolumens auf die Immobilienpreise – Ein ARDL-Ansatz für Deutschland	Ansgar Belke

5	2009	Does the ECB rely on a Taylor Rule? Comparing Ex-Post with Real Time Data	Ansgar Belke Jens Klose
6	2009	How Stable Are Monetary Models of the Dollar-Euro Exchange Rate? A Time-varying Coefficient Approach	Joscha Beckmann Ansgar Belke Michael Kühl
7	2009	The Importance of Global Shocks for National Policymakers – Rising Challenges for Central Banks	Ansgar Belke Andreas Rees
8	2009	Pricing of Payments	Malte Krüger
1	2010	(How) Do the ECB and the Fed React to Financial Market Uncertainty? The Taylor Rule in Times of Crisis	Ansgar Belke Jens Klose
2	2010	Monetary Policy, Global Liquidity and Commodity Price Dynamics	Ansgar Belke Ingo G. Bordon Torben W. Hendricks
3	2010	Is Euro Area Money Demand (Still) Stable? Cointegrated VAR versus Single Equation Techniques	Ansgar Belke Robert Czudaj
4	2010	European Monetary Policy and the ECB Rotation Model Voting Power of the Core versus the Periphery	Ansgar Belke Barbara von Schnurbein
5	2010	Short-term Oil Models before and during the Financial Market Crisis	Jörg Clostermann Nikolaus Keis Franz Seitz
6	2010	Financial Crisis, Global Liquidity and Monetary Exit Strategies	Ansgar Belke
7	2010	How much Fiscal Backing must the ECB have? The Euro Area is not the Philippines	Ansgar Belke
8	2010	Staatliche Schuldenkrisen – Das Beispiel Griechenland	Heinz-Dieter Smeets
9	2010	Heterogeneity in Money Holdings across Euro Area Countries: The Role of Housing	Ralph Setzer Paul van den Noord Guntram B. Wolff
10	2010	Driven by the Markets? ECB Sovereign Bond Purchases and the Securities Markets Programme	Ansgar Belke

11	2010	Asset Prices, Inflation and Monetary Control – Re-inventing Money as a Policy Tool	Peter Spahn
12	2010	The Euro Area Crisis Management Framework: Consequences and Institutional Follow-ups	Ansgar Belke
13	2010	Liquiditätspräferenz, endogenes Geld und Finanzmärkte	Peter Spahn
14	2010	Reinforcing EU Governance in Times of Crisis: The Commission Proposals and beyond	Ansgar Belke
01	2011	Current Account Imbalances in the Euro Area: Catching up or Competitiveness?	Ansgar Belke Christian Dreger
02	2011	Volatility Patterns of CDS, Bond and Stock Markets before and during the Financial Crisis: Evidence from Major Financial Institutions	Ansgar Belke Christian Gokus
03	2011	Cross-section Dependence and the Monetary Exchange Rate Model – A Panel Analysis	Joscha Beckmann Ansgar Belke Frauke Dobnik
04	2011	Ramifications of Debt Restructuring on the Euro Area – The Example of Large European Economies' Exposure to Greece	Ansgar Belke Christian Dreger
05	2011	Currency Movements Within and Outside a Currency Union: The Case of Germany and the Euro Area	Nikolaus Bartsch Gerhard Rösl Franz Seitz
01	2012	Effects of Global Liquidity on Commodity and Food Prices	Ansgar Belke Ingo Bordon Ulrich Volz
02	2012	Exchange Rate Bands of Inaction and Play-Hysteresis in German Exports – Sectoral Evidence for Some OECD Destinations	Ansgar Belke Matthias Göcke Martin Günther
03	2012	Do Wealthier Households Save More? The Impact of the Demographic Factor	Ansgar Belke Christian Dreger Richard Ochmann
04	2012	Modifying Taylor Reaction Functions in Presence of the Zero-Lower-Bound – Evidence for the ECB and the Fed	Ansgar Belke Jens Klose

05	2012	Interest Rate Pass-Through in the EMU – New Evidence from Nonlinear Cointegration Techniques for Fully Harmonized Data	Joscha Beckmann Ansgar Belke Florian Verheyen
06	2012	Monetary Commitment and Structural Reforms: A Dynamic Panel Analysis for Transition Economies	Ansgar Belke Lukas Vogel
07	2012	The Credibility of Monetary Policy Announcements: Empirical Evidence for OECD Countries since the 1960s	Ansgar Belke Andreas Freytag Jonas Keil Friedrich Schneider
01	2013	The Role of Money in Modern Macro Models	Franz Seitz Markus A. Schmidt
02	2013	Sezession: Ein gefährliches Spiel	Malte Krüger
03	2013	A More Effective Euro Area Monetary Policy than OMTs – Gold Back Sovereign Debt	Ansgar Belke
04	2013	Towards a Genuine Economic and Monetary Union – Comments on a Roadmap	Ansgar Belke
05	2013	Impact of a Low Interest Rate Environment – Global Liquidity Spillovers and the Search-for-yield	Ansgar Belke
06	2013	Exchange Rate Pass-Through into German Import Prices – A Disaggregated Perspective	Joscha Beckmann Ansgar Belke Florian Verheyen
07	2013	Foreign Exchange Market Interventions and the \$-¥ Exchange Rate in the Long Run	Joscha Beckmann Ansgar Belke Michael Kühl
08	2013	Money, Stock Prices and Central Banks – Cross-Country Comparisons of Cointegrated VAR Models	Ansgar Belke Marcel Wiedmann
09	2013	3-Year LTROs – A First Assessment of a Non-Standard Policy Measure	Ansgar Belke
10	2013	Finance Access of SMEs: What Role for the ECB?	Ansgar Belke
11	2013	Doomsday for the Euro Area – Causes, Variants and Consequences of Breakup	Ansgar Belke Florian Verheyen
12	2013	Portfolio Choice of Financial Investors and European Business Cycle Convergence – A Panel Analysis for EU Countries	Ansgar Belke Jennifer Schneider

13	2013	Exports and Capacity Constraints – A Smooth Transition Regression Model for Six Euro Area Countries	Ansgar Belke Anne Oeking Ralph Setzer
14	2013	The Transmission of Oil and Food Prices to Consumer Prices – Evidence for the MENA countries	Ansgar Belke Christian Dreger
15	2013	Target-balances: The Greek Example	Malte Krüger
16	2013	Competitiveness, Adjustment and Macroeconomic Risk Management in the Eurozone	Peter Spahn
17	2013	Contextualizing Systemic Risk	Lukas Scheffknecht
01	2014	Exit Strategies and Their Impact on the Euro Area – A Model Based View	Ansgar Belke
02	2014	Monetary Dialogue 2009-2014: Looking backward, looking forward	Ansgar Belke
03	2014	Non-Standard Monetary Policy Measures – Magic Wand or Tiger by the Tail?	Ansgar Belke
04	2014	Böhm-Bawerk und die Anfänge der monetären Zinstheorie	Peter Spahn
05	2014	State-of-play in Implementing Macroeconomic Adjustment Programmes in the Euro Area	Daniel Gros Cinzia Alcidi Ansgar Belke Leonor Coutinho Alessandro Giovannini