EU-IMF assistance to euro-area countries: an early assessment

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Preface

In 2011, the International Monetary Fund (IMF) asked us to prepare an independent assessment of its surveillance of the euro area during 2007-09. The resulting report (Pisani-Ferry, Sapir and Wolff, 2011) was published by both Bruegel and the Fund.

Having studied crisis prevention, we thought that it would be particularly interesting to continue with a further study of the results of, and lessons from, crisis management. It is an *early* assessment for sure, as all three countries covered (Greece, Ireland and Portugal) were still subject to financial assistance programmes at the time of writing. Yet it is necessary: three years after the first Greek programme started, in spring 2010, policymakers and citizens deserve to be offered a comprehensive and systematic evaluation of what has been achieved, and what has not.

This evaluation was carried out independently by Bruegel without having been commissioned. We benefitted from many discussions with Troika members, and with policymakers and experts from crisis countries; we also benefitted from feedback on an early draft on the occasion of a workshop held in Brussels on 26 March 2013, and from detailed comments on a later draft, for which we are indebted to all those who commented. A preliminary version of the study was presented on 22 April 2013 at the Peterson Institute of International Economics (PIIE) in Washington DC and benefitted from input from Jörg Asmussen of the European Central Bank, Servaas Deroose of the European Commission, Reza Moghadam of the IMF and Jacob Kirkegaard of PIIE. We did not get access to any confidential documents. In particular, the data presented in this study is all from public sources.

We are grateful to all those who helped us decipher the intricacies of the Troika programmes and improve our assessment. We would also like to thank Adrian Bosshard, Hannah Lichtenberg and Carlos de Sousa for their very effective assistance in the preparation of this report. The authors bear sole responsibility for any remaining errors, and for the views expressed in this report.

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Executive summary

Three years ago, in May 2010, Greece became the first euro-area country to receive financial assistance from the European Union and the International Monetary Fund in exchange for implementing an economic programme designed by the Troika of the European Commission, the European Central Bank and the IMF. Within a year, Ireland and Portugal went down the same path.

This study is intended to provide an early evaluation of these assistance programmes implemented by the Troika in these three countries (Cyprus and Spain are not included in this assessment because the programmes are too recent). The study assesses the economic impact of the programmes and the consequences of their particular institutional set-up. The Troika is a unique institutional construction that involves an unprecedented degree of cooperation between regional and global financial institutions.

Such an assessment is made difficult by two factors. First, at the time of writing, all three programmes were still on-going, including in Greece where a second programme was started in March 2012. Second, the circumstances are clearly unique, not only because the three countries are developed economies, but also because they belong to a monetary union and because the programmes were implemented at a time when both the euro area and the global economy were going through a severe financial crisis.

The three Troika programmes stand out compared to typical IMF programmes because of their exceptionally long durations and the exceptionally large size of the financial assistance packages. One reason for this is that the build-up of imbalances in all three economies at the start of the programme was much more significant than in typical programme countries. Another one is that, unlike many IMF programmes, official assistance entirely substituted markets in the financing of sovereign borrowing needs.

Economic and social hardship remains severe in all three countries. However, assessment cannot stop there and has to be based on a comparison between reasoned expectations and outcomes. Against this yardstick, the programmes have so far been successful though subject to risks in one of the three countries – Ireland, which at the time of writing is on track to exit the three-year programme and regain access to financial markets; potentially successful in Portugal, even though the economy remains structurally weak and the situation remains fragile to shocks; and unsuccessful in Greece, which is on a totally different trajectory to the other two countries. In Greece, early assumptions by the Troika about the ability of the economy to adjust and of the Greek political-administrative system to implement programme measures proved unrealistic. The subsequent European debate on Greek exit from the euro area further hindered progress in Greece. By contrast, the Irish and Portuguese programmes were based on more realistic assumptions, and implementation of programme conditionality was much better.

A more subtle conclusion is that the programmes have been successful in some ways and unsuccessful in others. The main success has been the current account, with deficits shrinking much faster than expected, although, depending on the country concerned, the reasons for this are either encouraging (an improvement in exports) or discouraging (a collapse of imports because of the recession).

The three countries have by and large adopted the austerity measures prescribed to them by the Troika. In structural terms they all implemented significant consolidation efforts. They had little choice since lender countries were unwilling to provide more financing. The alternative to austerity would have been debt restructuring.

In the Greek case, earlier restructuring would have been preferable, at least from a Greek point of view. In the Irish case, the bail-in of senior bank bondholders might have been desirable from the Irish point of view. But it would have improved the programme's sustainability far less than in Greece, and it could have had significant negative implications for the funding of Irish banks.

In the absence of expansionary measures elsewhere in the euro area, austerity measures in programme countries, the loss of confidence in the euro and the fragmentation of the euro financial system severely depressed growth. The recession was deeper or much deeper than anticipated. Together with the collapse of labour-intensive sectors such as construction, this also implied that unemployment increased far more than anticipated. This risks jeopardising the sustainability of the countries' necessary adjustment.

Compared to earlier IMF programmes, the drop in GDP and the slow adjustment in the real exchange rate in the three euro-area countries were exceptional. Also, unemployment increased much more dramatically. Moreover, the Greek debt restructuring was the largest in history.

Turning to institutional matters, EU-IMF cooperation clearly played an important role in the design, monitoring and, ultimately, the implementation of the programmes.

Though fraught with many potential problems, EU-IMF cooperation to deal with the crisis was inevitable in euro-area countries. From the EU side, despite various political misgivings, recourse to the IMF was necessary because the EU lacked expertise on, and experience of, crisis funding, and also lacked sufficient trust in its own institutions to act alone.

Despite a number of tensions stemming from their different logic and rules, the EU and the IMF succeeded in cooperating in Greece, Ireland and Portugal. The issue on which Troika members disagreed most was the risk of financial spillovers between euro-area countries, which led to divergent views about the Greek debt restructuring and about imposing losses on senior bondholders of Irish banks, two options that the IMF viewed favourably.

Our evaluation of the functioning of the Troika reveals a number of problems for each of its members, which give rise to a number of reform proposals. First, we argue that the European Commission's dual role as an agent of the European Stability Mechanism/the Eurogroup and as a European Union institution is problematic and can lead to conflicts of interest. We therefore propose that, eventually, the role should shift to a European Monetary Fund (EMF), which would replace the ESM and would be a true EU institution. A narrowly mandated agency would also be less exposed to different policy objectives.

Second, the ECB is involved in the Troika in 'liaison with the European Commission'. It does not offer programme assistance *per se* but provides crucial liquidity assistance to banks in programmes countries. We therefore see ECB participation in the Troika as necessary for it to have access to full information and to retain the ability to voice concerns. Yet, its role should not be one of a full negotiating partner because of potential conflicts of interest. Currently, the

ECB does not publish independent documents on the programmes but it does co-sign mission statements. We recommend that it discontinues co-signing such statements and behaves as a ‘mostly silent’ participant in the Troika.

Third, the IMF has become much more involved in the euro area operationally and financially than deemed sustainable by its shareholders. We envisage possible evolutions of its role, and conclude that it should become a ‘catalytic lender’ whose participation in programmes would be desirable – as long as the euro area has not set up an EMF and become a member of the IMF – but that could abstain from taking part without putting the whole package in jeopardy. In concrete terms this would imply limiting IMF participation to about 10 percent of total financing. More generally, we regard IMF-EU cooperation as an important template for future cooperation between global and regional financial institutions. In this respect, the euro-area crisis is an important test of the feasibility of such cooperation.

1. Introduction

With the decision in 2010-11 to establish large-scale financial assistance programmes for Greece, Ireland and Portugal, the European Union and the International Monetary Fund embarked on an unprecedented endeavour. It was the first time assistance was provided within a monetary union and the first time the Fund and European institutions cooperated so closely.

Other programmes followed, but they are outside the scope of this study since too little time has passed to properly evaluate them: in July 2012, Spain was granted financial support by the European Financial Stability Facility (EFSF), with the Commission monitoring the resolution of banks, and the Fund providing technical assistance on financial sector reform; in April 2013 the European Stability Mechanism (ESM) board of governors agreed to grant assistance to Cyprus.

Altogether, a new pattern for cooperation has been established, the consequences of which are bound to be important for the fate of European Economic and Monetary Union (EMU) and for the future relationship between global and regional financial institutions.

The Greek, Irish and Portuguese programmes are unprecedented in two respects:

- *First, because of the nature of the economic problem they are addressing*. It is the first time since the second world war that financially open and mature countries attempt to adjust within a monetary union. This is a challenging venture, and it is no surprise that it involves significant hardship. Other countries have adjusted within the constraints of a pegged exchange rate system – most recently Latvia. But they were less open or less financially developed. Furthermore, EMU participation entails abidance by a number of rules that do not apply to stand-alone countries. The results of the euro-area programmes are therefore anxiously scrutinised in Europe and beyond.
- *Second, because of the institutional set-up of assistance*. Since EMU in 2010 was not equipped with a crisis management regime, the principles and modalities of assistance had to be invented in real time in cooperation between the European institutions and the IMF. The result were the creation of dedicated European financing institutions – successively the EFSF, the EFSM and the ESM[1] – which provide the greatest part of the financing; and the assignment of negotiations with programme countries to the Troika, composed of the IMF, the European Commission and the European Central Bank (ECB). It was not the first time the IMF participated in joint programmes with other institutions, including the EU, but it had never been involved in such intensive cooperation with a regional institution.

These three programmes have already proved to be controversial. Deeply disappointing economic, social and financial outcomes in Greece, disagreements over the treatment of the creditors of failed banks in Ireland and social hardship in Portugal have attracted criticism. The stakes are high for the citizens of these countries and all those involved: governments, European institutions, European partners and the IMF. Also, there has been continual renegotiation of the terms of assistance, especially in the case of Greece, and this has proved to be divisive within the Troika and among European governments.

[1] Respectively the European Financial Stability Facility, the European Financial Stability Mechanism and the European Stability Mechanism.

This study is intended to help draw lessons from the 2010-12 experience of financial assistance programmes in Greece, Ireland and Portugal[2]. Its aim is to provide an objective assessment that can serve as a basis for serious debate and reform initiatives. It addresses both the economic and the institutional aspects of the issue: the programmes' achievements and shortcomings, taking into account the particular constraints arising from participation in EMU but ignoring the respective roles of the various institutions involved; and the cooperation between the IMF and European institutions within the Troika.

The conclusions from this evaluation primarily apply to the programmes in the three countries. But they are of broader relevance for other EMU countries, for the European policy system and for cooperation between the IMF and the European institutions. The conclusions may also shed light on discussions about cooperation between global and regional financial institutions in Asia and elsewhere.

[2] Time did not allow even an early assessment of the Cyprus programme. Nor do we cover the Spanish financial sector programme because of it is sectoral nature.

2. What is special about the crises in the euro area?

2.1 Varieties of crises

As documented by Kaminsky and Reinhart (1999) and Laeven and Valencia (2012), among others, financial crises are of various types, even though there is a rather high degree of correlation between them. In order to specify the role of international assistance, it is important to clarify what crises might occur within a monetary union and how they are dealt with.

- *Banking crises* might occur, whatever the monetary and exchange-rate regime. They are normally dealt with by the sovereign and do not imply recourse to external assistance, unless the sovereign finds itself unable to mobilise adequate resources, in which case it may have to subscribe to a conditional assistance programme;
- *Sovereign debt crises* are not specific to any particular policy regime either, although countries where the sovereign borrows in foreign currency, and countries in a hard peg, and therefore those in a monetary union, are more vulnerable because they have relinquished the option of debt monetisation;
- *Balance-of-payment (BOP) crises* are a potential threat to most countries. A country can find itself unable to honour its international financial commitments in case of a sudden stop in net capital inflows because of a shock or a fundamental disequilibrium. Such payment crises can be overcome, if the country is deemed to be solvent, through IMF lending[3]. Such crises were thought to be impossible in a monetary union, but the recent experience of EMU has shown that this was wrong, as discussed below.

Before Greek former prime minister George Papandreou called the IMF to request assistance, little thought had been given to the possible nature of crises within the European monetary union and the potential role for financial assistance. The crises that unfolded in 2010 and afterwards caught EMU unprepared.

As far as banking crises are concerned, it had been understood that they could occur within EMU. But what was not understood was that the combination of strong interdependence between banks and sovereigns and the absence of a lender of last resort for sovereigns made euro-area countries particularly prone to such crises[4]. The potential severity of what would become known as the 'doom loop' was not foreseen. Furthermore, the EU relied on a rather loose framework of cooperation between national authorities, and lacked a comprehensive template for dealing with cross-border issues (Decressin, Faruqee and Fonteyne, 2007; Véron, 2007).

The generally prevailing view was that sovereign debt crises – also because of the prohibition of monetary financing – could occur. A substantial body of literature had emphasised that sovereign solvency would be a concern in a monetary union and that crises had to be prevented through fiscal surveillance. But no framework existed for such an eventuality and its potentially serious consequences (Eichengreen and Wyplosz, 1998). In setting up the EU policy framework, the focus was on crisis prevention mainly through the Stability and Growth

[3] If the country had adopted a fixed exchange rate regime, the BOP crisis might also entail a currency crisis if and when the authorities become unable to defend the fixed exchange rate. It is important to note, however, that as shown by international experience, a currency crisis is not quite the same as a payment crisis and that the presence of one is not a necessary or sufficient condition for the occurrence of the other.

[4] See eg Pisani-Ferry (2013).

Pact and other surveillance mechanisms. No thought was given to crisis management. In addition, until 2010, interpretations of the meaning of Article 125 of the EU Treaty (the no-bail out clause) differed in different countries and institutions, but these interpretations were not discussed, let alone reconciled.

Finally BOP crises were deemed impossible since solvent agents within a country would always retain access to private funding. BOP crises were in fact ruled out by most authors. Writing in the 1970s, James Ingram thought that "*the traditional concept of a deficit or a surplus in a member nation's balance-of-payments becomes blurred. With a common currency, no individual country can be exposed to speculative attacks*" (Ingram, 1973). This view was echoed in the European Commission's 1990 *'One Market, One Money'* report that paved the way for the design of EMU: "*A major effect of EMU is that balance of payments constraints will disappear in the way they are experienced in international relations. Private markets will finance all viable borrowers, and savings and investment balances will no longer be constraints at the national level*" (European Commission, 1990).

2.2 Balance-of-payment crises

BOP crises are the bread-and-butter of IMF assistance. However, even the Fund was unprepared for the possibility of BOP crises in the euro area. In their surveillance work during the period 1999-2009, IMF staff never raised the possibility of major sovereign or balance-of-payment crises in the euro area despite their intimate knowledge of crises elsewhere and potential parallels with the euro area that should have drawn their attention, in particular consumption booms, real exchange rate appreciation and large current account deficits, which are typical in countries before a BOP crisis (Pisani-Ferry, Sapir and Wolff 2011). The Commission and the ECB were also unprepared.

What was not well understood in Brussels, Frankfurt or Washington was that euro-area countries could face BOP problems like emerging countries. A BOP crisis happens when private markets stop financing viable borrowers because of the country they belong to. Because it is within the confines of its jurisdiction, the state, as the ultimate insurer of private agents – notably banks – tends to concentrate risk incurred by households, companies and banks. Banks with assets that are not diversified internationally also concentrate risks resulting from the potential insolvency of private agents as well as of the sovereign. As they rely on the state as their backstop, they transfer the risk to it. Finally, because in the euro area the state issues debt in a currency over which it has no control (De Grauwe, 2011), it is vulnerable to liquidity crises. This perspective in turn weakens private agents that hold large quantities of government paper.

This web of interdependence between the state, banks and non-financial agents may lead markets to price country risk and, in the extreme, to shun all agents located in a particular country, irrespective of their individual financial health.

After the Lehman Brothers collapse, financial markets reassessed their exposure to euro-area countries that had accumulated large current account deficits and net external investment positions before the financial crisis. They concluded that country risk existed in a monetary union and suddenly stopped the capital flows to those countries. The result was extreme pressure on the most vulnerable euro-area countries. But a classical currency crisis, which would have meant the partial disintegration of the monetary union, was avoided thanks to the provision of ample liquidity by the Eurosystem (reflected in TARGET2 balances). The private sector could and did lose access to private funding contrary to the predictions in the academic literature. Yet, this did not lead to a lack in funding because the Eurosystem through its liquidity operations replaced outflowing liquidity. The private capital flow reversals led to acute liquidity shortages in the banking systems of the countries concerned. The ECB provided liquidity to the banks. It did so in the framework of its Long-Term Refinancing Operations (LTRO) as well as the Main Refinancing Operation (MRO) (see eg Pisani-Ferry and Wolff, 2012). This is in contrast to typical currency crises, in which national central banks cannot replace the withdrawal of foreign-currency financing, which then leads to a crisis.

Nonetheless, sovereigns in affected countries did face a payment crisis. Because they had lost access to private markets or a least because they were facing escalating borrowing costs, governments in Greece, Ireland and Portugal had no choice but to seek foreign assistance to fill their financing gap. The problem, especially for Greece, the first euro-area country to face such a crisis, was to whom should they turn for such assistance?

2.3 A special set of constraints

Crises in the euro area are characterised by a number of features that distinguish them from the situations the IMF normally deals with:

a. *Irrevocably fixed exchange rates.* According to Laeven and Valencia (2012), a majority (37 out of 66) of the sovereign debt crises that occurred between 1970 and 2011 were accompanied by a sharp currency depreciation. A number of IMF programmes, however, were conducted under fixed exchange rates. In the last 20 years, 44 out of 147 of all non-precautionary IMF Stand-By-Arrangements (SBAs) and Extended Fund Facilities (EFFs) were conducted under some variety of fixed exchange rate regime throughout the programme period[5]. Four (Ecuador in 2000 and 2003, Panama in 1995 and 2000) were even conducted without a separate legal tender. Although relatively rare, the absence of exchange-rate flexibility cannot therefore be regarded as completely specific to euro-area countries. What was more specific was the combination of irrevocably fixed exchange rates and a regime of unfettered capital flows;
b. *Full capital mobility*. Of the 44 programmes that were conducted under some variety of fixed exchange rate regime, only eight, in addition to the euro-area countries, had unrestricted capital mobility: Panama (1995 and 2000), Lithuania (2000 and 2001), Estonia (2000), Latvia (2008), Djibouti (1996) and Bosnia and Herzegovina (2002). Moreover, using the financial openness measure developed by Chinn and Ito (2007), only 21 of 118 non-precautionary IMF programmes for which this measure is available were conducted under full capital mobility.
c. *No-monetary financing constraint.* In the euro area, national central banks are not authorised to extend credit to sovereigns or to buy government debt securities on the primary markets. Purchases on the secondary market are not illegal, but they are controversial within the Eurosystem, as demonstrated by the disputes that arose over the ECB's *Securities Markets Programme* and its planned *Outright Monetary*

[5] Of these 43 programmes under some kind of fixed exchange rate regime throughout the programme period, 27 were conducted under pre-announced peg or currency board arrangements and eight were conducted under *de-facto* currency pegs (Egypt, 1996; El Salvador, 1993, 1995, 1997 and 1998; Moldova, 1995; Latvia, 2008; and Ukraine, 2008 and 2010). Other non-fully flexible exchange rate regimes, such as moving and crawling bands, were not considered for this subset.

Transactions. Such restrictions may exist in non-euro area countries as part of the framework that protects the central bank from government pressure, but they typically do not have international treaty status. This particular constraint opens up the possibility of a solvent sovereign facing a liquidity shortage, which the central bank cannot meet.

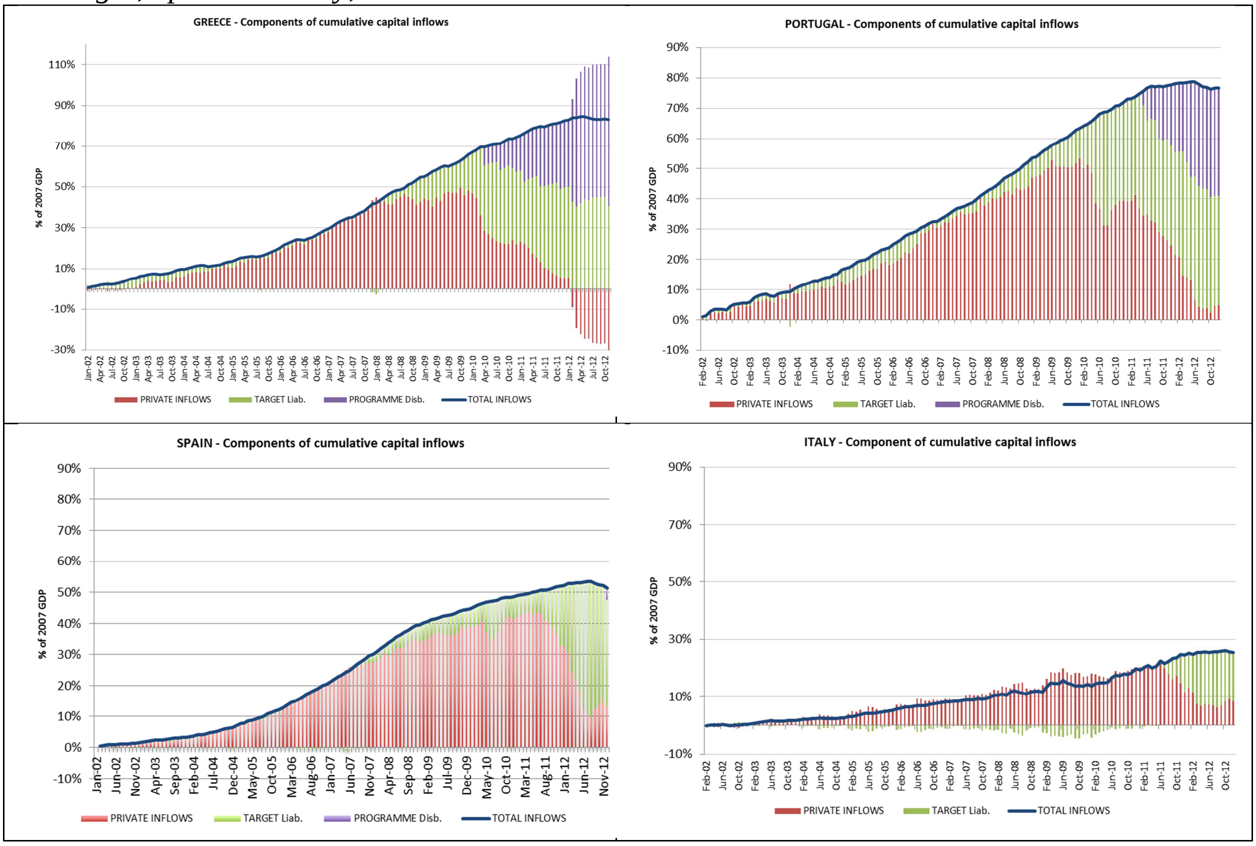
d. *Balance-of-payment financing by the Eurosystem.* In the international context, IMF assistance to countries in a fixed exchange-rate regime typically substitutes the insufficiency of international reserves, or intervenes in response to a run on reserves. As noted by Holmström and Tirole (2011), the Fund acts as the provider of outside liquidity and through the provision of hard-currency loans, it solves the problem that a country can only pledge to international lenders income derived from the production of tradable goods. In the euro-area context, however, ample liquidity has been provided by the Eurosystem[6]. This stands in contrast to classic BOP crises, in which the national central bank cannot offset the withdrawal of foreign currency loans, which then leads to a BOP crisis.

In combination, these constraints imply a very different role for international financial assistance and a very different policy assignment compared to standard IMF programmes. First, in a standard programme the key issue is the financing of the balance of payments and it is rare to face sovereign financing constraints once the balance of payments has been taken care of. In the EMU case, balances of payments were financed by the Eurosystem, but governments needed financial assistance to cover their borrowing needs. Second, in a standard programme, monetary and exchange-rate policy are expected to contribute to the achievement of a real exchange rate level consistent with a return to external equilibrium. In the euro-area case, monetary and exchange rate policy do not exist at the level of a single country and the role of adjusting the real exchange rate must be assigned to structural reforms. The relationship between structural reforms, domestic inflation and the real exchange rate is however very indirect, which makes real exchange rate adjustment particularly difficult in a monetary union.

Figure 1 shows the role of international financial assistance and Eurosystem liquidity in the case of two programme countries, Greece and Portugal, and in two countries, Spain and Italy, that suffered from capital-flow reversals but which did not apply for a programme[7]. In Greece and Portugal, official financing has had to offset a complete reversal of private capital inflows accumulated since the beginning of the 2000s. This has been achieved through a combination of programme financing and Eurosystem financing. A nearly complete reversal of inflows in Spain and a sizeable outflow in Italy have been entirely offset by Eurosystem financing.

[6] It has been recorded in the TARGET2 balances.
[7] Except for bank recapitalisation in the case of Spain.

Figure 1: Private capital flows, programme financing and Eurosystem financing, Greece, Portugal, Spain and Italy, 2002-12

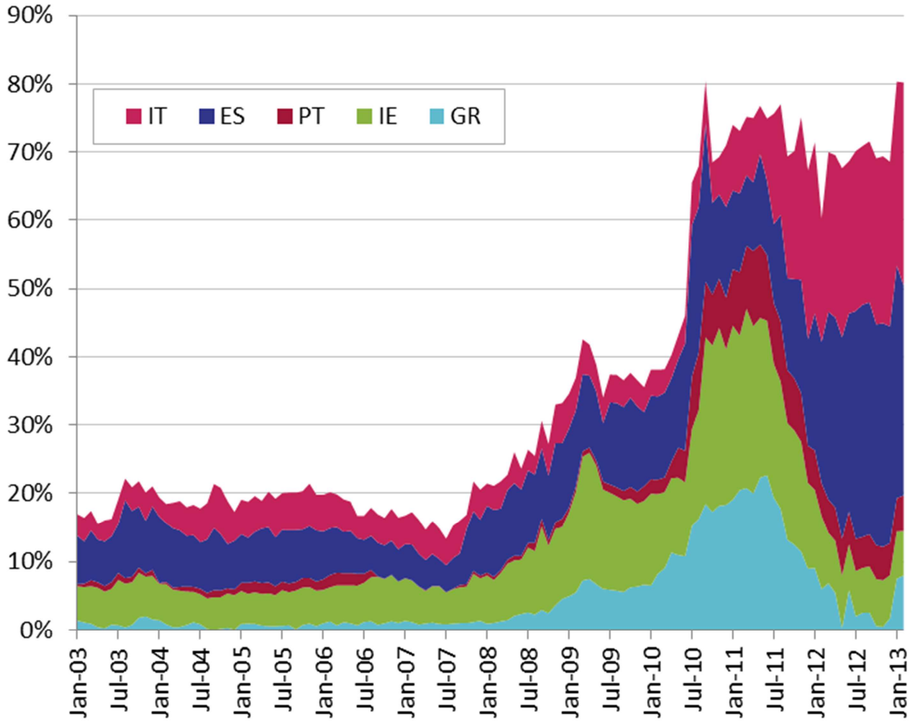


Source: Bruegel (updated from Merler and Pisani-Ferry, 2012). Note: Data for Ireland is not available on a monthly basis.

Figure 1 seems to suggest that euro-area countries have not been confronted with any balance-of-payments constraint because the Eurosystem entirely offset the withdrawal of private capital. This interpretation would not be correct: the Eurosystem does not provide unlimited financing of balance-of-payments deficits. ECB liquidity is being provided within the framework of its normal procedures such as the Long-Term Refinancing Operations (LTRO) or through the Emergency Liquidity Assistance (ELA) procedure.

In the case of general liquidity provision procedures, the quantity and quality of available collateral sets a limit on the amount of liquidity private banks can have access to. By reducing collateral standards for Greece, Portugal and Ireland, the ECB made its liquidity more accessible. In spring 2011, the three programme countries together made up more than 50 percent of total liquidity provided through the MRO and the LTRO windows (Figure 2).

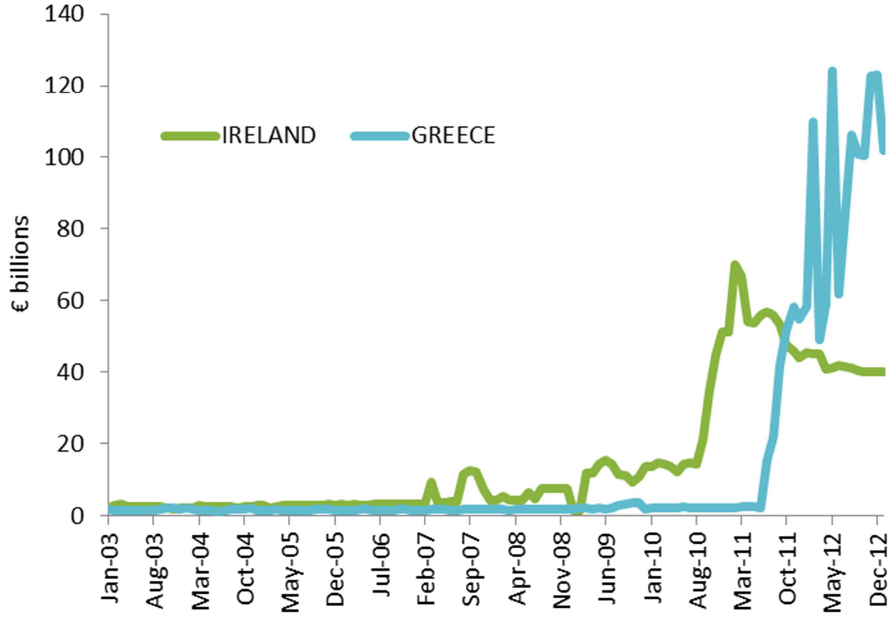
Figure 2: Share of 'periphery' countries in ECB main and longer-term refinancing operations, 2002-12



Source: Bruegel (updated from Pisani-Ferry and Wolff, 2012).

In the case of emergency liquidity assistance, the ECB can set limits on the amount it is willing to provide. ELA actually turned out to be an important source of balance-of-payment financing in programme countries (Figure 3).

Figure 3: Emergency liquidity assistance provided by the Greek and Irish central banks, 2003-12



Source: Bruegel based on national central bank balance sheets. Data for Portugal is not available. Note: Buiter and Rahbari (2012b) provide estimates consistent with ours.

The main features of the crises in the three programme countries are thus:

- Large-scale capital outflows;
- The vulnerability of sovereigns that borrow in a currency they do not have command of;
- No control over the nominal exchange rate, which implies a longer adjustment process;
- Financing of the balance of payments by Eurosystem liquidity.

This particular combination meant that financial assistance did not have to be tailored to the balance-of-payments needs that include the government and private sector needs[8]. In stark contrast to typical programmes, in which the size of an IMF programme is calculated as a function of the need to finance the capital outflows from a country and the current account deficit, in the euro-area programmes, financing needs were a function of the fiscal needs only. We provide below a simplified table of the computed financing needs for the three programme countries (Table 1). The financing needs in essence consist of the gross financing needs of the public sector less the expected debt roll-over in the public sector, plus the resources needed for bank recapitalisation, and, in the case of Portugal, an additional liquidity buffer. This is unambiguous evidence that the size of the programmes was computed on the basis of government, rather than balance-of-payments, financing hypotheses.

[8] Barkbu *et al* (2012) show that capital flow reversals are the main explanatory factor for the size of financial assistance in a sample of 40 years of IMF programmes.

Table 1: Financing needs and sources

		Greece	Ireland	Portugal
		10Q2-13Q2	2010-2013	2011-2014
A)	**General Government deficit**	53.0		22.0
B)	**Debt amortisation**	138.3		80.9
C)	**Adjustment**	1.5		2.1
D)	**Gross financing need (A+B+C)**	192.8	98.9	105.0
E)	**Debt issuance/Roll-over**	93.5	48.9	47.0
F)	**Privatisation**	0.0	0.0	5.0
G)	**Net Financing need (D-E-F)**	99.2	50.0	53.0
H)	**Bank support**	10.0	35.0	25.0
I)	**Total Financing need (G+H)**	109.2	85.0	78.0
J)	**Contribution IMF**	30.0	22.5	26.0
K)	**Contribution EFSM, EFSF, ESM, EU countries**	80.0	45.0	52.0
Memo: Use of country's financial buffers			*17.5*	

Source: European Commission programme documents (The Economic Adjustment Programme). Note: The assumptions for the debt roll-over are for Greece 94 percent (short-term debt) and 36 percent (long-term debt); and for Portugal 72 percent (short-term debt) and 42 percent (long-term debt). A more detailed version of this table can be found in Appendix 1. The financing needs of Greece are taken from the first programme in 2010 only.

2.4 Legal issues

When Greece decided to seek international assistance it was a first for a euro-area country. Had it been an EU country outside the euro area, it would have turned for financial assistance to the IMF just as Hungary, Latvia and Romania did a few months earlier. Like these countries, along with the conditional IMF loan, Greece would have received an EU conditional loan under the medium-term financial assistance (MTFA) facility, the EU's BOP assistance scheme based on Article 143 of the Lisbon Treaty.

As a member of the euro area and a member of the Fund, Greece still retained the option of obtaining financial assistance from the IMF. However it was not eligible for MTFA assistance because Article 143 of the Lisbon Treaty explicitly reserves such assistance to member states outside the euro area.

There are different views on why euro-area countries could not benefit from the EU's BOP facility. One, which is often put forward in the discussion in Germany, is that it is the logical consequence of Article 125 of the Treaty, the so-called 'no bail-out clause'. The clause stipulates that neither the Union nor individual member states shall be liable for the budgetary commitments of a member state. This clause was viewed from the outset by the German political system as one of the central pillars of the common currency, and as a precondition for euro membership. However this interpretation is disputed.

Marzinotto *et al* (2010) argue that the reason why Article 143 excludes euro-area countries has nothing to do with the no bail-out clause. Before the creation of the euro, the MTFA facility was available to all EU countries. According to Marzinotto *et al* (2010), future euro-area countries were excluded during the Maastricht negotiations simply because negotiators believed that BOP crises would not occur in a monetary union.

Irrespective of the exact motives for excluding euro-area countries from Article 143, the fact is that when the crisis hit Greece, the EU had no legal framework on which to base financial assistance or to work in tandem with the IMF, as it was already doing in non-euro area countries.

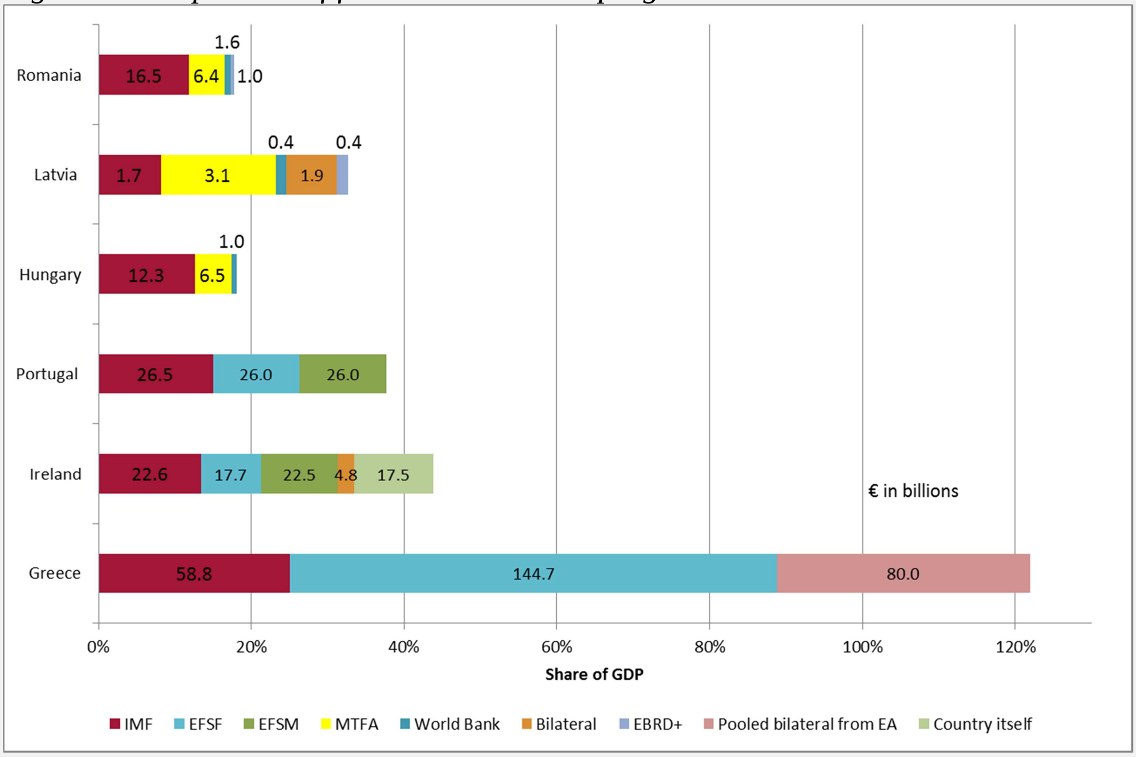
As the crisis unfolded and more euro-area countries needed financial assistance, different financial instruments were created. The first help given to Greece was based on bilateral lending, which was pooled by the European Commission and then disbursed to the Greek government. In a second step, the balance-of-payments assistance foreseen under Article 143 was further developed and the EFSM was created (see Council Regulation 407/2010). Simultaneously, the creation of the temporary EFSF was decided on by euro-area finance ministers. Finally, in October 2012, the EFSF was transformed into the ESM based on the intergovernmental ESM treaty. The ESM also required a change to the Lisbon Treaty, a modification of Article 136, which allows euro-area countries to take specific measures to strengthen the coordination and surveillance of their budgetary discipline (de Witte, 2011).

In practice, the three different cases of financial assistance all used a different instrument to provide the assistance. IMF lending represents about a third of the overall lending given to euro-area countries. The remaining two-thirds was provided through a combination of different lending schemes (Box 1).

Box 1: Financial instruments used to support the three euro-area countries and Hungary, Latvia and Romania

Figure 4 breaks down the overall lending into the loans from different schemes. In the three euro-area countries, the size of the overall programmes was about three times the size of IMF lending. It amounted to more than 120 percent of GDP for Greece, while it is above 30 percent for Ireland and Portugal. This compares with typically somewhat smaller programmes elsewhere in Europe.

Figure 4: Composition of financial assistance programmes



Source: European Commission, IMF.

In the three euro-area countries, different assistance instruments were used. For Greece, lending was initially organised as bilateral lending by euro-area member states pooled by the European Commission together with IMF lending. Later, after the creation of the EFSF, lending by euro-area countries shifted to the EFSF. In Ireland, EFSM, EFSF and IMF lending was combined with bilateral loans provided by the United Kingdom (plus small contributions from Sweden and Denmark). Similarly, in Portugal, EFSM and EFSF lending was combined.

In the other three EU countries to which financial assistance was provided, IMF lending was combined with the balance-of-payments assistance foreseen in the Treaty's Article 143. For Latvia, the central banks of Sweden, Denmark, Finland, Norway and Estonia provided additional bilateral support via swap agreements. Finally, the World Bank provided small-scale support to each of the three countries.

Consistent with the absence of a legal base and actual financial instruments, the euro's founding fathers also did not conceive that an actual institution may become necessary to provide the financial assistance in combination with a programme of conditionality. This meant that when the crisis hit, the EU was ill-prepared and did not have the institutional means to provide assistance. More specifically, the European Commission had very little experience in providing financial assistance, and the ECB had no experience whatsoever. This was one of the reasons why at an early stage several member states insisted on involving the IMF in the design of programmes.

In sum, the legal framework resulted in a number of constraints:

- The European Commission is bound by the Treaty in giving policy recommendations to member states. This concerns in particular fiscal and macroeconomic policies. *De facto*, these Treaty provisions were overshadowed by programme conditionality, but they nevertheless played a role in the Commission's approach to assistance.
- Financial assistance to sovereigns in EMU was not foreseen by the Treaty and it was regarded by some as illegal, even though the legality of the ESM was later confirmed[9]. When the sovereign debt crisis escalated, creative solutions were used to provide assistance regardless. It took several years for a Treaty change to be agreed allowing for the establishment of the ESM.
- There were no institutions in place that could provide such assistance. In practice, to overcome technical difficulties and to increase political credibility, a solution involving the European Commission, the European Central Bank and the IMF – the so-called Troika – was found.

[9] European Court of Justice, Judgement of the Court (Full Court) of 27 November 2012. Thomas Pringle vs Government of Ireland, Ireland and the attorney general. http://curia.europa.eu/juris/celex.jsf?celex=62012CJ0370&lang1=en&type=NOT&ancre=

3. The Troika

In Greece, Ireland and Portugal, the men (and occasionally women) in dark suits come in trios: one from the IMF, one from the European Commission and one from the European Central Bank. The Troika, as it became known, is the basic structure for negotiation between the official lenders and the governments of recipient countries.

3.1 Origins and mission

The Troika originated in the 25 March 2010 decision by the euro area's heads of state and government to contribute coordinated bilateral loans to Greece as part of a package involving "substantial IMF financing and a majority of European financing"[10]. The agreement was that disbursement of the bilateral loans would be decided on by unanimity among euro-area member states. It would be "subject to strong conditionality and based on an assessment by the European Commission and the European Central Bank"[11]. A few days, later the Eurogroup announced that "the Commission, in liaison with the ECB", would start working on a joint programme "with the IMF and the Greek authorities"[12]. On 19 April 2010, the first Troika mission started consultations in Athens.

The same template was later applied to Ireland and Portugal (and to Cyprus, which is outside the scope of this study). The gradual build-up of a European crisis management regime did not result in any meaningful change in the structure and responsibilities of the Troika. However, the creation of the ESM in October 2012 and the entry into force of the Treaty on Stability, Coordination and Governance (TSCG) in January 2013 resulted in a number of additional provisions formalising the role and responsibilities of the Troika: Since 1 March 2013, access to ESM assistance has been limited to countries that have ratified the TSCG[13]. IMF lending, however, remains available to all EU countries in their capacity as Fund members.

- The ESM has formally become the organisation responsible for deciding on financial assistance. Decisions to grant assistance are taken by its Board of Governors, consisting of the finance ministers of the participating countries (in other words, the Eurogroup under a different name);
- Assistance decisions are to be taken by unanimity by the ESM Board, unless the European Commission and the ECB both assess that failure to decide would threaten the sustainability of the euro area[14]. In this case, the decision is to be taken by an 85 percent majority, with voting weights depending on the size of the financial contribution to the ESM.
- The European Commission is entrusted by the ESM with the responsibility of assessing the economic and financial situation in the member state requesting assistance and its implications for the stability of the euro area as a whole. If assistance is to be provided, the Commission is responsible for negotiating "wherever possible, together with the IMF", the conditions for financial assistance. These tasks are to be performed "in liaison with the ECB". Furthermore, the Commission is

[10] Statement by the heads of state and government of the euro area, 25 March 2010
[11] Ibid.
[12] Statement on support to Greece provided by euro-area member states, 11 April 2010.
[13] This provision of the TSCG applies to any assistance granted after 1 March 2013.
[14] ESM Treaty, Art. 4.4.

assigned the role of signing on behalf of the ESM the Memorandum of Understanding negotiated with country authorities[15]. Formally, the Commission therefore acts on behalf of the ESM and thus on behalf of the member states.

These decisions are a mere formalisation of existing practice. Nevertheless, they could open the way to an evolution that would see the ESM acquire more of the roles currently fulfilled by the IMF. We return to this issue in conclusions.

3.2 What is the Troika?

It is important to understand what the Troika is and is not. It is a vehicle for economic and financial evaluation and for negotiation. Representatives from the Troika institutions jointly take part in meetings with national authorities; assessments are shared and discussed within the Troika; assessments are in principle common, although the IMF and the Commission prepare separate reports (the ECB does not publish assessments but the Commission reviews are prepared "in liaison with the ECB"); negotiations with the authorities are held jointly; and agreements on the conditions for assistance are reached simultaneously with the representatives of the three institutions. The resulting strategy, in particular as expressed in the Letter of Intent and the attached memoranda, is then addressed by the national government to the IMF and, on the European side, to the Commission, the ECB, the president of the Eurogroup, and the finance minister of the country that hold the rotating EU Council presidency. Formal expressions of disagreement exist but they are exceptional (for example, the ECB explicitly distanced itself from the inclusion of private-sector involvement in the October 2011 debt sustainability analysis for Greece)[16].

This *modus operandi* was adopted at the time of the first Greek programme (Appendix 1) and has not been substantially modified since.

[15] ESM Treaty, Art. 13.
[16] See Greece: Debt Sustainability Analysis, unsigned document attributed to the IMF, 21 October 2011.

Box 2: Programme documents and the role of institutions

IMF procedures are highly standardised: financial assistance is formally granted to a country after the finance minister and central bank governor have addressed to the Fund a 'Letter of Intent' outlining broad intentions, and a 'Memorandum of Economic and Financial Policies' (MEFP) that spells out the policy strategy, planned policy actions and corresponding numerical targets. Although handed over by the country's government under its own responsibility, these documents in fact result from negotiations with, and are drafted by, the IMF mission team. Once the IMF's Executive Board has decided in favour of support, the implementation of the programme and the fulfilment of the stated objectives are monitored by the Fund on a quarterly basis. Each time a review is done and published, the Letter of Intent and the associated memorandum are updated and revised.

Assistance to euro-area countries is given based on the same template, but with amendments and additions:

- The Letter of Intent and the MEFP addressed to the IMF are copied to the vice-president of the Commission in charge of economic and financial affairs, and to the presidents of the ECB, the Eurogroup and the Economic and Financial Affairs Council (ECOFIN);
- An additional Memorandum of Understanding on specific economic policy conditionality is addressed to the European authorities (European Commission, ECB, Eurogroup and rotating EU Council presidency) and copied to the IMF. This is the document that serves as a basis for EFSF/ESM financial assistance decision[17].

The two memoranda are consistent but not identical. Especially, the European MoU is significantly more detailed and includes specific conditions, for example of a structural character, that are not part of the MEFP. IMF conditionality therefore has a narrower scope than European conditionality.

The Troika, however, is neither a lending nor a decision-making institution. To start with, the IMF and the ESM (previously the EFSF, after bilateral loans were folded into a common loan, and marginally the EFSM) are responsible for lending. Lending decisions are taken neither by the Commission nor the ECB. Loans are provided under different terms by the IMF and ESM, even though their conditions and disbursement are coordinated. Consequently, recipient countries enter into separate and different financing agreements with the IMF and the ESM. The two institutions' lending facilities are also not identical. Furthermore, the IMF enjoys preferred creditor status over the ESM[18].

Decisions to release loans are also made separately by the IMF executive board and by the Eurogroup. IMF decisions follow standard practice within the organisation but depend crucially on the agreement of European partners. European decisions are prepared by the Euro Working Group (EWG) in which euro-area governments are represented by state secretaries,

[17] In accordance with, respectively, paragraph (2) of the preamble of the EFSF framework agreement, Art. 3(5) of the Council regulation establishing the EFSM, and Art. 13(3) of the ESM Treaty. The MOU is concluded by the Commission on behalf of the Eurogroup in the EFSF case, in its own name in the EFSM case, and on behalf of the ESM in the ESM case. In the case of the EFSM, the MOU is communicated to the European Parliament and the Council.

[18] As stated in the ESM Treaty (item 13 of 'Whereas' provisions).

and taken by the Eurogroup (or, since its creation in October 2012, the ESM's Board of Governors)[19].

Table 2 summarises the roles of the three partners in the Troika. It is apparent that the main roles of the IMF (programme negotiation and monitoring; assistance decisions; lending) have been distributed among European institutions.

Table 2: Distribution of roles in IMF and European assistance

	IMF	**Euro area**
Programme negotiation and monitoring	IMF Staff	Commission services in liaison with ECB
Decision to assist	IMF Board	ESM Board of governors (aka Eurogroup)
Lending	IMF	EFSF/EFSM[20]/ESM

3.2.1 The roles of the European Commission and the ECB

An important question from the European standpoint is that of the exact roles of the Commission and the ECB and their institutional implications.

The Commission's role in euro area programmes is much narrower than its role in assisting non-euro area EU countries within the framework of Article 143 of the Treaty on the Functioning of the European Union (TFEU), which was seen in 2008-09 for Hungary, Latvia and Romania. For non-euro countries, the Commission participates alongside the IMF in the negotiation of programmes and the actual lending. Money lent is borrowed on the capital markets using the guarantee of the EU budget. For euro-area countries, however, the Commission has no authority to provide loans (except for the €48.5 billion lent in 2011-13 to Ireland and Portugal by the EFSM). It is merely negotiating on behalf of the member states, ie the Eurogroup (or the ESM Board of Governors), which provide the financial assistance.

This has two significant implications for the Commission's role in financial assistance. First of all, the Commission acts merely on behalf of the member states, rather than as an independent institution representing the general Community interest, which is its normal function. In the case of non-euro area EU countries, the decision to grant financial assistance is taken by the Council based on a Commission proposal, which comes from the College of Commissioners. By contrast, the College has no formal role in cases of assistance to euro-area countries. Commission services receive their negotiating mandate from the Commission vice-President who is responsible for economic and monetary affairs and from the EWG President.
Second, the dual role of the Commission as an agent of the member states but also as an EU institution could lead to tensions. For example, the Commission should enforce the Stability and Growth Pact's fiscal policy provisions. Yet, in the programme context, these rules are not a primary concern. A particularly interesting case is the dual role of the Commission in the context of financial assistance to support bank restructuring programmes. The Commission has a clear state aid mandate, with the objective of avoiding competitive distortions and

[19] In the case of Ireland, the UK participated in the financial assistance and was therefore part of the decision-making body. In the case of both, Portugal and Ireland, EFSM money was involved leading to a different decision-making structure.
[20] For the EFSM, the decisions are taken by the ECOFIN Council based on a formal proposal by the Commission.

ensuring the viability of banks and appropriate burden sharing. In the context of a programme, member states may have different objectives, potentially compromising the Commission's state aid mandate.

The ECB's role is less clearly defined than the Commission's. The legal texts refer to it in an oblique way, using the formula 'in liaison with the ECB'. Reasons for European authorities to request ECB participation in the Troika are not spelled out explicitly, and there is no straightforward rationale for this involvement. When the IMF provides conditional assistance to a country, that country's national central bank is generally part of the negotiation, but on the receiving country's side of the table. This is true also for assistance to euro-area countries, with the ECB being also present, but on the lending side.

There are three possible reasons why the ECB was involved in the initial Greek negotiation. First, the ECB *de facto* had very significant exposure to the country without having any legal hold over the supervisory assessment of its banking system. Being part of the Troika meant a better assessment could be made of potential risks to the ECB's balance sheet, and that the ECB could have a say over policy decisions that might affect it[21]. Second, the European leaders trusted the ECB and wanted it to be part of the European negotiation team alongside the European Commission. Third, the European leaders wanted to make it possible for the central bank to participate in the policy discussions because it was fearful of possible recommendations from the IMF that would have challenged ECB policies.

3.3 Divisions of labour within the Troika

There is no available systematic evidence on the division of labour within the Troika. The IMF and the Commission publish separate assessments and programme reviews, but they are closely coordinated. The ECB does not publish its own independent assessment of the country situation or progress made on the implementation of the programme.

Our discussions with country teams and governments suggest that there is no strict division of labour between the three institutions. The IMF brought in the programme technology and it proceeds as customary in countries to which it is providing assistance. The Commission has learned the programme technology, with which it was not initially entirely familiar. The Commission naturally has in-depth expertise on a number of structural and sectoral policy areas (for example, product markets). In addition, it must pay attention to constraints resulting from the European framework (for example with regard to the Stability and Growth Pact)[22]. The Commission and the IMF compute the financing needs of the countries separately, thereby introducing checks and balances at a technical level. The ECB pays particular attention to financial-sector issues, especially the application of global capital standards.

[21] A significant part of the BOP financing is provided by the Eurosystem. *De facto*, lending decisions are therefore also taken by the ECB governing council because of its ability to impose limits to ELA (see for example the 31 March 2011 ECB press release on the suspension of the rating threshold for Irish government debt instruments). Moreover, governments issue T-bills that are used as collateral vis-à-vis the Eurosystem. While this is a monetary risk resulting from a central bank operation with a commercial bank, in case of failure of the bank, the central bank ends up being a creditor to the government. Also in the context of the Securities Markets Programme, the ECB *de facto* became a creditor.

[22] Art. 13 (3) of the ESM Treaty indicates that *"The MoU shall be fully consistent with the measures of economic policy coordination provided for in the TFEU, in particular with any act of European Union law, including any opinion, warning, recommendation or decision addressed to the ESM Member concerned"*. This provision suggests that the Commission is compelled to include in the MoU conditions that are additional to those implied by a standard IMF programme.

4. The euro-area programmes in perspective: a comparison with earlier IMF programmes

The financial assistance programmes in the euro area are not only special because of the Troika construction, the legal constraints and the economic specificities of financial assistance resulting from a monetary union. They are also different in terms of size, duration and shape compared to earlier IMF programmes. This chapter compares the average of the three euro-area countries as well as the three euro area countries individually with all non-precautionary IMF programmes during 1993-2012 as well as with a subset of programmes in Latin America, and with the Asian crisis along a set of key economic indicators. The details of the methodology are explained in Box 3.

Box 3: IMF financial assistance programme comparative statistics: the last 20 years

We consider all non-precautionary programmes that have been put in place as Stand-By Arrangements (SBA, the workhorse of the IMF, *"designed to help countries address short-term balance of payments problems"*) and Extended Fund Facilities (EFF, intended *"to help countries address medium- and longer-term balance of payments problems reflecting extensive distortions that require fundamental economic reforms"*, including the three euro-area programmes). We thus do not include Low-Income Countries (the main target of a wide variety of other forms of IMF programmes), countries with very strong fundamentals for which a flexible credit line is used and other precautionary programmes that would have distorted our sample.

This leaves us with a sample of 147 non-precautionary SBA and EFF programmes between 1993 and 2012, of which 47 were implemented in central and eastern Europe (including the Baltic States), 37 in Latin America and the Caribbean, 20 in sub-Saharan Africa, 16 in the Commonwealth of Independent States, 14 in developing Asia, seven in the Middle East and North Africa, four in the euro area (counting Greece twice because there are two programmes; the same is done for other countries with more than one IMF loan including consecutive loans) plus Iceland and Korea. In all subsequent figures, we will refer to this sample as 'All IMF 1993-2012'.

We define a new subset called 'Asian crisis' formed by Indonesia, Korea and Thailand in 1997 and the Philippines in 1998. The second subset, with which we compare our three euro-area countries, consists of Brazil (1998), Argentina (2000) and Uruguay (2002), this subset is labelled 'LatAm' in all figures in this chapter. We chose these three Latin American cases to form the Latin American subset in our comparative statistics study because they were part of one single regional crisis, sharing the same stylised facts, and have strong links with each other, similar to the Asian Crisis subset and the euro-area subset.

The three Latin American countries had some form of fixed exchange rate that ultimately proved to be unsustainable, because it produced a continuous loss of competitiveness since these countries had higher inflation than their trading partners, and their exchange rates were either completely anchored or going through a crawling peg with depreciation rates that were insufficiently rapid relative to their inflation and labour costs differentials. In all of three cases the IMF supported the rigid exchange rate policies implemented by these governments, in most cases explicitly in the official documents and in the Argentine case implicitly by not opposing them. Figure 5 shows the development of the international reserves in Brazil, Argentina and Uruguay and the eventual abandonment of these rigid exchange rate regimes.

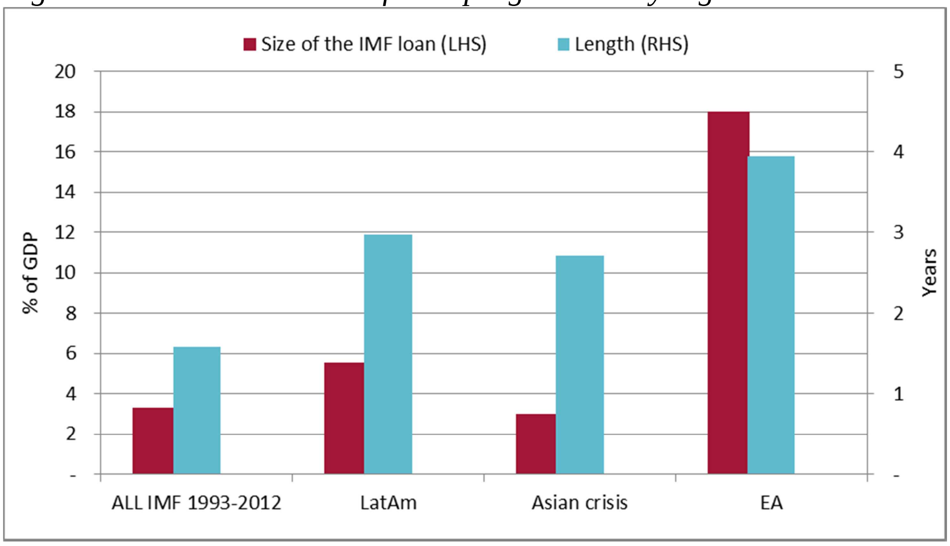
Figure 5: International reserves and exchange rates in the LatAm subset

Source: Datastream.

For all the comparative graphs in the chapter, the time variable is defined in relation with to the IMF programme approval. T indicates the year of approval. If the programme was approved in the second half of the year, we take the calendar year as the year T. If the programme was approved in the first half of the year, we take the previous calendar year as T. We show a simple unweighted average of all programmes. Moreover, we plot one standard deviation of the entire sample of 147 programmes to provide a sense of statistical significance.

The euro-area programmes are much larger and longer-lasting than previous IMF programmes. Figure 6 compares the size in percent of GDP and the duration in years. Euro-area programmes are 15 percentage points larger with respect to each country's GDP, and 2.4[23] years longer than previous IMF programmes. They are also longer in duration and larger in size than those in the Latin American and Asian crises.

Figure 6: Size and duration of IMF programmes by region

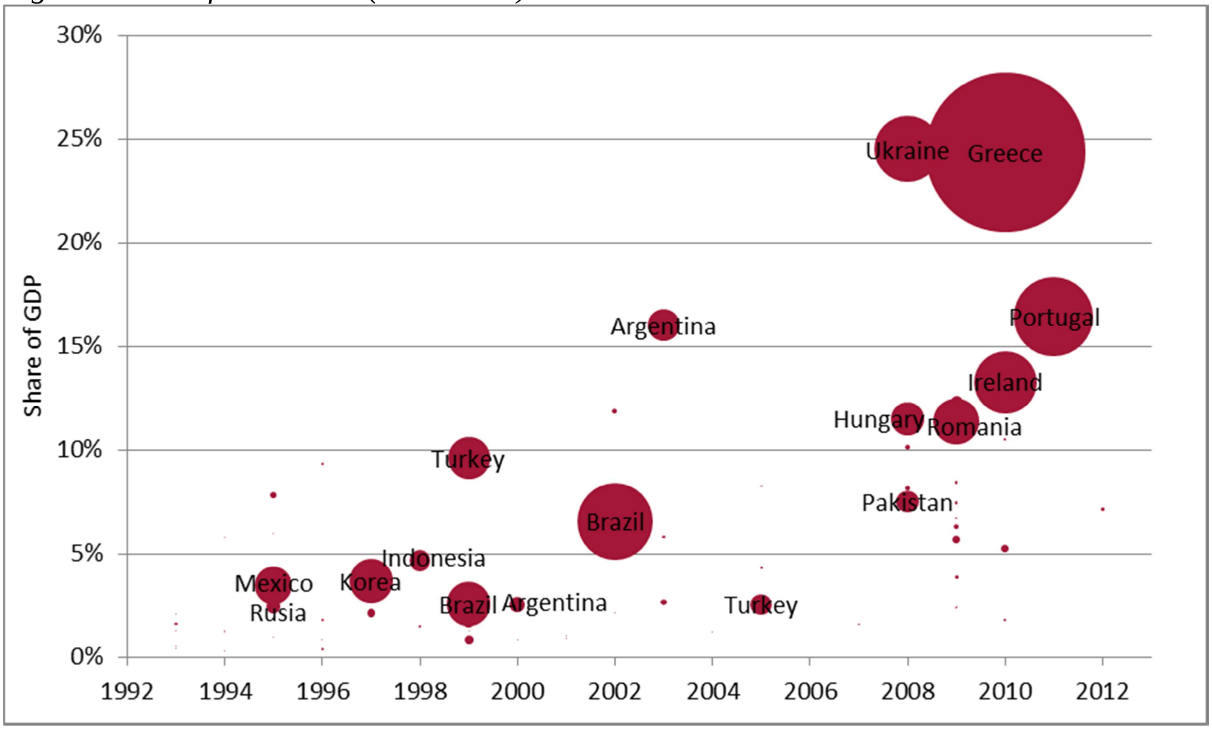


Source: Bruegel based on IMF MONA database and IMF WEO (October 2012). Note: Includes only IMF loans; in the case of the euro-area countries the duration is as currently scheduled.

[23] The average (and mode) length of the IMF's programmes between 2003 and 2012 was 3 years, the same length as the Irish and Portuguese programmes, while the average length of the whole non-precautionary subset (1993-2012) is 1 year; the Greek programme is 5.85 years long as currently scheduled.

Figure 7 shows the size of IMF loans to individual euro-area countries compared to previous loans. The loan to Greece in particular is considerably larger than previous loans. This holds both in terms of their size measured in per cent of GDP, as well as in terms of their absolute size.

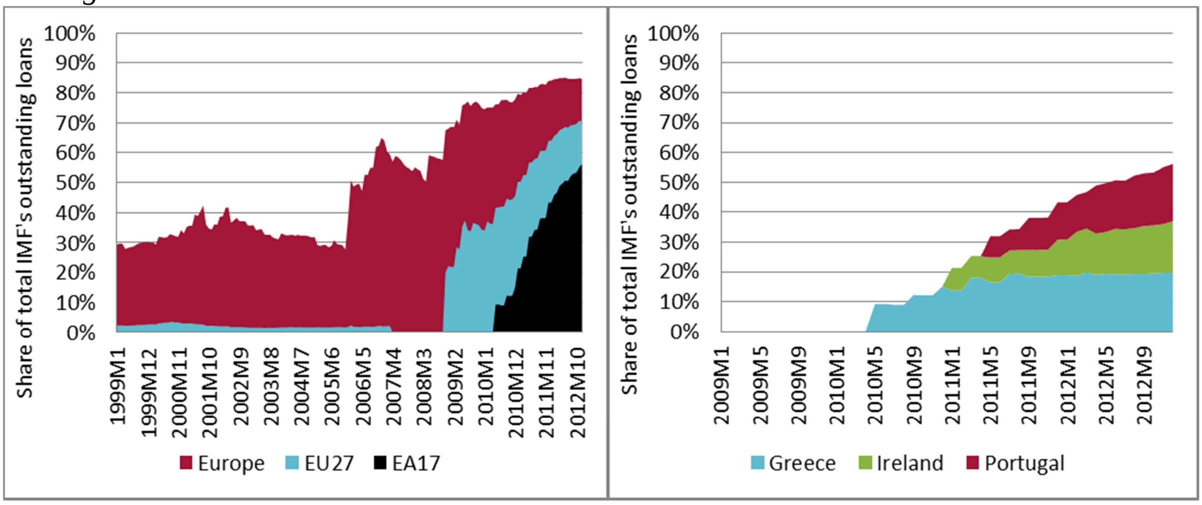
Figure 7: Size of IMF loans (1993-2012)



Source: IMF MONA database and IMF WEO (October 2012). Note: The diameter of the circles indicates the absolute size of the loans in US dollars.

The large size and long duration of the loans to euro-area countries implies that IMF lending activity has become increasingly focused on Europe and the euro area in particular. Figure 8 shows the geographic distribution of outstanding IMF loans. While in the decade before the crisis, there was virtually no IMF lending to EU countries, by end of 2012, the EU share of outstanding IMF loans was more than 70 percent. Most of these loans went to the euro area (56 percent of total outstanding IMF loans).

Figure 8: Weights of Europe, the EU and three Troika programme countries in total IMF lending



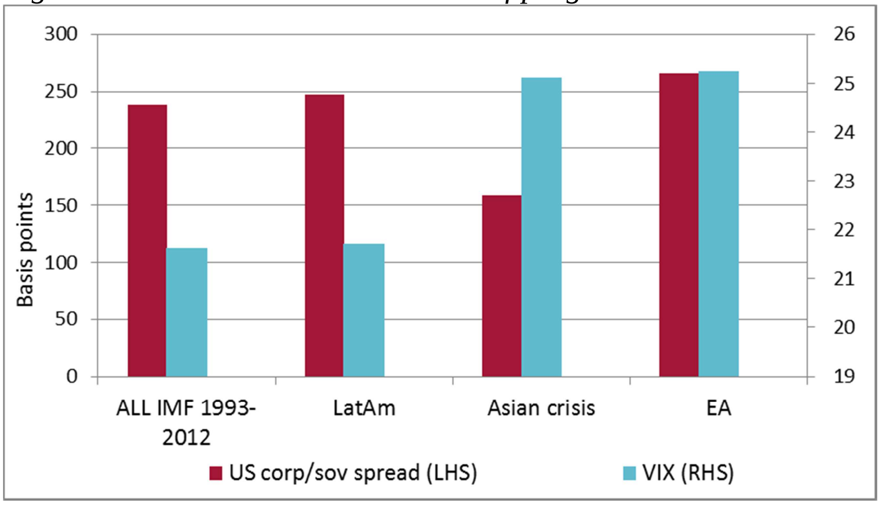
Source: IMF International Financial Statistics (February 2013) and Bruegel calculations. Note: Europe: Includes all EU27 countries plus Albania, Bosnia Herzegovina, Croatia, Iceland, Kosovo, FYR Macedonia, Montenegro, Serbia and Turkey.

In summary, the three euro-area financial assistance programmes have drawn very substantially on the IMF's resources, even though IMF lending only contributed to about one third of the overall programmes, as shown by Figure 4.

How do the three euro-area programme countries compare in terms of their macro-economic performance before and after the start of programmes? Given the size and duration of the programmes, one would expect an extraordinarily difficult macroeconomic situation. We first study whether the programmes came at a period of extraordinary global financial stress. We then show the development of debt, deficits, current accounts, GDP growth and the exchange rate from five years prior to the programme to five years after the start of the programme. For the euro-area countries, this means including two years of forecasts for Greece and three years of forecasts for Portugal and Ireland.

We first look at indicators of the global environment such as global growth and financial stress in the year in which the programme started. Certainly, the euro-area crisis was preceded by a period of unique global financial stress. When the three programmes started, global stress as measured by the VIX (Chicago Board Options Exchange Market Volatility Index) and the US sovereign-corporate bond spreads was still particularly high.

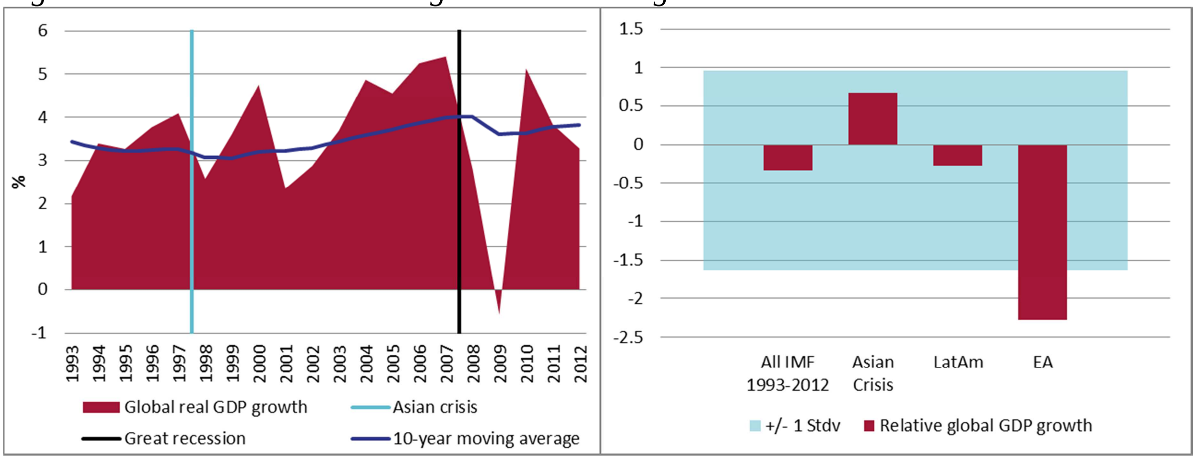
Figure 9: Financial stress at the time of programmes



Source: Datastream, IMF Mona database and Bruegel calculations. Note: Average level of the stress indicators in the year when the programme starts.

The euro crisis also happened at a time of a significant slowdown in global growth, though global growth had recovered significantly by the beginning of the programmes. However, it would be going too far to ascribe a significant role to these factors because the level of risk aversion was not much greater than in the other periods under consideration, and growth – while being lower – may have been comparatively high right before the great recession. We therefore doubt that the external environment explains the very significant size and duration of the programmes.

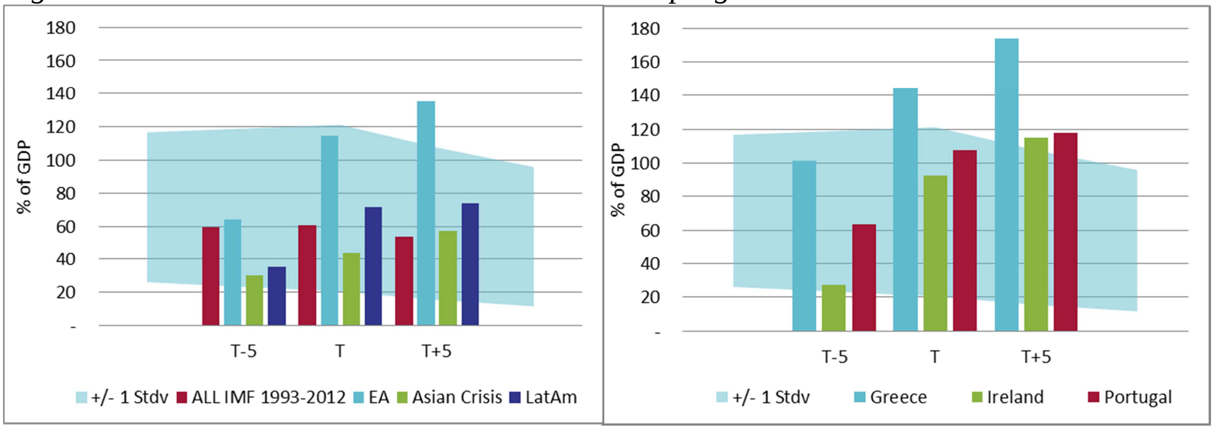
Figure 10: Absolute and relative global real GDP growth



Sources: IMF WEO October 2012, IMF Mona database and Bruegel calculations. Note: the right hand panel shows global real GDP growth in the year before the approval of each IMF programme relative to average global GDP growth in the previous 10 years.

Turning to the debt-to-GDP ratio, average debt levels in the three programme countries was significantly higher (115 percent) than the average IMF programme country (61 percent). It was also higher than that in our Latin America (71 percent) and Asian crisis (44 percent) subsets. In Ireland, the debt-to-GDP ratio was significantly below that in an average IMF programme case five years ahead of the start of the programme. However, Irish indebtedness increased very substantially in the five years in the run-up to the programme, leading to a debt to GDP ratio above the average debt level of 61 percent in the year when the programme started. Similarly, in Portugal, there has been a significant increase in the debt to GDP ratio pre and post the programme start date.

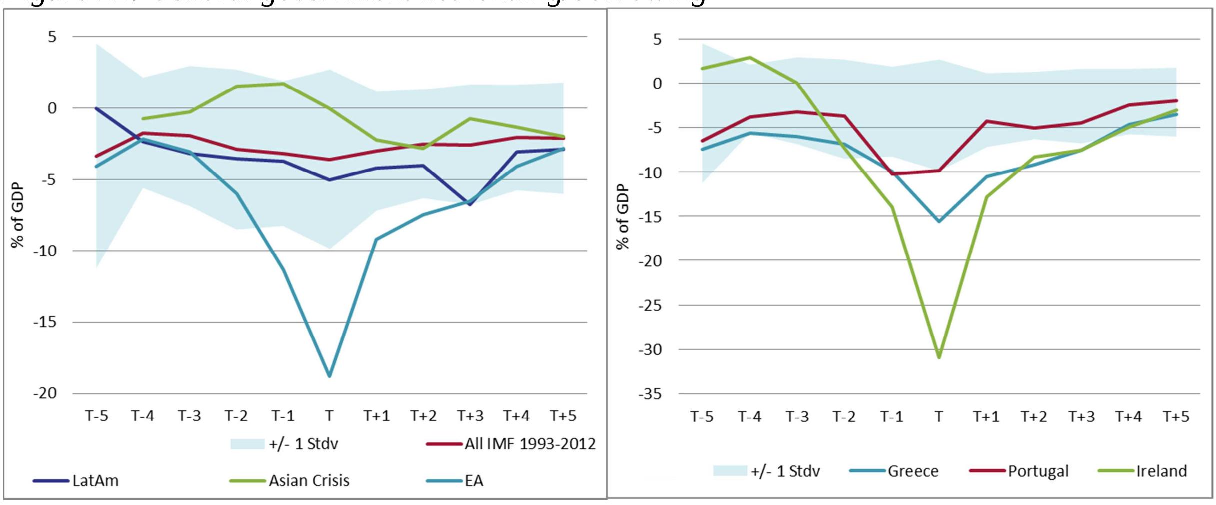
Figure 11: Government debt-to-GDP ratios in IMF programme countries



Source: IMF WEO (October 2012), IMF Mona database and Bruegel calculations.

Corresponding to the substantial and increasing debt levels are very large fiscal deficits before the programmes started. The average deficit in the euro area one year ahead of the programmes was almost 19 percent of GDP, a number which is particularly high because of the high Irish deficit related to its bank bail-outs. Weymes (2012) estimates the impact of banking assistance in Ireland in 2010 to be 20.2 percent of GDP. But deficits were also much higher in Portugal and Greece than in typical IMF programme countries, and the levels are clearly higher than the standard deviation across the sample.

Figure 12: General government net lending/borrowing

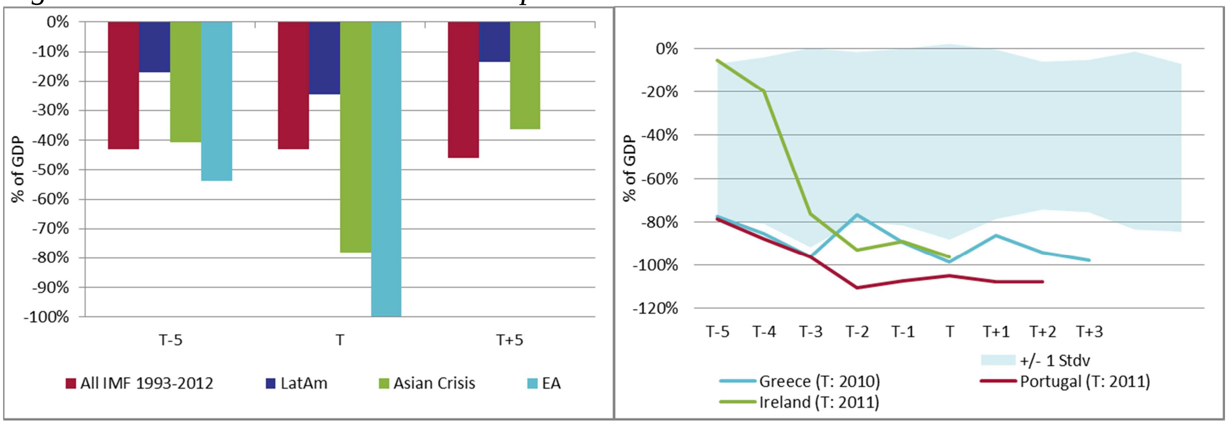


Source: IMF WEO (October 2012), IMF Mona database and Bruegel calculations.

The large deficits in euro-area programme countries resulted in part from major private-sector imbalances that were unwinding following the bursting of the credit and housing market bubbles. This was true in particular in Ireland, but large private sector imbalances that subsequently had an impact on public finances also existed in Greece and Portugal.

The three euro-area countries also stand out in terms of their net international financial liabilities. Greece, Ireland and Portugal has external financial liabilities of close to 100 percent of GDP at the onset of their programmes, well above the 43 percent that was the average in all countries in our sample at the start of their programmes.

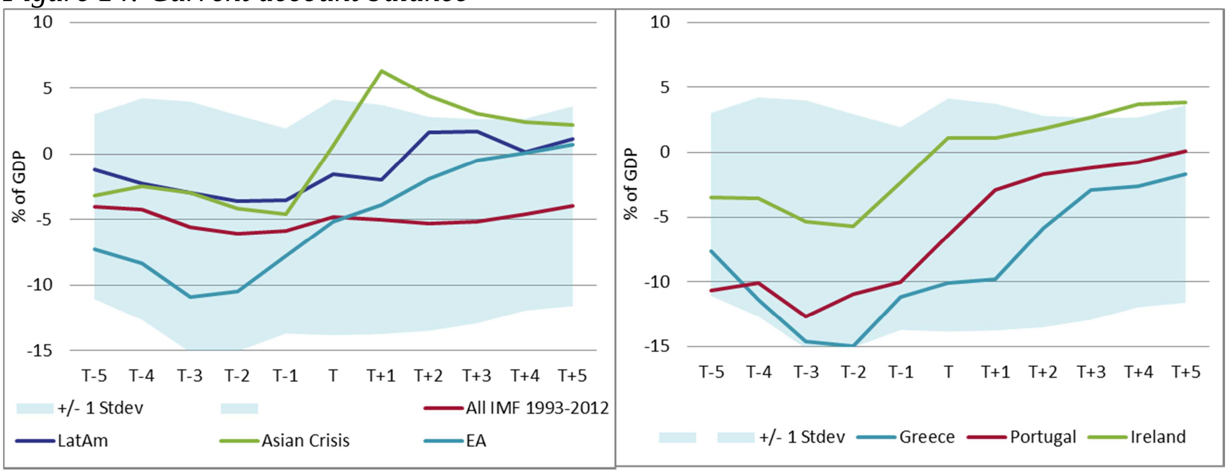
Figure 13: Net international investment position



Source: Bruegel calculations based on updated and extended version of dataset constructed by Lane and Milesi-Ferretti (2007), and Eurostat.

High external financial liabilities were largely a result of persistently high current-account deficits. Euro-area countries at the beginning of the programmes had with current-account deficits that were much more significant than in any of the other country groups examined. In the three euro-area countries, the reduction in current-account deficits started a couple of years before the programme began and amounted over the course of 10 years to a turnaround of around 10 percentage points of GDP (Figure 14). Current-account deficits were much smaller at the beginning of previous IMF programmes. Moreover, there is no clear change in the current account deficits in the 10 years around the programme.

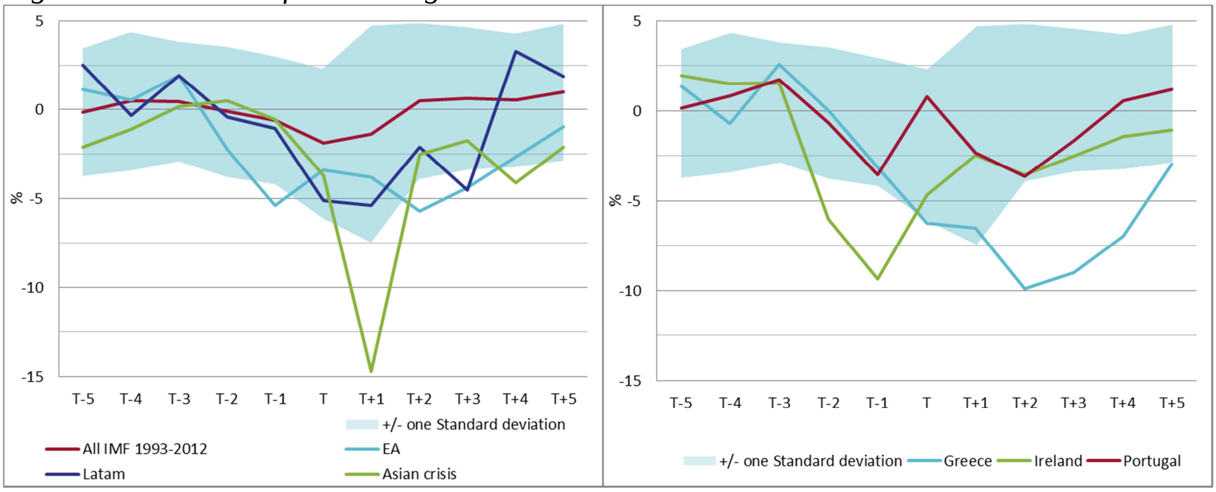
Figure 14: Current account balance



Source: IMF WEO (October 2012), IMF Mona database and Bruegel calculations.

Euro-area programme countries also stand out in terms of economic growth. Their growth rates dropped more significantly than in the Latin American and Asian cases, and remained very subdued during most of the period under consideration.

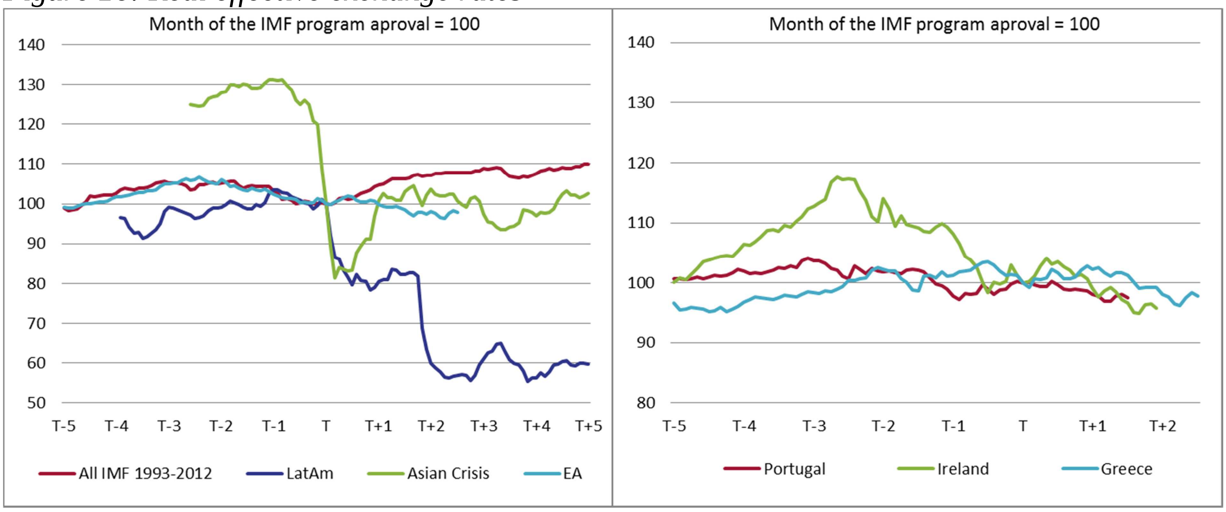
Figure 15: Deviation from GDP growth trend



Source: IMF WEO (October 2012), IMF Mona database and Bruegel calculations. Note: The growth trend is computed as the average growth in the 10 years preceding the programme.

In terms of the performance of the exchange rate, the euro-area countries are again different from the typical crises in Asia and Latin America. Figure 16 shows the dramatic depreciation seen during the Asian and the Latin American crises and the also very substantial decline in the real effective exchange rate around the time of the programme. In contrast, among the euro-area countries, only Ireland saw a significant exchange rate adjustment in real effective terms. Indeed, Irish prices and wages dropped dramatically during the course of the programme. By contrast, in Greece and Portugal, the price adjustment is relatively slow.

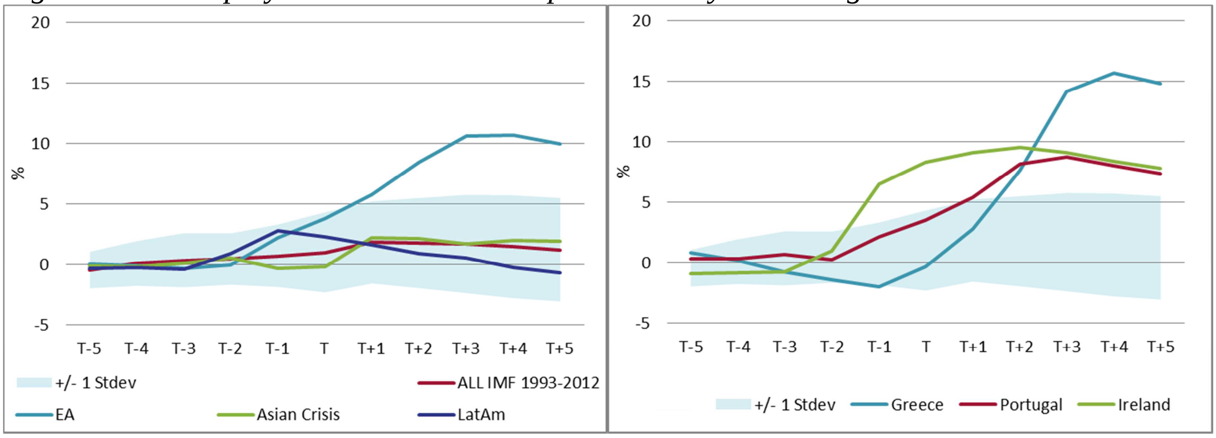
Figure 16: Real effective exchange rates



Source: Bruegel based on Darvas(2012). Note: The double depreciation of the average REER of the Latin American cases is mostly driven by the behaviour of the Argentinian peso. REER is based on CPI.

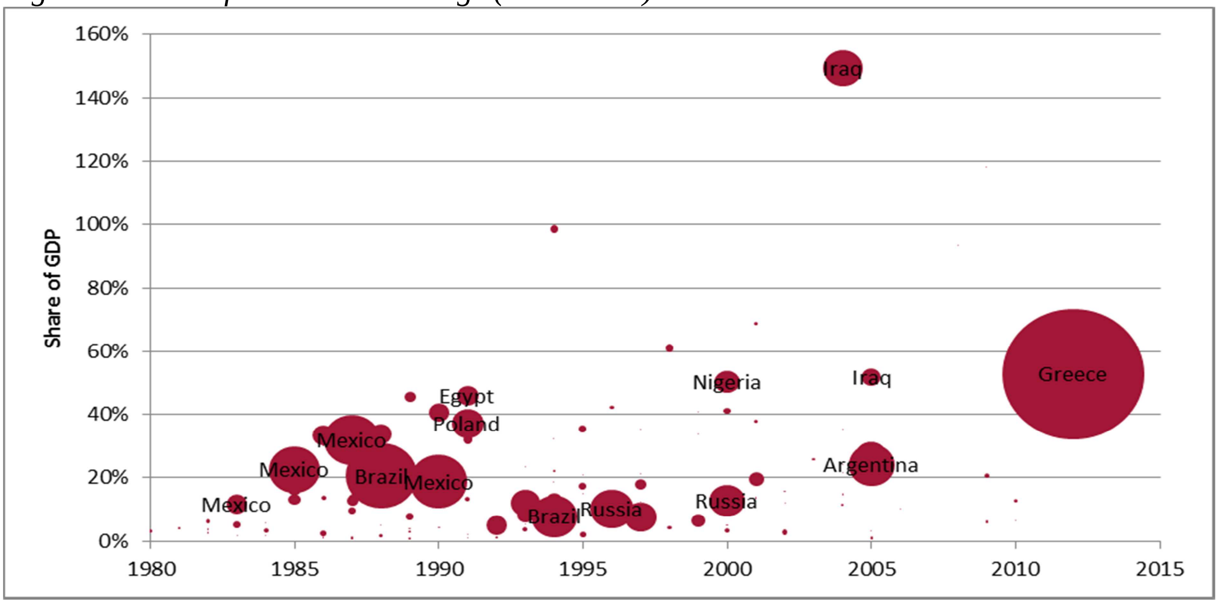
Unemployment in the euro area during the course of the programme increased much more dramatically than it did during earlier IMF programmes, and exceeded very significantly historical standard deviations of unemployment increases. In the three euro-area countries, unemployment increased by more than 10 percentage points on average, with the greatest increase in Greece.

Figure 17: Unemployment rate relative to previous 10-year average



Source: IMF WEO (October 2012), IMF Mona database and Bruegel calculations.

Figure 18: Size of debt restructurings (1980-2012)



Source: Juan J. Cruces and Christoph Trebesch (2011). Note: the diameter of the bubbles indicates the absolute size of the loans in US dollars.

Overall, the comparative data shows the dramatic situation in the euro-area programme countries compared to the situation during previous IMF programmes. The imbalances at the start of the programme, in particular in terms of debt, external debt, deficits and current accounts, were much greater than those seen in previous programmes. In addition, average countries in earlier programmes saw significant depreciations in their real exchange rates, while price adjustment in euro-area countries has been moderate, except for Ireland. Unemployment increased much more dramatically in the three euro-area countries than in previous IMF programmes, and debt restructuring in Greece was the largest in history.

Our findings are largely consistent with those of Barkbu *et al* (2012), who studied the historical record of financial crises and multilateral responses. They compare the 1980s debt crises, the Tequila crisis, the Asian crisis, the Russian crisis and the European crisis consisting of the eight recent European programmes. One of their findings is that emergency lending in the last forty years has tended to increase, while debt restructuring has tended to become less likely or has been delayed.

5. Assessing the three euro-area programmes

5.1 Methodological issues

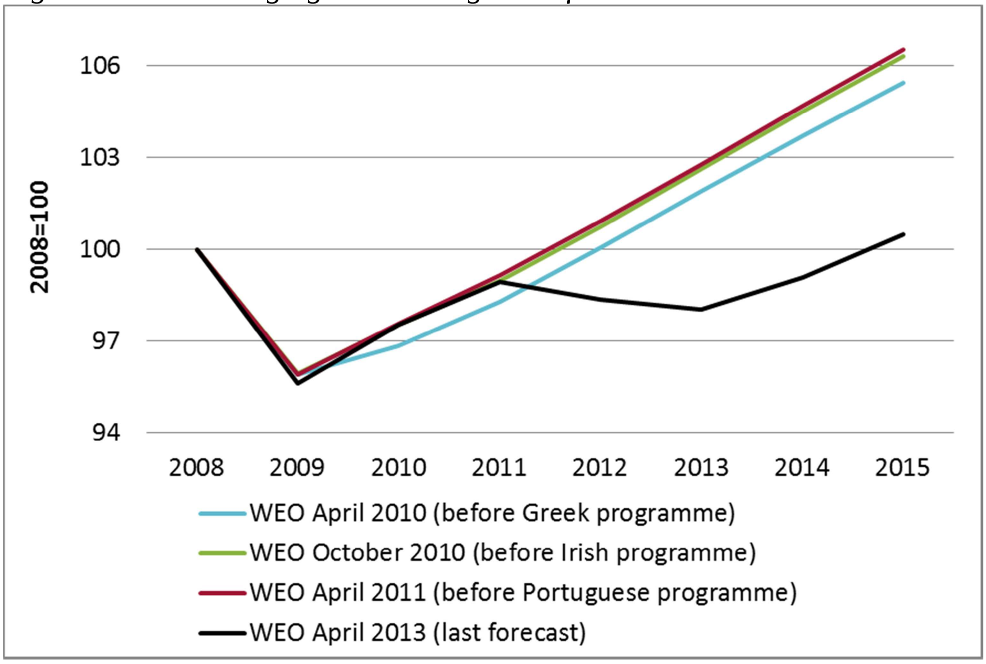
The evaluation of assistance programmes raises a number of typical yet difficult methodological issues:

1. Programmes are based on forecasts, and forecast errors are unavoidable and should not be confused with programme failures. A programme can, for example, fail to reach the pre-set targets because of a less-favourable-than-expected external environment, yet can be simultaneously successful in that the main goals – say, macroeconomic balance, financial soundness and market access – have been achieved;
2. The programme parameters – say, the terms of financing or the associated conditions – are often subject to renegotiation. An assessment cannot take the initial parameters as given and neglect their evolution over time. In addition, this evolution can in part be regarded as an endogenous response to early results;
3. Not all policy decisions taken by a country result from the assistance programme. National governments might have taken important policy-adjustment decisions before the programme negotiations, and might continue to take initiatives after them. Furthermore, the programme itself is only part of the overall international framework that affects policy decisions. Decisions by policy institutions taken outside the context of the programme can be of major importance for its outcome;
4. Programme success is contingent on implementation by national authorities. Failure to implement does not necessarily imply that the programme was ill-designed, at least from a strictly economic standpoint. It may mean, however, that not enough attention was given to domestic political-economy factors and the need to ensure national-level ownership;
5. Programme outcomes cannot be assessed in isolation because they are affected by spillovers from other countries. These can arise from economic interdependence channels such as trade and capital flows, and from contagion channels arising from the conclusions drawn by markets on the implications for a country of decisions taken in, or about, another country[24].

All five of these issues are highly relevant for the EU-IMF programmes in euro-area countries. To start with, all three programmes were initiated at a time when the euro area was expected to recover smoothly from the 2009 recession. Initial developments were in line with, or ahead of, expectations, but after mid-2011 the recovery stalled, capital markets got excessively nervous about the very survival of the euro, and the growth trajectory turned out to be significantly lower than forecast (Figure 19). When assessing the programme results, it is therefore important to discount the impact of a less favourable external environment, in particular after 2012.

[24] See Forbes and Rigobon (2001, 2002) for a discussion on the distinction between interdependence and contagion. They define contagion as a significant increase in cross-market linkages after a shock to one country. A classic example of contagion was the rise in emerging market spreads after the 1998 Russian default. This rise could only be explained by the fact that market participants had drawn general lessons from the treatment of the Russian crisis by the G7 and the IMF.

Figure 19: The changing euro-area growth forecast



Source: IMF, World Economic Outlook Database. Note: GDP growth projection vintages.

Second, the euro-area programmes have been subject to constant renegotiation and redefinition, to a much greater extent than standard IMF programmes, for which the template is standardised and well-tested. The Greek programme, for example, started with the assumption that EU leaders had made up their mind and rejected the option of debt restructuring for euro-area members. Only five months later, in October 2010 in Deauville, a different stance was adopted, and after another nine months, in July 2011, debt restructuring was officially endorsed as an option for Greece. Yet the size of that restructuring was revised again three months later, in October 2011. Simultaneously, the interest rate on official European lending was revised several times.

Third, major decisions were taken outside the framework of the programmes. In the Irish case, adjustment started before the negotiations with the Troika, and the programme did not alter the policy course in a fundamental way. In all three cases, decisions by EU institutions that were not formally part of the programmes still had a significant bearing on their outcomes. European Central Bank policy is the best example of this: neither the Securities Market Programme (SMP) of spring 2010 and summer 2011, nor the three-years Long-Term Refinancing Operation (LTRO) of end 2011-early 2012, nor the announcement of the Outright Monetary Transactions (OMT) programme in summer 2012 were part of the programme design, yet they, in particular the LTRO and OMT, had significant effects on bond markets.

Fourth, implementation by national authorities was very uneven. In Greece, especially, government support for the programme weakened at an early stage, a series of political upheavals affected the country's willingness and ability to implement agreed measures, and negotiations with the Troika were regularly interrupted. The situation was different in Ireland and Portugal.

Fifth, contagion between countries was particularly pervasive in 2010-12 when the euro area was in the process of setting the rules on the basis of case-by-case decisions. Repeatedly, decisions taken about the Greek debt problem affected bond spreads in other countries. Rating agencies very explicitly linked assessments of the solvency of the weak euro-area sovereigns to the jurisprudence set in Greece[25]. Decisions taken on the treatment of Irish bank creditors also affected the funding conditions for banks in other countries. Caution should therefore be exercised when assessing country programmes one by one.

The issue, in a nutshell, is that we are facing a major identification problem. There is no methodology that makes it possible to isolate precisely the set of policy initiatives that corresponds to an assistance programme and to evaluate their effects independently from changes in other relevant variables affecting the policy outcome.

In what follows we make extensive use of the programme documents. For the euro-area countries, the IMF and the European Commission published, at the start of each programme, comprehensive documents presenting the Troika diagnosis, the strategy deemed appropriate, the list of policy measures subscribed to by the government, and associated economic forecasts. These documents were then updated every quarter on the occasion of the reviews carried out by the Troika to take into account international and domestic economic and policy developments. Together with actual data and other forecasts from other sources (in particular the IMF and the European Commission), these documents provide the basis for our assessment.

However, for the reasons indicated above, comparisons between programme forecasts and outcomes provide only partial and biased indicators of success. In analysing them we aimed to determine:

- What changed in the country's economic policy and financing conditions when the programme was agreed;
- Whether the economic strategy outlined in the initial programme was consistent and appropriate, given the information available at the time of its publication, and whether the policy instruments that the strategy relied upon were sufficient to reach the stated goals;
- If outcomes turned out to be less favourable than expected, and if so, if this was due to flaws in the strategy, to implementation failures, or to changes in the external environment.

It should be emphasised that we are not, however, providing a counterfactual analysis. This would have implied assessing actual Troika programmes against alternative programmes with different priorities or modalities. This is a real limitation, but one that is difficult to overcome in macroeconomic evaluations. In view of the particular conditions of the euro area, there are even fewer natural experiments we can refer to than for standard IMF programmes[26]. Moreover, developing alternative programmes and testing them with macro models is beyond the scope of our report.

[25] A May 2011 assessment of the consequences of a Greek default by Moody's, the rating agency, concluded that *"a confirmation that the euro area was willing to let one of its members default would inevitably cause investors to reassess the limits of euro area support. That, together with the assumption that other weak euro area sovereigns might be more likely to choose to take similar steps to Greece – particularly if a Greek restructuring were perceived as 'orderly' – could result in Ireland and Portugal, and perhaps stronger countries such as Spain and even Italy and Belgium, finding market access considerably more expensive"*. Source: Moody's Investors Service, 'Assessing the Effect of a Potential Greek Default', *Special Comment*, 24 May 2011.

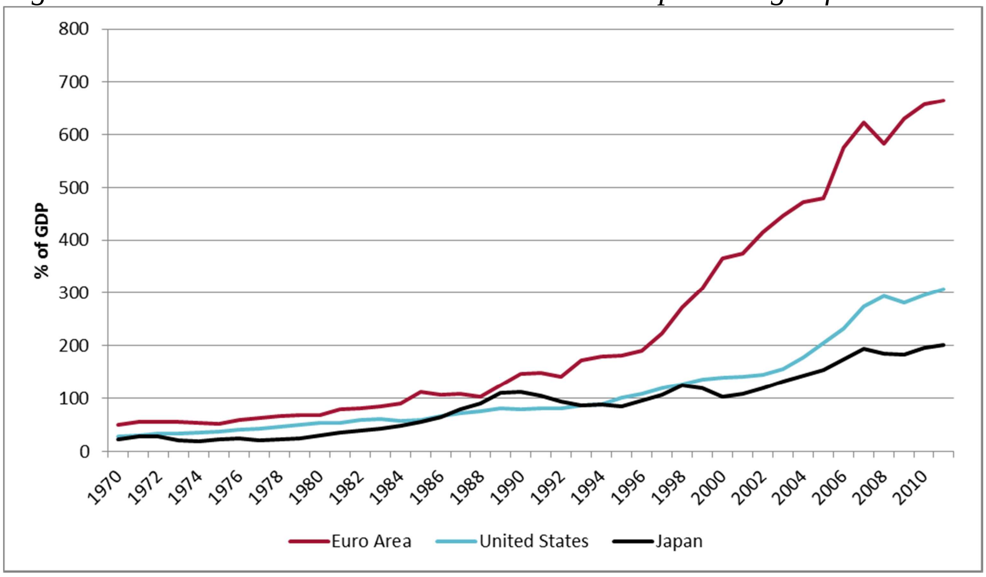
[26] The issue of counterfactuals has also been raised in assessments of the work of the IMF's Independent Evaluation Office. See Lissakers (2006).

5.2 A very special context

To evaluate financial assistance programmes in the euro area, it is necessary to start from the special circumstances of a monetary union. In chapter 4, we saw that financial assistance programmes in the euro area are larger and longer, and that unemployment increased much more significantly, than elsewhere. We also saw that in the euro area, programmes were only used to support public finances, whereas large balance-of-payments assistance was given to the private sector via the banking system's access to the ECB liquidity window. So two questions need to be asked: why was the programme size so extraordinarily large, and why was the programme duration so long? The answer to these questions can be found in the specific situation in the euro area at the beginning of the crisis in terms of institutional set-up, degree of financial integration and size of imbalances.

In the run-up to the crisis, financial markets regarded EMU as completely stable and dismissed the possibility of a liquidity – let alone solvency – crisis. Sovereign risk premia were largely absent and euro financial markets were highly integrated. While financial globalisation meant that cross-border financial holdings relative to GDP increased by 149 percentage points in the US and 69 percentage points in Japan between 1999 and 2007, such cross-border financial holdings increased by 351 percentage points in euro-area countries. In other words, monetary union led to a very high degree of cross-border financial integration (Figure 20)[27].

Figure 20: Cross-border assets and liabilities as a percentage of GDP



Source: Bruegel estimations based on updated and extended version of dataset constructed by Lane and Milesi-Ferretti (2007), IMF and Eurostat. Note: Euro area refers to the current 17 member states. Intra-euro area holdings are counted as cross-border.

The high degree of financial integration was almost unanimously celebrated as a success of monetary union, by policy makers, market participants and academics. Yet, as the crisis unfolded, markets and policy makers realised that financial market integration was too advanced compared to policy integration and to the underlying level of political, social and institutional integration. It was also biased towards debt instruments rather than risk-absorbing equity instruments. The appropriate infrastructure to regulate and supervise, let

[27] See European Commission (2012) and Lane (2012).

alone resolve, cross-border financial institutions was largely absent[28]. The banking system was also deeply exposed to government debt and the negative feed-back loop led to a significant deterioration of financial conditions. In short, the euro-area financial and banking system was extraordinarily fragile.

Second, the counterpart of large downhill capital flows was a significant increase in the indebtedness of the corporate, household and government sectors. The combination of high debt levels and real exchange rate misalignments lead to the contradiction that countries would simultaneously need higher and lower inflation: higher inflation in order to reduce debt-to-income ratios and lower inflation in order to restore competitiveness.

Third, in the absence of nominal exchange rate adjustment in a monetary union, wages and prices would need to be sufficiently flexible. With the inflow of capital into peripheral countries because of EMU, the three future programme countries witnessed significant booms, low unemployment rates and wage increases significantly exceeding productivity developments, especially in the non-traded sector. The over-valued real exchange rate has been difficult to correct in the programme countries, because of insufficient wage and price flexibility – the exception being Ireland. Lower inflation rates, in turn, mean that the real interest rate is too high compared to the cyclical situation.

A fourth important aspect is the economic growth outlook in partner countries. Economic growth in the euro area in 2012-13 has been extremely weak. The EU has not provided a solution for the weak growth pattern resulting from expensive financing conditions in some major member states, the loss of confidence in the sustainability of the euro, relatively restrictive fiscal policies and, to some extent, deeply enshrined structural weaknesses. This combination had a deep impact on the design and success of the programmes.

The fragility of the euro-area financial system left its mark on the programmes in three main ways:

- The imposition of losses – on bank creditors or government bond holders – was considered highly dangerous for the stability of the system. As a result, the size of the programmes became larger and the cost imposed on taxpayers was also significant;
- All euro-area countries had to be considered systemic because failure to succeed in any of them could have had major consequences for the resilience of the euro area as a whole. This was most apparent for Greece, where the Troika hardly had the option of walking out of difficult negotiation phases;
- Financial instability in some parts of the euro area meant that other parts, including the programme countries, would be affected by contagion.

The absence of the nominal exchange rate instrument, an important tool for adjusting real price misalignments in typical IMF programmes, resulted in the focus being put on a combination of structural and fiscal policy to achieve adjustment. The hope was that structural reforms would trigger significant aggregate productivity boosts that would help reduce the unit labour cost gap, even in the presence of a low degree of nominal wage flexibility. Fiscal consolidation was also seen as a way to trigger wage adjustment – in particular through public sector wage restraint.

[28] It is currently in the process of being built up, a policy agenda dubbed 'banking union'. At the time of writing, the banking union is not yet in existence.

As for growth, in typical IMF programmes the foreign growth environment can be taken as given. In the euro-area context, the fragility of the three programme countries, the contagion effects on other peripheral countries and the overall incomplete architecture of the euro area resulted in significantly worse euro-area growth than desirable for the success of the programmes.

These factors were present alongside the difficult situation at euro-area level and in the individual countries. Every major political and economic set-back in Greece meant renewed calls by senior politicians in the north of Europe to stop the programme and eject Greece from the euro area. In turn, the political situation in the north of Europe had implications for the other programmes as well. The design of the programmes itself was significantly shaped by political motivations and decisions in the Eurogroup. Moreover, political uncertainty about the willingness of national governments to progress with further institutional reform to fix the birth defects of the euro area continues to be a major obstacle.

In addition, procrastination by national and EU authorities in coming to terms with the necessity of financial assistance probably resulted in bigger programmes than if financial intervention had taken place before market access was lost, or even preventively. Support at an earlier stage could have been associated with continued market financing and therefore it could have resulted in smaller official financing packages. It could also have prevented the rise in financing needs for the financial sector.

5.3 A horizontal overview

It is against this complex economic and political situation that our evaluation has to be undertaken. Certainly at the beginning of the Greek programme, nobody could foresee the series of major policy choices that euro-area policy makers would be confronted with (See Annex 2: Timeline of events). We acknowledge that this has been a major difficulty for the Troika, which makes our assessment of its performance particularly challenging.

Before getting into the details of the individual programmes, we provide some elements of comparison between them. Table 3 documents the considerable complexity in terms of different financial contributors. It also shows the extraordinary size of the Greek programme.

Table 3: Overview of the Financial Assistance Programmes in Greece, Ireland and Portugal

	Greece		Ireland	Portugal
	1st programme	2nd programme		
Date	May 2010 until June 2013	March 2012 until end 2014	December 2010 until end 2013	May 2011 until mid-2014
Size	€110 bn	€164.5 bn[29]	€85 bn	€78 bn
Nature	IMF: SBA EA: Greek Loan Facility	IMF: part of EFF €28 bn[30] arrangement EA: EFSF	IMF: EFF EA: EFSF EU: EFSM Bilateral Ireland	IMF: EFF EA: EFSF EU: EFSM
Contributors	IMF (€30) Pooled bilateral from EA (€80 bn)	IMF (€19.8 bn) EFSF (€144.7 bn)	IMF (€22.5 bn) EFSF (€22.5 bn) EFSM (€22.5 bn) UK (€3.8 bn) Sweden (€0.6 bn) Denmark (€0.4 bn) Ireland: Treasury and National Pension Reserve Fund (€17.5 bn)	IMF (€26 bn) EFSF (€26 bn) EFSM (€26 bn)

Source: DG ECFIN. Note: The abbreviations stand for SBA: Stand-By Arrangement; EFF: Extended Fund Facility; EFSF: European Financial Stability Facility; EFSM: European Financial Stabilisation Mechanism.

Table 4 compares forecasts for 2013 at the outset of the programmes with the latest available forecasts for 2013. The table shows that programme projections were way off in Greece, but much less so in Ireland and Portugal. In all three countries, however, the increase in unemployment was underestimated. Moreover, in particular in Greece and Ireland, the contraction of domestic demand was significantly underestimated. In terms of inflation, the forecast changes were close to those realised in Ireland and Portugal, but for Greece, expected inflation was significantly lower than realised inflation rates. Finally, the improvement in the current account was generally better than predicted.

[29] Euro-area member states and the IMF approved an additional €130 billion for the term 2012-14; this was added to the undisbursed amounts (€34.5 billion) of the first programme (Greek Loan Facility). Hence, the total of the second programme amounts to €164.5 billion.
[30] The IMF approved a four-year arrangement under the EFF for Greece in March 2012. €19.8 billion of this arrangement were contributed to the second Troika programme for Greece. The other €8.2 billion will be disbursed in the two years after the end of the Troika programme (ie 2015 and 2016).

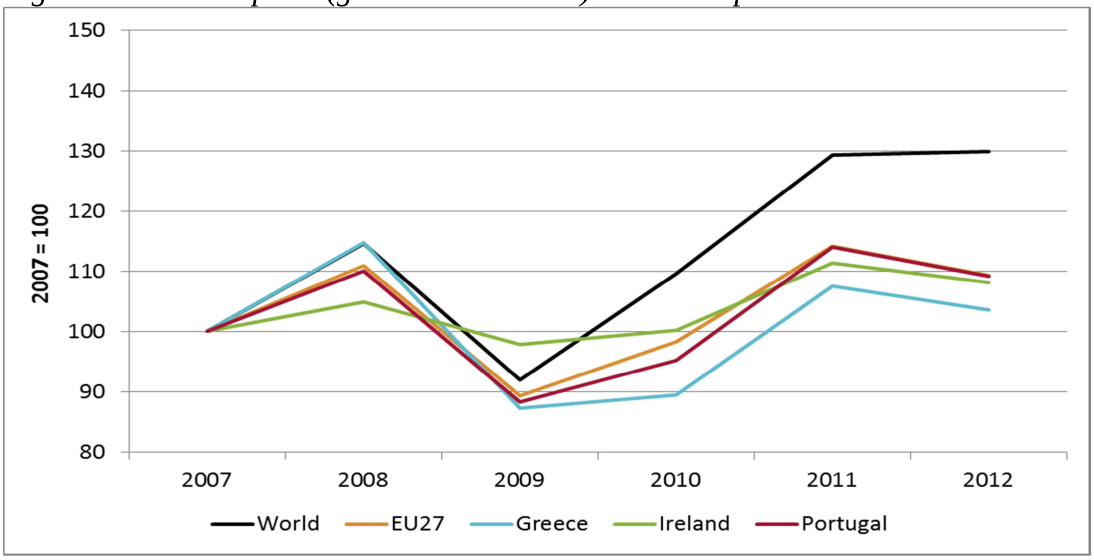
Table 4: Economic indicators for 2013: projections vs. outcomes

	Greece		**Ireland**		**Portugal**	
Source	Programme May-10	AMECO Feb-13	Programme Feb-11	AMECO Feb-13	Programme Jun-11	AMECO Feb-13
*Projection**	*2009-2013 cumulated*		*2010-2013 cumulated*		*2010-2013 cumulated*	
Real GDP (% change)	-3.5	-21.0	5.4	2.4	-2.8	-6.5
Domestic demand (% change in volume)	-11.8	-28.4	-3.4	-11.1	-10.5	-14.0
HICP (% change)	3.4	8.3	2.6	2.8	6.9	7.0
Projection	*2013*		*2013*		*2013*	
General government deficit (% of GDP)	-4.9	-4.6	-7.5	-7.3	-3	-4.9
Current external balance (% of GDP)	-5.6	-4.3	2.6	3.4	-3.9	-1.4
Unemployment (%)	14.8	27	11.6	14.6	12.4	17.3
General government debt	149.7	175.6	120.5	122.2	108.6	123.9
Net IIP (negative)	106.0**	97.6	n.a.	n.a	123.4**	106.1

Source: European Commission economic adjustment programmes, European Commission forecasts as of February 2013 retrieved from the AMECO database. Note: * Data for 2009, respectively 2010 refer to end of year data. The date is the year before the programme started. **Taken from IMF programme documents as not available in European Commission economic adjustment programme.

So what can explain the better than predicted net export performance? We look at the development of total exports and compare them with EU27 export developments and world export developments. While Ireland and Portuguese exports have broadly performed similarly to EU exports overall, the Greek export performance has been worse (Figure 21).

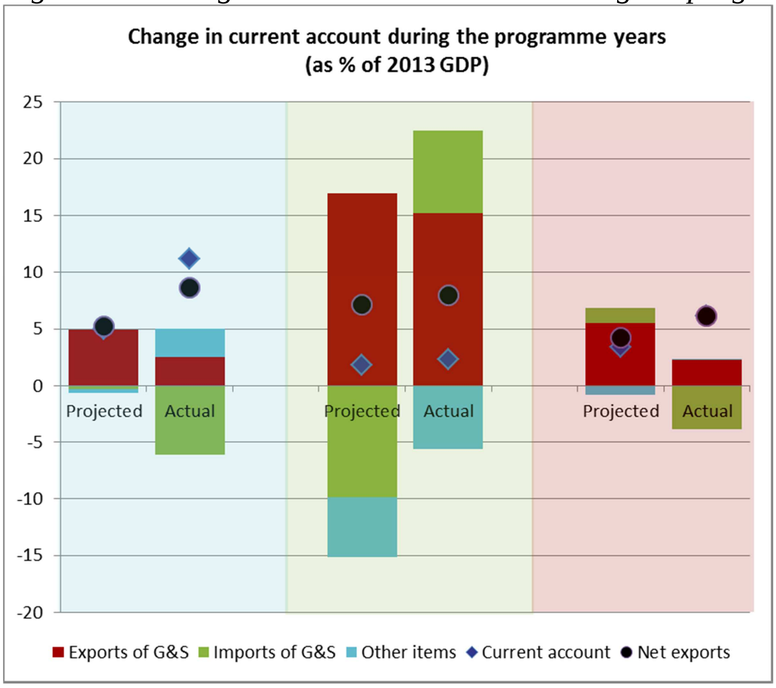
Figure 21: Total exports (goods and services) at current prices.



Source: WTO Statistics database.

When we look in more detail at what the programmes initially forecast for 2013, and compare that with the outcome according to the February European Commission estimate, two results stand out. First, export growth plays a significant role in the change of the current account in Ireland, and to some extent in Portugal and Greece, during the programme period (Figure 22). In Portugal and Greece, exports disappointed compared to what the programme initially predicted, while in Ireland, the export performance matched the forecast very closely. Second, the better than expected outcome in terms of the current account is to a significant extent determined by the greater than expected decline in Greek and Portuguese imports. In Ireland, by contrast, imports increased during the programme period contrary to the forecast contraction. Consistent with the erroneous projection of demand developments, the programmes did not project a significant contraction of Greek or Portuguese imports.

Figure 22: Change in the current account during the programme years (as % of 2013 GDP)

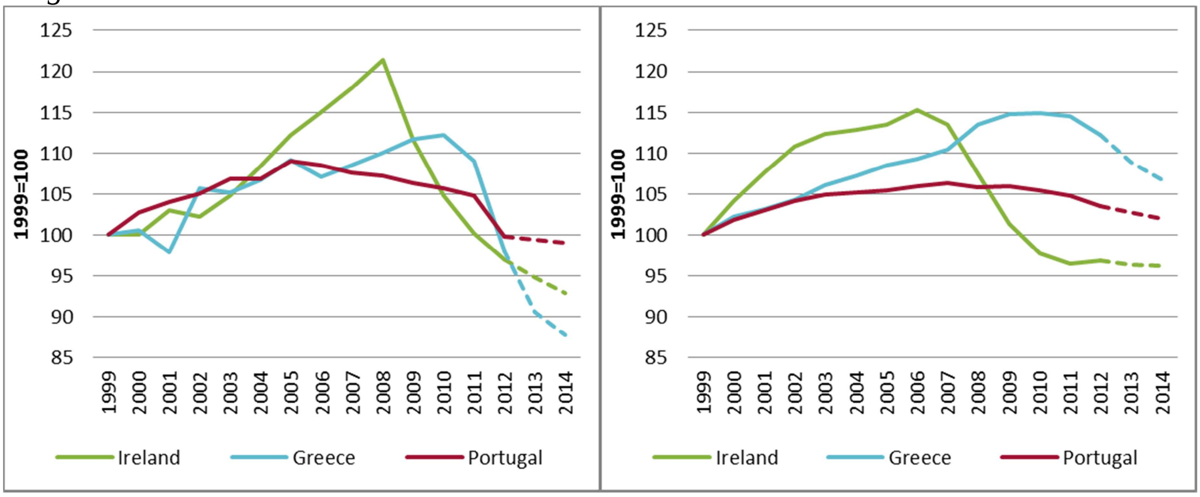


Source: AMECO winter forecast 2013, European Commission programme documents. Note: The durations of the programme are from the beginning of the programme until the most recent available data: 2010 to 2013 for Greece and Ireland, and 2011 to 2013 for Portugal. The projected data is taken from the European Commission's original Economic Adjustment Programmes.

Current-account performance is of course related to the development of relative prices and costs. Figure 23 shows the very strong pre-crisis divergence relative to euro-area trading partners and the adjustment since the beginning of the crisis. Unit labour costs adjusted first in Ireland and later in Greece and Portugal, while the developments of the GDP deflator have been more muted. As discussed by Wolff (2012), producer prices thus seem to move more sluggishly than costs. The consequence has been a larger-than-planned reduction in real wages.

In the individual country sections, we discuss the specific price adjustments. Yet, the horizontal view already indicates that lagging price adjustment may have been one of the reasons for the relatively slow pick-up in growth.

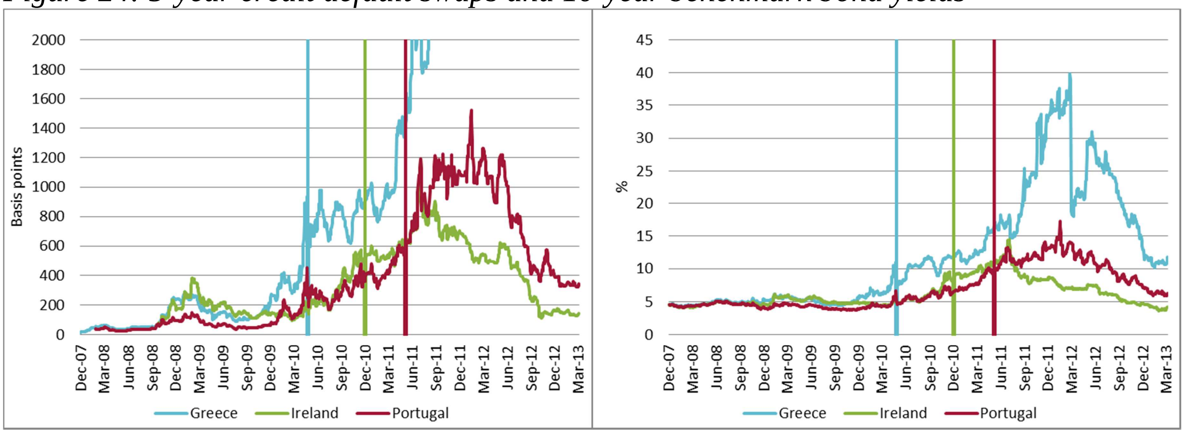
Figure 23: Real effective exchange rates, based on unit labour costs (left panel), and GDP deflators (right panel), performance relative to the rest of the former EU15: double export weights



Source: Ameco, February 2013. Note: dotted lines correspond to the AMECO Feb-13 forecast.

The programmes started at a time when risk premia in the sovereign bond market were rising fast. Figure 24 shows that after the start of the programme, the credit default swap (CDS) risk premia typically continued to rise until turning later on. The turning points came at different times. In Ireland, risk started to decline in the summer of 2011, while in Portugal, risk peaked in the spring of 2012. In Greece, the positive effect of the debt restructuring on yields is clearly visible. This could suggest that declining risk premia were not only the result of action at the European level but also reflect a reassessment of the economic situation of each country.

Figure 24: 5-year credit default swaps and 10-year benchmark bond yields



Source: Datastream. Note: The vertical lines indicate the approval of the IMF financial assistance programmes in each case.

5.3.1 Greece

The Greek programme is by far the least successful of the three under review. Since its inception in May 2010, it has been held back by economic disappointment, financial about-faces and political upheavals. The implementation of agreed measures has repeatedly disappointed the Troika. Economic performance has been dismal and social hardship much more devastating than expected. The restructuring of private claims on the Greek sovereign was repeatedly rejected as an option, only to be introduced in February 2012, yet it did not take long for the IMF to argue that there was a need to go further and contemplate also the restructuring of official assistance loans. In early 2012, the IMF and the euro area were forced to add €130 billion to the initial €110 billion programme, and to extend its duration far beyond the initial three-year horizon. Politically, the adjustment has proved domestically very controversial: after three general elections in three years, formerly dominant parties have seen their approval ratings dwindle and have been forced into a fragile coalition.

Yet the adjustment programme continues, market nervousness has diminished since summer 2012 and Greece is still part of the euro area. In this respect the programme has achieved what was perhaps its main aim.

It is important to find out what explains this outcome. In the next section, we first provide a quantitative account of economic developments since the May 2010 start of the programme. We then examine possible explanations for this outcome, and offer a few conclusions.

5.3.2 Anatomy of a setback

Greece entered into a stand-by agreement in May 2010. The start of the programme was the provisional conclusion of a sequence that started with the disclosure of budgetary deficit figures far in excess of what had been communicated to the EU in the previous years. The country suffered at the same time from massive fiscal imbalances, excessive private credit and a severe deterioration in competitiveness. It was much less open than other European economies of similar size, its traded-goods sector was underdeveloped, rent-seeking was pervasive, the state machinery was largely ineffective and tax evasion was common. By any possible standard, ensuring adjustment within monetary union was bound to be a challenge of exceptional magnitude.

The Troika and the Greek government designed a programme focused on fiscal rebalancing and competitiveness. Front-loaded fiscal adjustment was considered indispensable to restore confidence in public finances and bring about the rebalancing between domestic and external demand. A structural reform package was devised with the aim of restoring competitiveness in the medium term. It was expected that:

- Growth would resume in 2012;
- Unemployment would peak at 14.8 percent in 2012;
- No debt restructuring would be needed;
- The debt ratio would peak in 2013 at 149 percent of GDP;
- Government would recover full market access in 2013.

These hopes were unambiguously dashed by events. Three years on, the programme is off-track by a wide margin (Table 5).

Table 5: Greece in 2013: expectations versus reality

	Initial programme (May 2010)	January 2013 forecast	Performance relative to expectations*
Real GDP (2009=100)	96.5	79.6	
Nominal GDP (base estimate for 2009=100)	99.2	77.8	
Real domestic demand (2009=100)	89.7	72.5	
Gross fixed capital formation (2009=100)	82.6	56.6	
Unemployment rate (per cent)	14.3	26.6	
Government deficit (per cent of GDP)	-4.8	-4.5	
Government gross debt (per cent of GDP)	149	178.5	
Exports of goods and services (billions of euros)	60.6	50.6	
Imports of goods and services (billions of euros)	57.5	51.2	
Current-account balance (per cent of GDP)	-4.0	-1.2	

Source: IMF programme documents. Note: * red: worse than expected; yellow: as expected; green: better than expected.

It is not unusual for IMF programmes to disappoint in comparison to initial forecasts, but orders of magnitude are usually much smaller. On the basis of an assessment of 159 programmes, the IMF Independent Evaluation Office found that growth disappointed in about 60 percent of programmes, and that the average output shortfall over a two-year period was 1.5 percent and -6.4 percent in cases of capital account crises (IEO, 2003, Table 5.3). An output shortfall as large as Greece's could only be found in one percent of the programmes.

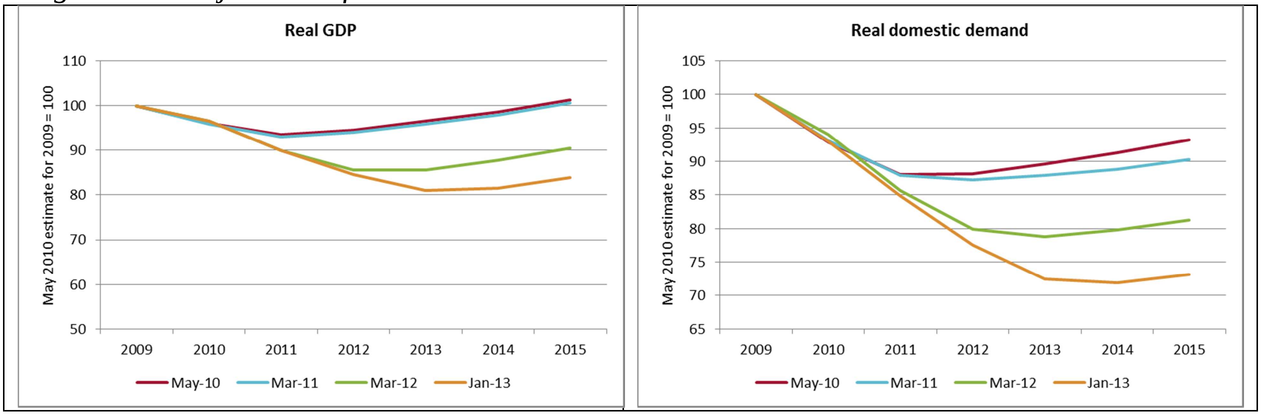
The differences between performance indicators are also remarkable. Greece under the programme experienced a true collapse in domestic demand and especially of fixed investment. In January 2013, unemployment in 2013 was expected to be more than 12 percentage points higher than foreseen at the outset of the initial programme. But the government deficit was expected to be 2 percentage points higher only and the current account was expected to be closer to balance.

To monitor these developments in more detail, we look at key indicators and their expected evolution at roughly one-year intervals in the initial May 2010 programme, the March 2011 third review, the March 2012 request for an extended agreement and the January 2013 second review of the extended arrangement. Unless otherwise indicated, all data is taken from IMF documents.

Growth and employment

As Figure 25 shows, the programme was still roughly on track at the time of the March 2011 third review. However, there was a sharp deterioration between spring 2011 and spring 2012, and a further deterioration between spring 2012 and spring 2013. Instead of a slowdown in the pace of contraction followed by a stabilisation, as expected in March 2011, the decline in domestic demand accelerated sharply in 2011 and continued in 2012. In 2011 fixed investment declined by close to 20 percent. This collapse was not offset by foreign trade. On the contrary, exports performed worse than initially hoped.

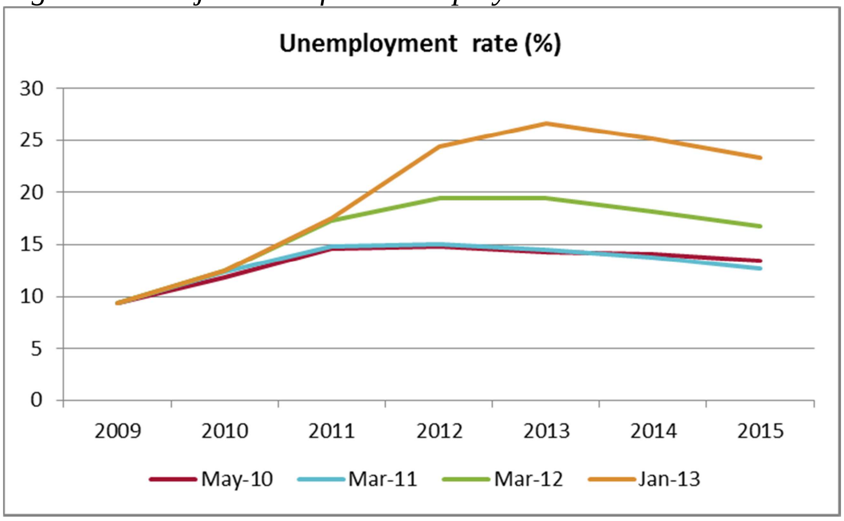
Figure 25: Projections of real GDP and domestic demand



Source: IMF programme documents.

The same pattern can be seen for unemployment. Although a significant deterioration was thought likely in the initial programme, the unemployment rate was expected to peak in 2011. In fact the deterioration went much further. The projected increase in the unemployment rate between 2009 and 2013 is expected to be 17.2 percentage points in the January 2013 review, against 4.9 in the programme – more than three times more (Figure 26).

Figure 26: Projections of the unemployment rate



Source: IMF programme documents.

Wages, prices and the real exchange rate

The initial programme foresaw a moderation of inflation in 2010 and a small decrease in consumer prices in 2011, followed by a gradual convergence towards a one percent inflation rate (Figure 27). This scenario was compatible with a slow improvement in the real exchange rate vis-à-vis the rest of the euro area. Competitiveness gains were, however, expected to take place, as a consequence of productivity-enhancing reforms affecting the traded-goods sector and the economy as a whole.

In reality consumer price index (CPI) inflation increased in 2010, partly as a consequence of the rise in the VAT rate, and started to decline in 2012 only. By this measure the real exchange rate vis-à-vis the euro area is not expected to post a material improvement by 2013. The GDP deflator-based real exchange rate suggests improvement already in 2012, albeit a modest one.

Figure 27: Projections of CPI inflation and the real exchange rate

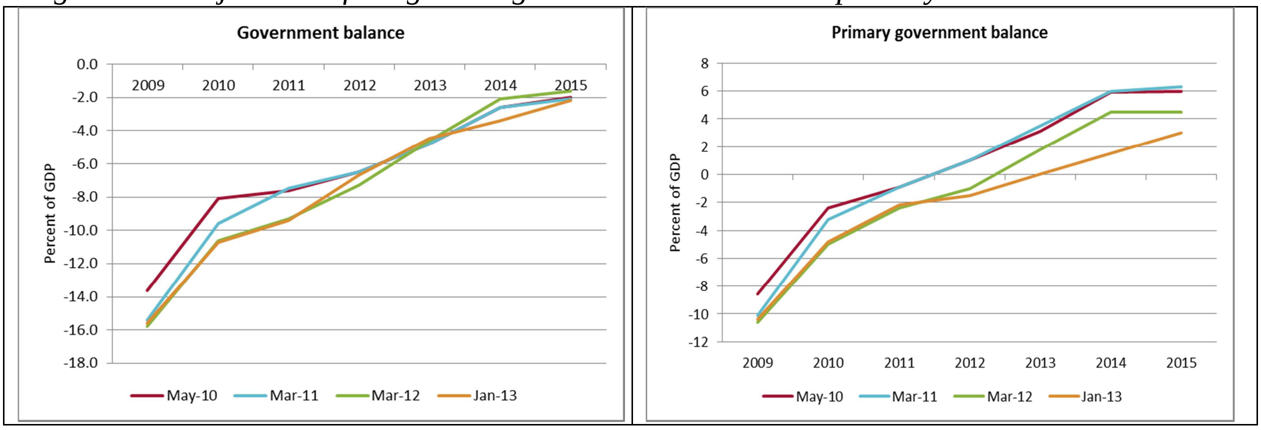
Source: IMF World Economic Outlook, IMF programme documents, European Commission Economic Forecast, Bruegel calculations. Note: As the first programme did not include projections for unit labour costs, we rely on consumer prices instead to compute the projected evolution of the real exchange rate. The CPI for the euro area is taken from the closest vintages of the IMF's bi-annual *World Economic Outlook*.

It is only for wage-based competitiveness indicators such as unit labour costs that the improvement is noticeable. Thanks mostly to downward wage adjustment, ULCs started to decline already in 2010 and the trend accelerated strongly in 2011-12.

Public finances

Notwithstanding the February 2012 restructuring, the debt ratio in 2013 is expected to be still significantly above the initial target. As a proportion of GDP, the government balance is expected to be 1.9 percentage points worse than envisaged in the first programme (Figure 28). This gap, however, can be entirely ascribed to the fact that the actual 2009 deficit was itself notably worse than assessed at the time of the launch of the first programme. In terms of change, the 2009-13 evolution as foreseen in January 2013 is the same: almost 9 percent of GDP.

Figure 28: Projections of the general government balance and primary balance



Source: IMF programme documents.

This is an extraordinary result in view of the sharp deterioration of the output forecast. It can be first explained by a large drop in the interest payments (€8.4 billion or 5.2 percent of GDP in 2013 according to the January 2013 forecast, instead of €18.9 billion as initially foreseen), which itself resulted from improvements to the terms of lending by the EFSF/ESM, and from the rescheduling agreement of February 2012. Second, the improvement in the primary balance has remained almost as strong as initially envisaged (€24.7 billion between 2009 and 2013, instead of the initially expected €27.8 billion). As the economy shrank, Greece increased its efforts to meet the deficit targets and largely succeeded.

Its performance is clearly less brilliant in terms of the public debt ratio, largely because initial conditions and the shrinking of the denominator mechanically affected the result. In spite of higher inflation, nominal GDP significantly falls short of the rebound expected in the first programme. In the initial programme it was expected to have returned by 2013 to the then-estimated 2009 level. In the January 2013 forecasts, it was expected to be more than 20 percent lower (Figure 30).

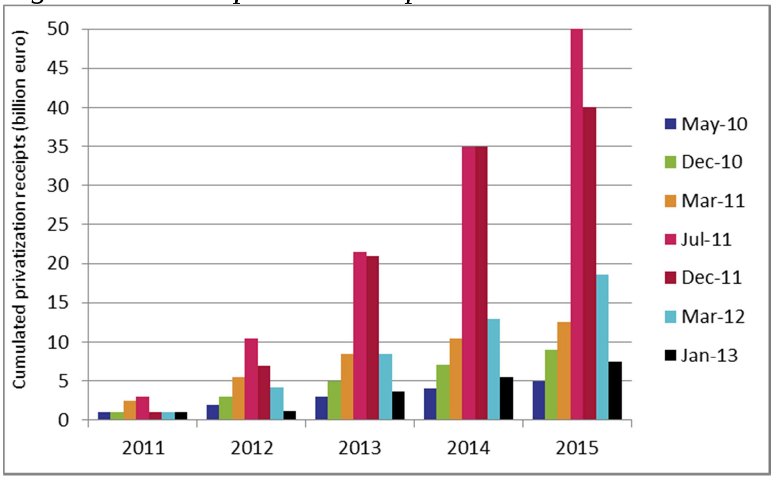
Against this background, the Troika pushed for a meaningful privatisation plan. In the first Troika programme privatisation receipts were expected to be nearly negligible: €3 billion during the 2010-13 period, roughly 0.3 per cent of GDP per year, a target the IMF staff considered *"disappointing"*. As public debt concerns worsened, the Troika exerted increasing pressure on the government to be more ambitious, especially as public-sector assets – not all of which were marketable – were assessed to be worth nearly €200 billion (85 percent of GDP)[31]. It was hoped that in 2012-13, privatisation could raise about one percent of GDP per

[31] See Table 18 in the IMF's Second Review, December 2010.

year. In addition, divestiture of state assets was expected to contribute to economic performance.

Enthusiasm for privatisation was however dashed. Politically, the Troika was accused of pushing for the dismantling of state property. Economically, weak equity market conditions undermined potential revenues. In December 2011, the Troika recognised that results had disappointed but nevertheless set as a goal that privatisation proceeds should reach €11 billion by end-2012, €20 billion by end-2013 and €35 billion by end-2014[32]. This was still quite ambitious. However the envisaged programme was not carried out in 2012, partly because of the two elections the country went through in the first semester. In early 2013, privatisation receipts for 2012 were assessed as negligible.

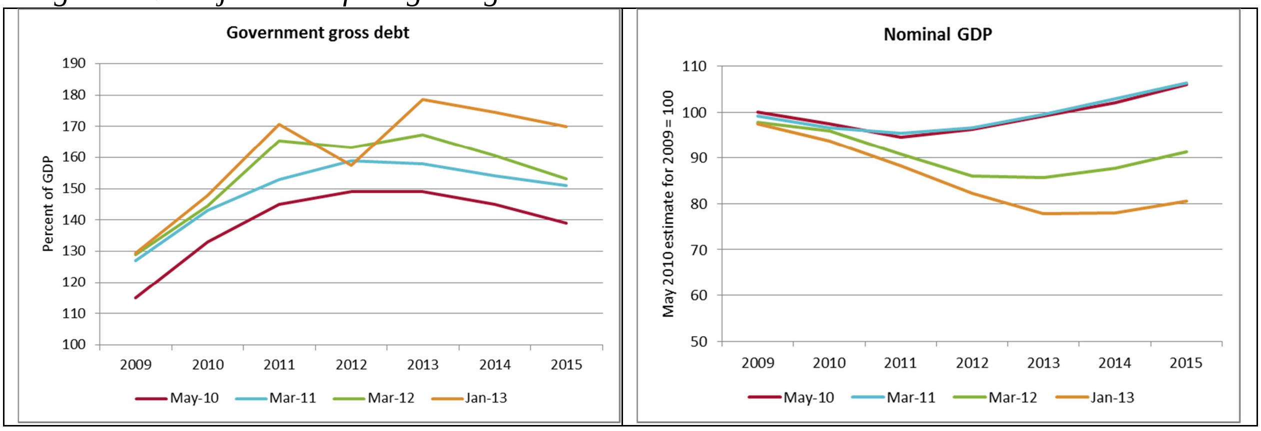
Figure 29: Greek privatisation plans



Sources: IMF programme documents.

In retrospect, the Troika repeatedly proved to be too optimistic about the ability and willingness of the government and the privatisation agency to prepare and execute privatisation plans.

Figure 30: Projections of the gross government debt ratio and nominal GDP



Source: IMF programme documents.

Table 6 details the contributions of various factors to the changes in the deficit and debt ratios between the 2010 commencement of the programme and the January 2013 review. Concerning the deficit, the very large revenue shortfall resulting from adverse growth

[32] See Annex Table 1 in the December 2011 Review

developments was largely offset by an additional fiscal effort estimated to be of the order of magnitude of 7 percentage points of GDP over four years, or almost two percentage points per year. This considerable consolidation came on top of the major effort already pencilled in in the first programme. Concerning the debt ratio, significantly worse initial conditions and the mechanical effects of a lower nominal GDP were the two main factors accounting for the gap between the initial and the final debt ratios. Restructuring contributed to reducing the 2013 debt ratio by 25 percentage points, but this was nowhere near enough to offset the two adverse factors.

Table 6: Greece - breakdown of the gap between May 2010 and Jan 2013 fiscal targets for 2013

(All variables expressed as % of GDP)

	Primary balance	Overall balance	Gross debt
2013 target as set in the May 2010 SBA programme	**3.1**	**-4.8**	**149.0**
- Worse 2009 initial conditions	-1.8	-2.0	14.3
- Revenue shortfall due to adverse GDP developments	-9.0	-9.0	
- Effect of lower nominal GDP		-1.0	38.4
- Interest rate on public debt		4.5	
- Larger than expected overall deficits			1.7[33]
- Fiscal consolidation effort (residual)	7.7	7.8	
- Debt accumulation residual			1.7
- Debt restructuring			-26.6
2013 result as forecast in the January 2013 review	**0.0**	**-4.5**	**178.5**

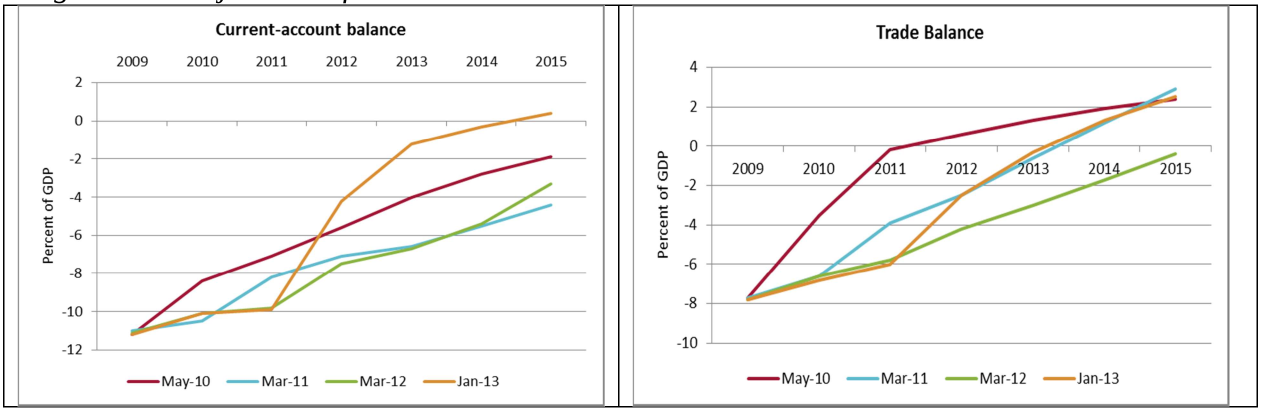
Source: Bruegel calculations, IMF programme documents. Note: See methodology in Appendix 2.

External account

The external balance is the one indicator for which there have been positive developments during the last three years: the current-account deficit has shrunk faster than initially expected and it is expected to nearly vanish in 2013. This development is not due to an improvement in the trade balance, however: in 2013 Greece is expected to post a small (-0.3 percent of GDP) trade deficit instead of a 1.3 percent of GDP surplus. Exports that were supposed to grow at about 6 percent annually in volume terms stagnated in 2011-12 and are only expected to rebound modestly in 2013. Imports have contracted severely, in line with the collapse of domestic demand. So the Greek economy does not exhibit any sort of competitiveness revival. In comparison to the assumptions of the first programme, the improvement in the current account stems exclusively from lower interest payments – because of the restructuring and higher unilateral transfers.

[33] The deviations from the initially projected overall balance in 2010 and 2011 were partially compensated by the smaller than expected overall deficits in 2012 and 2013 as consequence of the debt restructuring.

Figure 31: Projections of the current-account balance and the trade balance



Source: IMF programme documents.

5.3.3 Reasons for setbacks

The Greek programme may still achieve its ultimate goal of keeping Greece in the euro area and of making it able to recover and grow. But the IMF and the ESM have had to commit many more resources and for a much longer period than initially envisaged, and results remain deeply disappointing, and the ultimate outcome uncertain.

It was not immediately obvious that things would turn out this way. As indicated already, macroeconomic evolution in 2010 was roughly in line with programme forecasts and the first evaluations by IMF services were positive: the first review in July 2010 spoke of an "impressive start", the second, in December 2010, assessed the programme as "broadly on track". But the situation took a turn for the worse in 2011. Against the background of heightened market concern, domestic demand and GDP growth underperformed markedly, investment collapsed and exports stagnated. The programme went off-track and the unsustainability of Greece's debt became obvious.

In the following sections, we examine a number of possible explanations for this failure:

- The external environment was more adverse than expected;
- Euro-area policies were inconsistent;
- Implementation by the Greek authorities was inadequate or insufficient;
- Debt restructuring should have been front-loaded;
- Fiscal austerity has been excessive;
- Not enough weight was given to the structural reform and competitiveness objectives.

Adverse external environment

As shown in Figure 3, Greece, until summer 2011, benefitted from a rather benign external environment. Growth in the euro area remained positive, broadly in line with forecasts made in May 2010. The environment during the first fifteen months of the programme was thus significantly better than later, when the Irish and Portuguese programmes were in their early stages.

European policy indecision

The Greek programme undoubtedly suffered from the hesitant European policy stance. The start of the programme was delayed by lingering uncertainty about the principle, procedures and terms of assistance. After Greece revealed on 16 October 2009 the extent of its budgetary misreporting, it took eight months to agree on an assistance programme. By the time the programme started, market access had been lost. The terms of European assistance were revised several times. The announcement in Deauville in October 2010 that debt securities would include collective action clauses from 2013 onwards sent confusing signals about the stance towards restructuring. Debt restructuring and the desirable extent of private-sector involvement were the subjects of numerous discussions, and less than four months after the heads of state and government agreed on a scheme in July 2011, it was replaced by another – deeper – scheme in October 2011. Even the desirability of adjustment within the euro area was a matter for open discussion, which contributed to market doubts about Greece's membership of the euro. These vacillations created an atmosphere of uncertainty about the context in which the programme was being executed and its chance of success. The uncertainty impacted bond rates significantly and reverberated in the domestic policy debate.

External factors, however, are certainly not the only reason why the programme went off track. Errors in its design and calibration and adverse domestic developments also played major roles.

Inadequate and insufficient programme implementation

Troika members are adamant that the major cause of the setback was lack of implementation on the Greek side. More precisely, they claim that the commitment of the Greek authorities started to waver towards the end of 2010, and stalled in late spring 2011. Quarterly reviews and press releases published by the Troika or the IMF indeed confirm that from this period until autumn 2012, the Troika repeatedly expressed dissatisfaction with the implementation of the programme, especially about structural reform (Table 6).

Table 7: Greece - Troika and IMF statements on programme implementation, 2011-12

Date	Document	Statement
11-12/2/2011	Troika statement	The underlying fiscal and broader reforms necessary to deliver the program's medium-term objectives are being put in place [..] Greece's economic programme remains on track.
3/6/2011	Troika statement	Reinvigoration of fiscal and broader structural reforms is necessary to further reduce the deficit and achieve the critical mass of reforms needed.
8/7/2011	Statement by the MD of the IMF	The program is delivering important results: the fiscal deficit is being reduced, the economy is rebalancing, and competitiveness is gradually improving. However, with many important structural reforms still to be implemented, significant policy challenges remain.
11/10/2011	Troika statement	The reform momentum has not gained the critical mass necessary to begin transforming the investment climate [..] It is essential that the authorities put more emphasis on structural reforms in the public sector and the economy more broadly.
5/12/2011	Statement by the MD of the IMF	The program is in a difficult phase, with structural reforms proceeding slowly, the economy weak, and the external environment deteriorating.
9/3/2012	Statement by the MD of the IMF	Restoring competitiveness and a sustainable fiscal position will require Greece to undertake sustained and deep structural reforms over a prolonged period.
5/8/2012	Troika statement	Staff teams [..] concluded a visit to discuss with the new authorities the economic policies needed to restore growth and competitiveness, secure a sustainable fiscal position, and underpin confidence in the financial system in line with the objectives of the economic adjustment program.
17/10/2012	Troika statement	The authorities and staff teams agreed on most of the core measures needed to restore the momentum of reform and pave the way for the completion of the review. Discussions on remaining issues will continue.
Source: IMF Website.		

Official press releases tended towards understatement. For more than a year, at a crucial juncture, implementation of agreed policies was deficient and the Greek authorities, the parliament and government bodies in charge of enforcement lacked ownership of the objectives and priorities of the programme.

In hindsight, it is clear that lack of implementation was a major hindrance to policy reform. The Troika overestimated the effectiveness of the Greek government machinery and its ability to follow through on priorities and measures agreed in principle by Greece's political leaders. Without underestimating the responsibility on the Greek side, this suggests that the Troika could have made more effort at an earlier stage to build capacity and to tailor the programme in such a way that its implementation could be assured once agreed.

True, technical assistance was provided, by both the Troika (for example to the tax authorities) and, later, the European Commission (through the Task Force on Greece). But it proved insufficient.

Delayed debt restructuring

In retrospect, debt restructuring should have taken place at an earlier stage or should have even been front-loaded – at least, judging from the Greek viewpoint. In the initial programme, debt was expected to peak in 2012-2013 at 149 percent of GDP, an already perilously high figure, and the government was supposed to maintain for several years a 6 percent of GDP primary surplus, a performance in excess of what other OECD countries have been able to achieve (Darvas *et al*, 2011). By the time of the third review, in March 2011, it was already clear that revisions to the 2009 debt and deficit levels were making this scenario even more unlikely, even though the programme seemed to be on track from the growth and fiscal adjustment standpoints: in spite of its greater expectations for privatisation receipts, the IMF expected the debt ratio to peak 10 percentage points higher at 159 percent of GDP. As growth began to disappoint markedly during 2011, public debt unsustainability became obvious.

Furthermore, there were two internal contradictions in the economic and public finance strategy. First, to restore sustainability Greece needed a nominal GDP growth rate that was unrealistic for an uncompetitive economy in need of real exchange-rate depreciation. The Troika correctly assessed in May 2010 that Greece suffered from a debt sustainability problem and a competitiveness problem, and it estimated its real over-valuation to be of the order of 20-30 percent. There was an inherent tension between the two objectives of debt sustainability and real depreciation, which was recognised in the first programme, when it noted that *"policies to restore external price competitiveness, which in a monetary union have to rely on reductions in domestic costs and prices, will initially weigh on economic activity, government revenue and debt dynamics"*.

The second contradiction – in fact an avoidable inconsistency – was caused by European leaders rather than the Troika negotiators: the excessive stringency of lending conditions. European insistence that, in order to prevent moral hazard, financial assistance could only be provided at penalty rates, led credit to be priced at Euribor + 300 basis points (rising to Euribor + 400 basis points after three years)[34]. As recognised later, this lending policy was inconsistent with the aim of ensuring sustainability, and it helped fuel market expectations of an eventual restructuring.

Restructuring was advocated early on by outside observers and market analysts. But according to participants in the negotiations between the Troika and the Greek authorities, it was not seriously considered as an option in the spring 2010 discussions, for several reasons:

- First, the fiscal situation seemed significantly better than it was: as indicated in Table 9, both the deficit and the debt ratio for 2009 were still underestimated.
- Second, an early debt restructuring could have led Greek citizens to believe that they could shift the burden onto non-residents at no cost, which would have discouraged domestic consolidation efforts.
- Third, an early restructuring could have had noticeable spillover effects on the rest of the euro area. Banks were vulnerable to the Greek sovereign risk both directly, as they were holding more than €50 billion in Greek government securities, and indirectly, through their exposure to the Greek banking system.

[34] In the words of the euro-area leaders *"The objective of [the financial assistance] mechanism will not be to provide financing at average euro area interest rates, but to set incentives to return to market financing as soon as possible by risk adequate pricing"* (statement on assistance to Greece, 25 March 2010).

- Fourth, debt restructuring would have set a precedent for other heavily indebted sovereigns.

For these reasons the ECB and several euro-area governments were adamant that restructuring had to be avoided. Reportedly, none of the key players advocated it strongly.

For the IMF, the decision not to advocate restructuring was difficult. As already discussed , the Greek programme involved exceptionally large loans from the IMF, far in excess of standard access limits. IMF rules state that lending in excess of the limits is only possible if *"a rigorous and systematic analysis indicates that there is a high probability that the member's public debt is sustainable in the medium term"*. This would have excluded Greece, for which the IMF appraisal was that *"on balance, staff considers debt to be sustainable over the medium term, but the significant uncertainties around this make it difficult to state categorically that this is the case with a high probability"*[35]. In a clear if implicit reference to Greece, the solution was to amend the rules to authorise the IMF to lend in excess of limits when *"there is a high risk of international systemic spillovers"*[36].

By the end of 2010, however, it was increasingly difficult to avoid the conclusion that a restructuring was unavoidable. Spreads on 10-year government bonds vis-à-vis Germany had remained close to or above 800 basis points for six months, and projections indicated that return to a safe debt ratio required implausibly high primary surpluses for an extended period (Darvas *et al*, 2011). The IMF's third review of the programme mentioned *"large risks"* to sustainability, *"including from growing contingent banking sector liabilities"*[37]. By the time of the fifth review in July 2011, the IMF was advocating *"deep private-sector involvement"* (PSI) over and above that agreed on 21 July. But agreement on the principle of such a deep PSI had to wait until October 2011, and negotiations were only completed in February 2012. The delay had a high cost as more holders of government debt were reimbursed on par in the meantime, implying deeper net present value cuts for the remaining holders and limiting the impact on debt sustainability of the restructuring. Furthermore, uncertainty over the debt settlement clouded the policy agenda during 2011.

Excessive austerity

The fiscal stance is difficult to measure but the IMF, the European Commission and the OECD concur: between 2009 and 2013 Greece implemented an exceptionally vigorous fiscal consolidation package (Table 8). On average, retrenchment amounted to more than four percentage points of GDP per year. It was significantly more in 2010 as the programme called for a front-loaded adjustment.

[35] Greece: Staff Report on Request for Stand-By Arrangement, May 2010, p. 20.
[36] Amendment of 9 May 2010 on access policy and limits. See *Selected Decisions and Selected Documents of the IMF*, Thirty-Sixth Issue, 31 December 2011.
[37] Third review under the SBA, March 2011, p. 9.

Table 8: General government structural balance, Greece, 2009-13

	2009	2010	2011	2012(e)	2013(f)	Change
Initial programme (IMF)	-10.0	-2.4	0.8	2.8	4.6	14.6
						Current estimates
IMF	-18.6	-12.1	-8.3	-4.5	-1.3	17.3
European Commission	-14.8	-8.1	-4.7	-0.5	1.8	16.6
OECD	-16.5	-9.3	-4.9	0.0	2.5	19.0

Source: IMF WEO database, October 2012; European Commission AMECO database, March 2013; OECD Economic Outlook database, December 2012.

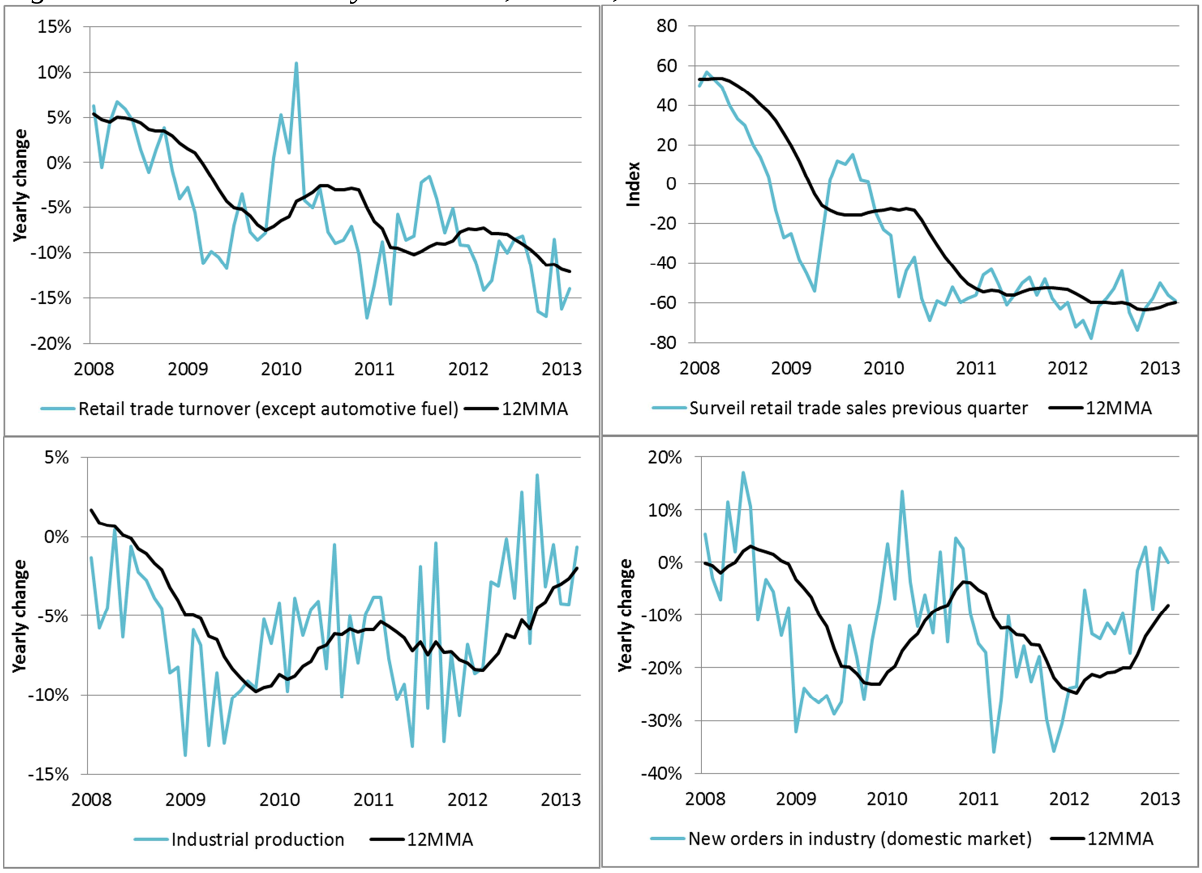
Table 8 indicates that retrenchment went significantly beyond what was envisioned in the first, already very ambitious, adjustment planned in the first programme. The rationale for the initial strategy was that Greece needed a massive, front-loaded adjustment to put public debt on a sustainable path, stem excessive domestic demand, cut the external deficit and restore confidence. Furthermore, as Greece had lost market access, a slower pace of budgetary adjustment would have mechanically implied more official lending, for which there was no willingness among European leaders. The recessionary impact of these measures was recognised but it was hoped that in the short run they would be partially offset by a strong export performance and that domestic demand would start to recover in 2012.

It is difficult to assess whether the programme went off-track because the macroeconomic impact of the fiscal adjustment exceeded what had been pencilled in, or for other reasons. Greece in 2010 was already in recession and it was evidently hazardous to impose a 10 percent of GDP shock to a leveraged and uncompetitive private economy. Private demand could hardly replace public demand in a context in which banks, having been rendered fragile by their exposure to the sovereign and by the rising proportion of non-performing loans, were in the process of tightening access to credit. Further developments increased the severity of the banking problem, leading to additional credit tightening and adverse consequences for domestic demand.

It is sometimes argued that the deterioration of the economic situation did not arise from austerity but from a confidence shock resulting from the confusing statements made by European policymakers at and after the Franco-German Deauville meeting. The increase in bond spreads and the rise in credit default swaps and the resulting worsening of the banking sector situation were factors in the programme's failure to reach its objectives.

Monthly indicators give mixed messages (Figure 32). It is true that some indicators at the end of 2010 suggested a further deterioration of the situation after a period during which stabilisation at a low level had been observed. At the same time, the programme itself resulted in clear compression of domestic demand when it started in mid-2010.

Figure 32: Selected monthly indicators, Greece, 2009-12



Source: Bank of Greece, Bulletin of Conjunctural Indicators.

Competitiveness and structural reforms

According to the Memorandum of Economic and Financial Policies annexed to the May 2010 request for a stand-by arrangement, *"the main objectives of the programme [were] to correct fiscal and external imbalances and to restore confidence"*. The programme indeed started from the recognition that Greece suffered from a budgetary problem and a competitiveness problem. It also acknowledged that to correct fiscal and external imbalances at the same time was *"challenging"* and required a *"major reorientation of the economy"*.

Addressing the first problem required nominal GDP to grow and to contribute to alleviating the debt burden. Addressing the second in the low-inflation context of the euro area and closing the competitiveness gap by the end of the programme required the GDP deflator to drop or at least to remain roughly constant, which, against the background of a real domestic demand adjustment, mechanically implied a significant worsening of the sustainability conditions.

To reach these twin objectives, the strategy was to make the fiscal adjustment *"the cornerstone of the programme"*, to use income and social security policies to *"buttress the fiscal adjustment effort and restoration of competitiveness"* and to introduce structural reforms to *"boost the economy's capacity to produce, save and export"*, while maintaining financial stability. The intended assignment was therefore to rely on a major, front-loaded fiscal adjustment effort to strengthen public finances, and to rely on a combination of public-sector instruments (such as wage reductions) and private-sector reforms (such as the reform of the wage bargaining system) to set in motion a unit labour cost reduction and disinflation process.

From the outset there was an unmistakable asymmetry in the programme: while the correction of fiscal imbalances relied on a clearly defined set of budgetary instruments, the effectiveness of structural reforms in delivering the intended competitiveness gain was bound to be much more elusive. In particular, the programme did not rely on a fiscal devaluation strategy (for which it was probably estimated that the country lacked fiscal space). Initially, there was also to be a discussion on making the abandonment of the fourteenth month of salary[38] a part of the programme conditionality, but this option was rejected. As a consequence, the GDP deflator was expected to experience a small decline in 2011 (-0.5 percent) and to grow at about one percent per year thereafter. This was insufficient to restore price competitiveness and led to reliance on optimistic assumptions about the ability of the tradable sector to engineer an export rebound.

Almost two years later, in March 2012, the memorandum attached to the request for an extended arrangement under the EFF included an unambiguous recognition of failure on the competitiveness front. It spoke of *"a good deal of primary fiscal adjustment"* but only of *"some improvements in unit labour costs"* that left a competitiveness gap of 15-20 percent and highlighted the tension between these objectives. It noted that *"the economy's tendency to correct the competitiveness gap through wage and price reductions, and thus a deep recession, works directly against efforts to improve the fiscal position and financial stability. And efforts to improve the fiscal position, without a competitiveness boost, generate large negative multiplier effects (with no interest rate and exchange rate channels to offer offsets)."*

Recognising that *"uneven progress towards restoring competitiveness [pointed] to a need to recalibrate the programme strategy"*, the IMF concluded that *"a shift in the structural reform strategy to directly prioritise internal devaluation"*. The Commission was equally explicit, indicating that *"in the second programme, the implementation of the growth-enhancing structural reform agenda [gained] prominence [...] while the debt restructuring and higher official financing [allowed] a slower fiscal adjustment and a more gradual privatisation process"*[39].

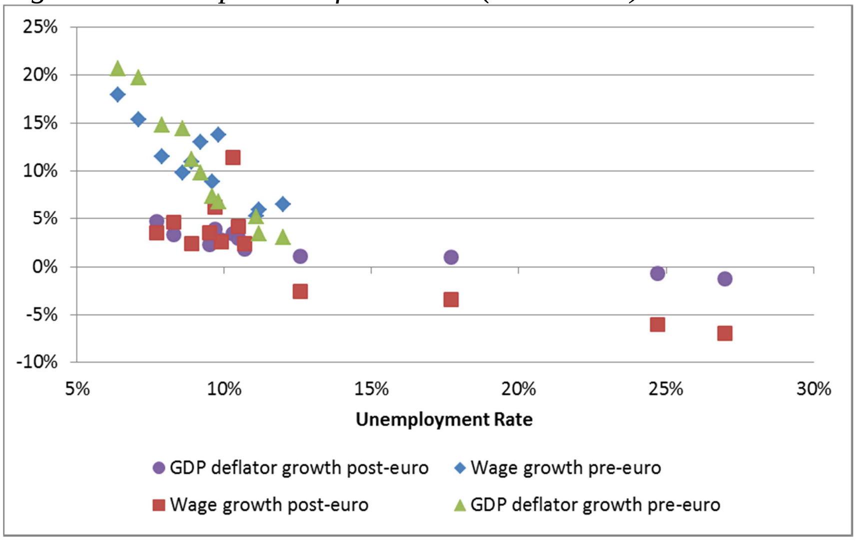
Structural reforms and considerable slack in the labour market eventually resulted in nominal wage adjustment. According to the European Commission, the unit labour costs-based real effective exchange rate indicator relative to the rest of the euro area declined by 14 percent between the first quarter of 2010 and the third quarter of 2012. Troika-supported reforms have furthermore encouraged decentralised wage agreements and there is evidence of a deeper decline in firm-level wages. The problem is that indirect taxes, administrative prices and terms-of-trade factors, and the persistence of rents in protected sectors have contributed to keeping prices high.

[38] In the Request for Extended Arrangement (March, 2012), it is mentioned that *"if competitiveness improvements remain elusive by end-year, it was agreed to consider more direct interventions (in this context, staff viewed a suspension of the 13th/14th monthly salaries as one way to deliver an upfront reduction in all relative wages)."* But this was not mentioned in the First and Second Reviews under the Extended Arrangement (January, 2013).

[39] See European Commission, "The Second Economic Adjustment Programme for Greece", *Occasional Paper* 94, March 2012.

A simple Phillips curve confirms these observations (Figure 33). It is apparent that in spite of the very high unemployment rate and the high degree of slack in the economy, disinflation until 2011-12 remained slow. Furthermore, wages adjusted much more than prices, implying higher-than desirable purchasing-power losses and a lower-than-desirable improvement in competitiveness.

Figure 33: Phillips curve for Greece (1990-2013)



Source: Bruegel based on AMECO data. Note: The Phillips curve is a standard representation of the relationship between wage or price inflation and the unemployment rate.

This re-examination led the Troika to push for a much more detailed structural reform agenda. While the first programme merely indicated the key reforms deemed necessary, the second started from the observation that Greece "*does not have the capacity*" for a strategy of "*rapid, full and effective implementation of reforms*". Consistent with this observation, the Memorandum on Specific Economic Policy Conditionality (MSEPC) of March 2012 included an extremely detailed list of actions to be undertaken, each associated with a strict timetable. This list has continued to grow and the MSEPC of January 2013 includes 26 pages of conditions relative to structural reforms with budgetary relevance and 22 pages of conditions relative to labour and product markets. While the scope of reforms has admittedly remained the same, the programme now specifies the minutiae of what has to be done in which sector by what date.

This move was the logical consequence of the need to rely on structural instruments as a substitute for the lack of an adjustable nominal exchange rate, and of the Greek authorities' inability to implement enacted reforms. It is nevertheless in stark contrast with the IMF's stated philosophy of 'parsimonious conditionality', adopted in the aftermath and on the basis of the experience of the Asian crisis. Instead of streamlining conditions and focusing on the "*core area[s] of Fund responsibility*" – financial stability, macroeconomic stabilisation and "*closely related*" structural measures, as advocated in the 2002 guidelines for conditionality, the Troika has immersed itself more and more in the sector-specific regulation of microeconomic behaviour.

5.3.4 Conclusions: Lessons from the Greek programme

Correcting the major disequilibria that had accumulated in the Greek economy while keeping the country in the monetary union was bound to be an exceptionally difficult challenge: not only because both the fiscal imbalance and the real exchange rate misalignment were both very large, but also because the economy was rather closed and because the government machinery was ineffective. Furthermore, political ownership of reforms was partial at best. In 2010-11 there were significant voices within government and the parliamentary majority that did not support the agenda proposed by the Troika. Finally, the EU was undecided on its stance towards Greece: the principle, timing, conditions and modalities of assistance were all matters for continuous and often inconclusive discussion.

The Troika was not responsible for these extraordinarily adverse conditions. It was perhaps not even fully informed of the true extent of the economic, administrative and political challenges – although the past misreporting of budget numbers was enough reason to be cautious. The EU and the IMF learned from developments on the ground and accordingly adjusted the parameters of the programme.

Nevertheless, what was known should have been enough to err on the side of caution and to calibrate a programme that would have had a greater probability of success.

This did not prove possible. Political reluctance in Europe to start debt restructuring, the fear of potential moral hazard effects and the absence of effective mechanisms to contain its possible financial fallout made this option unappealing. The alternative, nearly-concessional lending within the framework of a large and long-lasting assistance programme, was not politically palatable either. This conundrum led the IMF and the EU to bet on the materialisation of optimistic tax revenue and privatisation assumptions. Instead of formulating a robust programme capable of withstanding adverse economic, political and financial developments, they did just the opposite. It is no surprise that these optimistic assumptions were not vindicated by events.

In spite of significant economic and political setbacks, the programme was not derailed completely. A few months after the technical government of Lucas Papademos completed the PSI in early 2012, implementation stalemate ended in the aftermath of the June 2012 election. The new government endorsed a consolidation and reform agenda, which made it possible to unlock financial assistance. Speculation about a possible Greek euro exit has abated, halting (even reversing) deposit outflows and making it possible for the government to concentrate on the domestic agenda. However, the short-term economic outlook remains grim.

Beyond macroeconomic achievements or the lack thereof, fairness has gradually emerged as a major issue, especially in connection with tax matters. As noted by the IMF, by early 2013, *"the mounting sense of social unfairness [was] undermining support for the programme"*[40]. Although the programme could not be characterised as unfair from a public finance standpoint, it did not correct pre-existing inequalities and the high degree of tax evasion[41]. Furthermore, the substantial absolute impact it had on the bottom deciles and the distributional effects of a very high level of unemployment added to the perception that there was a disregard for fairness.

[40] IMF, First and Second Reviews under the Extended Arrangement, January 2013.
[41] See Avram *et al* (2013) on the distributional effects of fiscal consolidation in Greece and other European countries.

5.4 Ireland

5.4.1 Introduction

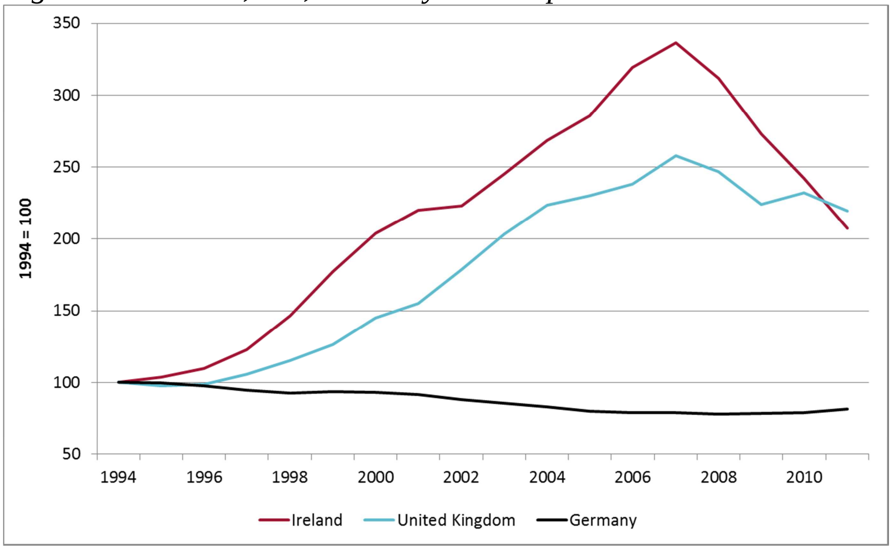
When on 21 November 2010 Ireland became the second euro-area country to officially request financial assistance, it had already been in crisis for more than two years. The Economic Adjustment Programme for Ireland was formally agreed in December 2010. It included a joint financing package of €85 billion for 2010-13 with contributions from the EU/EFSM (€22.5 billion), euro-area member states/EFSF (€17.7 billion), bilateral contributions from the United Kingdom (€3.8 billion), Sweden (€0.6 billion) and Denmark (€0.4 billion) and funding from the IMF (€22.5 billion). Moreover, there was an Irish contribution of €17.5 billion through the Treasury cash buffer and National Pension Reserve Fund investments[42].

The design of the Irish programme cannot be understood without being aware of pre-crisis developments. When Ireland entered the monetary union, its catching-up process was largely over. The 'Celtic Tiger' was among the top group of European countries according to a number of indicators, and GDP per capita was already above the euro-area average. Ireland then experienced a very large real estate boom (see Figure 34) accompanied by a massive credit expansion. The real estate boom resulted from a combination of (1) overly optimistic expectations, (2) lower interest rates, (3) capital inflows into the banking system, (4) tax incentives for property speculation and home buying, and (5) poor regulation of banks. The subsequent ECB rate cuts during the euro-area downturn in 2002-03 further added to the boom. The domestic construction sector grew very significantly. At the same time, Irish households increased their direct property holdings in the hope of continuing capital gains. Private sector balance sheets were inflated as a consequence.

Figures 34 and 35 show the extraordinary expansion of private credit in Ireland, which according to Nyberg (2011) was quite concentrated in speculative property lending. Meanwhile, public debt had fallen to a very low level. However, public revenue was heavily dependent on the real estate boom. Public expenditure (wages, salaries, benefits) dramatically increased on the back of this artificial boost to revenues. While the headline budget was in balance, the underlying structural deficit was substantial (Regling and Watson 2010).

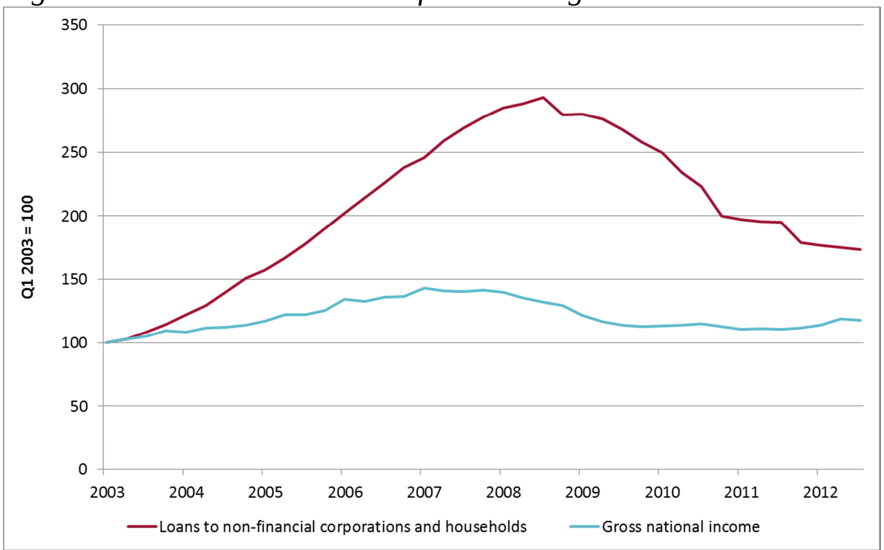
[42] Information taken from European Commission, Economic Adjustment Programme for Ireland, http://ec.europa.eu/economy_finance/assistance_eu_ms/ireland/index_en.htm, retrieved on 17/03/2013.

Figure 34: Ireland, UK, Germany - house price index



Source: Eurostat.

Figure 35: Ireland – evolution of loans and gross national income



Source: ECB, Eurostat.

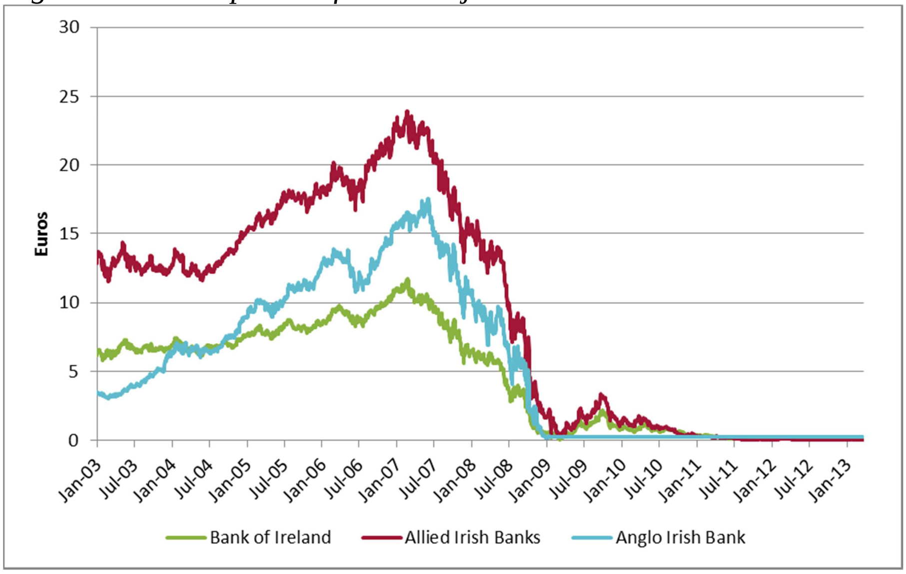
When the real estate boom came to a halt at the end of 2006, the economy entered a severe downward spiral. The most immediate effect was doubt about the banking system. Irish banks had tapped international capital markets on a large scale. When the global interbank market froze during the 2007-08 financial crisis, the Irish banking system started to experience liquidity problems. To prevent a banking system collapse, the Irish government at the end of September 2008 issued an almost complete guarantee protecting the creditors of all domestic Irish banks[43]. That guarantee protected all retail and corporate deposits (to the extent that they were not covered by existing deposit protection schemes), interbank deposits, senior unsecured debt, asset-covered securities and dated subordinated debt. Only undated subordinated debt was left out of the guarantee. The guarantee was valid for two years and was called the Credit Institutions Financial Support Scheme (CIFS). In December 2009, the government introduced a second scheme called the Eligible Liabilities Guarantee Scheme

[43] http://www.irishstatutebook.ie/pdf/2008/en.act.2008.0018.pdf

(ELG) to allow credit institutions to issue debt securities and take deposits with a maturity beyond September 2010, when the first scheme was due to expire.

The decision to provide blanket guarantees to bank creditors was taken at a moment when the share prices of three major Irish banks had already declined dramatically (Figure 36). When the decision was taken, the prevailing view was that Ireland was a solid country with sound fundamentals that was subject to a liquidity run. A guarantee from a sovereign with one of the lowest debt levels in the EU was supposed to restore trust and end the liquidity crisis. Right after the introduction of the guarantee, Irish banks issued significant amounts of senior bonds and commercial paper. While the guarantee provided temporary relief, it did not allow banks to re-establish non-guaranteed market access[44].

Figure 36: Share prices of three major Irish banks



Source: Thomson Reuters.

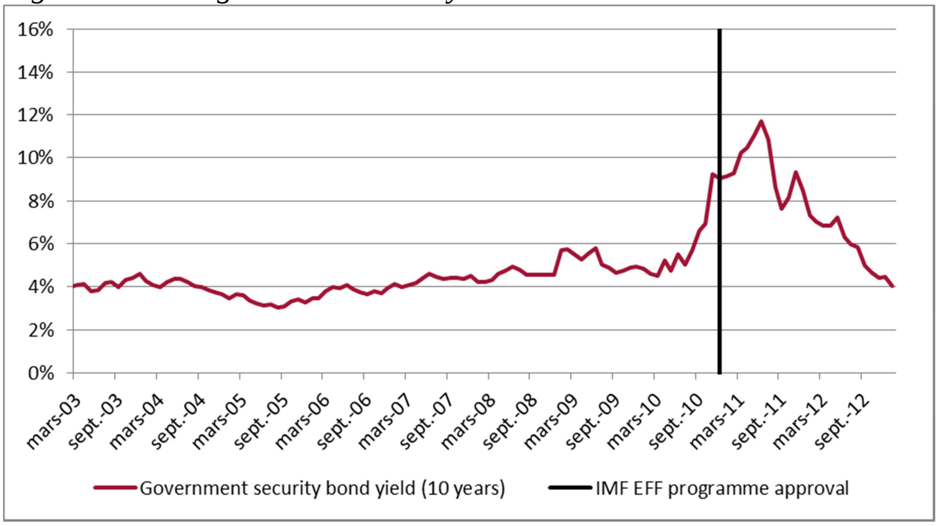
The government guarantee initially led to a reversal of capital flows and an inflow into Ireland of additional capital from other EU countries. However, as the housing market continued to decline, it became increasingly clear that the banking system did not only have a liquidity problem but also that there was a question mark over its solvency. The government eventually had to bail out its banking system during 2009 and 2010, leading to a budget deficit of more than 30 percent in 2010, more than 20 percentage points of which was just for the banks. The overall cost of the banking crisis according to Laeven and Valencia (2012) amounted to 40 percent of GDP. The Irish government deficit had already significantly deteriorated, from balance in 2007 to more than 7 percent in 2008, and almost 14 percent in 2009, in large part due to the collapse of revenues that had fed off the rising real estate market. In addition, by the time the programme started, GDP had collapsed by around 17 percent in nominal terms.

When the government guarantee was approaching its end in September 2010, the six banks had significant re-financing needs as nobody was ready to provide longer-term funding. A full

[44] It can be debated, whether this initial guarantee was the real mistake in the Irish crisis. From the European point of view, there were concerns that deposit flights to Ireland would undermine stability elsewhere. When later the value of the guarantee became more doubtful, the guarantee was seen by some as preventing a more appropriate involvement of bank creditors. Yet, from the Irish point of view, at the moment the decision was taken, the problems were widely perceived as liquidity problems and the Irish government debt was very low so that the risks associated with the decision seemed minor.

vicious circle was in swing with significant capital outflows. Investors with funds in the banks no longer trusted the state guarantee because the government itself was under stress.

Figure 37: Irish government bond yields



Source: Central Statistics Office, Ireland.

5.4.2 The Irish programme

The Irish government had to ask for financial assistance in November 2010. The programme consisted of €85 billion: €50 billion to provide funding for the government and €35 billion in loans to the government earmarked for the banking sector. The Memorandum of Understanding (MoU) of 8 December 2010 committed the Irish government to policy conditionality in three key areas: fiscal reform, financial sector reform and structural reforms.

Many of the fiscal reform measures stipulated in the programme were taken from the already planned Irish National Recovery Plan[45], which were, of course, partly a result of discussions between the Irish authorities and the Troika in the three preceding months. The excessive deficit procedure already foresaw reaching the 3 percent target in 2014. In the National Recovery Plan, the government put significant emphasis on cutting expenditure overall while maintaining expenditure that was important for competitiveness. The key element on the fiscal side was a plan to bring down the large fiscal deficit to below 3 percent by 2015. This fiscal adjustment was deemed a necessary response to the large structural deficit that the country was exposed to following the bursting of the property bubble[46]. €21 billion of adjustment had already been undertaken during 2008-11. The programme essentially continued with the government's plan to adjust fiscal policy during 2012-14, in line with the national reform plans and with a bias towards expenditure reductions. The adjustment was required because government revenue from real estate had collapsed from almost 20 percent of total revenues (5 percent of GDP) to below 1 percent of GDP in 2010 (European Commission, 2011). On the fiscal side, the Troika was thus in a unique position of having a government as a negotiating partner that had already in great detail planned significant reforms that were consistent with Troika demands.

[45] The national recovery plan was published on 24 November 2010, i.e. at the beginning of the formal negotiations with the Troika following the official request for assistance of 21 November 2010. The plan can be found here: http://www.budget.gov.ie/The%20National%20Recovery%20Plan%202011-2014.pdf
[46] IMF (2011) estimated the structural deficit for 2008 to be more than 11% of potential GDP.

The second key pillar was financial sector reform, which focused on downsizing and reorganisation of the banking sector while maintaining financial stability. The first step was a significant capital injection into banks and a transfer to NAMA, the National Asset Management Agency, which was established in December 2009 to absorb impaired bank assets. The second element was a stress test dubbed PCAR to assess banks' balance sheets. The third element was a Prudential Liquidity Assessment Review" (PLAR), which had the declared aim of achieving an ambitious deleveraging and a much lower loan-to-deposit ratio. Moreover, legislative changes to improve bank resolution regimes and other more structural financial aspects were agreed. In terms of the downsizing, the plan foresaw a rapid deleveraging towards lower loan-to-deposit ratios (European Commission, 2011). The speed of deleveraging was later reduced. In terms of the reorganisation, the agreement foresaw the establishment of a resolution plan for Anglo Irish Bank and INBS. Both banks had borrowed very large amounts of liquidity under an ELA programme from the Central Bank of Ireland. The Irish Bank Resolution Cooperation (IBRC) resulted from the resolution of the two banks. The Irish government provided the IBRC with promissory notes that would result in a payment of the government to the IBRC that would then allow the repayment of the ELA liquidity[47]. The plan also foresaw the imposition of losses on shareholders and subordinated debt, but exempted senior debt holders.

The third pillar of conditionality concerned a structural reform package to underpin growth. Here, the MoU mentions an array of measures that were designed in some detail, and that essentially took up what the government had put down in National Reform Plans sent to the EU previously. It would go beyond the scope of this study to further assess these elements. Certainly, the Irish economy was already one of the most liberalised and flexible economies in the EU before the crisis. The programme conditionality may have further helped to make Irish labour and product markets more efficient.

5.4.3 Assessment

Was the overall package appropriately designed based on the information available at the time? To what degree was it implemented? Was it adapted in response to economic or other developments? What were the main shortfalls? What accounts for them?

In terms of the broad structure, the programme addresses all the key issues. The emphasis was rightly put on financial and fiscal reform, both of which were in need of significant overhaul. We turn first to the macroeconomic and fiscal adjustment and then to financial sector reform and the role of the ECB.

5.4.3.1 Overall structure

Starting with the fiscal part, the adjustment was based on fairly realistic forecasts. The Irish government's original plan foresaw a slightly quicker fiscal adjustment with the deficit falling below 3% in 2014[48]. The Troika discussions thus led to a postponement of the 3 percent deficit goal by one year already at the beginning of the programme thereby giving somewhat more breathing space.

[47] See for example Whelan, Ireland's promissory notes deal, Forbes 2/11/2013, http://www.forbes.com/sites/karlwhelan/2013/02/11/irelands-promissory-note-deal/

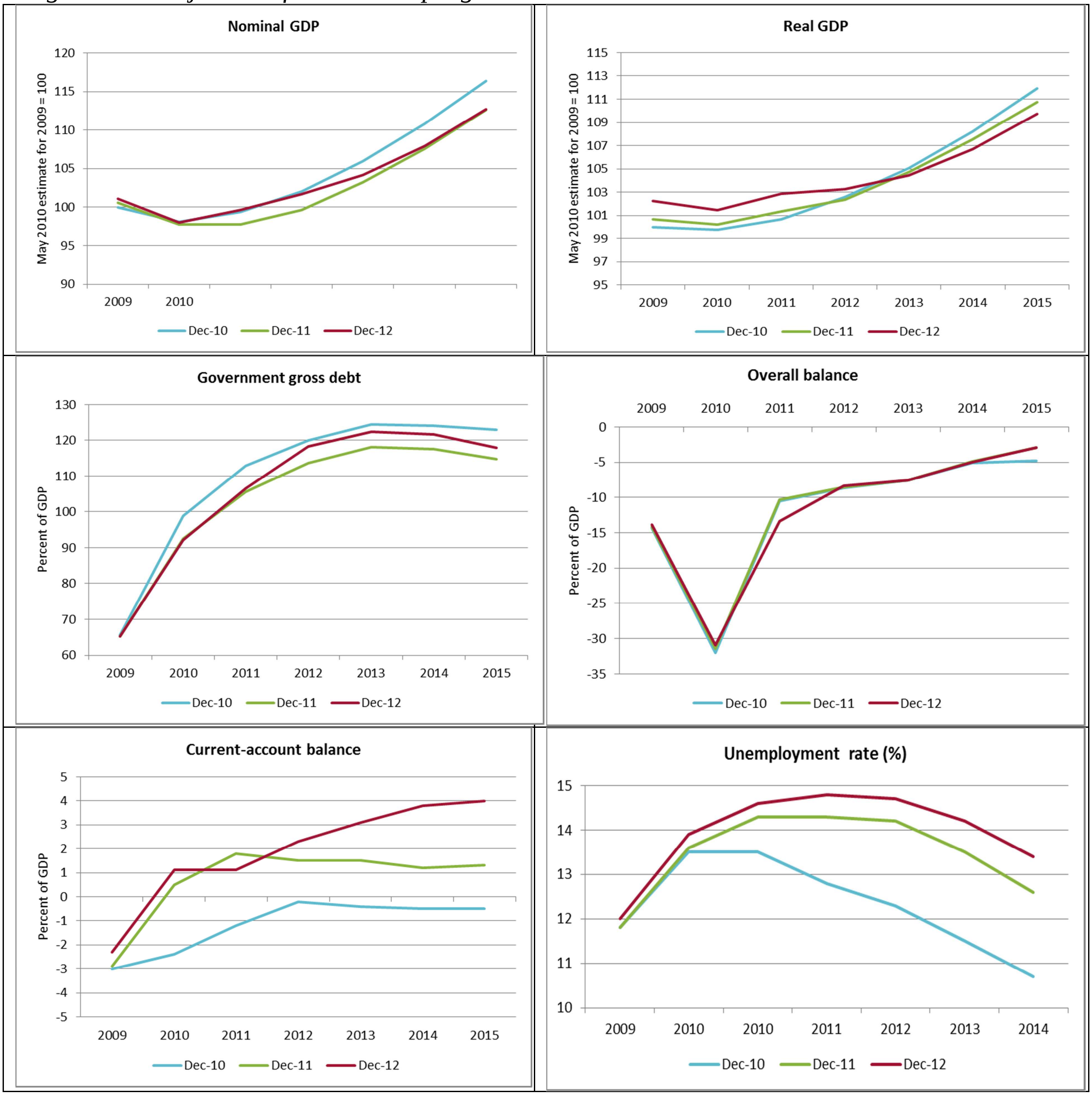
[48] The national recovery plan, published 24 November 2010. http://www.budget.gov.ie/The%20National%20Recovery%20Plan%202011-2014.pdf

Figure 38 shows that in contrast to Greece, the successive revisions for Ireland of GDP, debt and deficit forecasts were modest. The return to a 3 percent deficit was originally foreseen for 2015. The promissory note announcement in February 2013[49] improves the general government deficit by 0.6 percent of GDP in 2014 and 2015 (Irish Fiscal Advisory Council, 2013)[50]. The Irish Fiscal Advisory Council foresees that because of the better-than-forecast performance in 2012 and the promissory note agreement, a deficit of 2 percent for 2015 is feasible if all budgetary measures are implemented. In that sense, the initial programme was appropriate and allowed a realistic time period for the fiscal adjustment.

Moreover, price developments were not completely off the mark considering the entire period, even though the December 2010 and December 2011 GDP deflator estimates clearly predicted much faster adjustment early on and less later on. Despite this good performance, the unemployment rate rose to higher than expected levels. However, the current-account improvement was greater than expected, showing the remarkable capacity of the Irish economy to grow externally (Figure 22 in section 5.3 shows the contribution of exports to the adjustment of the current account. Exports were of major importance from 2010-13).

[49] The promissory note deal transformed the promissory notes that were transferred from the IBRC, when it was liquidated, to the Central Bank of Ireland. The promissory notes were transformed into long dated bonds of maturities between 27-40 years. The deal essentially alters the time profile of the fiscal costs. See Whelan http://www.forbes.com/sites/karlwhelan/2013/02/11/irelands-promissory-note-deal/ for more details.
[50] Whelan (2012) points out that the interest rate on promissory notes has no impact on Irish public debt.

Figure 38: Projections for the Irish programme



Source: IMF programme documents.

This meant that the debt level forecast made at the start of the programme was quite accurate. As a result, the deviations between forecast and actual figures are relatively small (Table 9). This shows that the Irish programme was fully on track in terms of fiscal policy. By contrast, in terms of unemployment, the Irish programme has been disappointing.

Table 9: General government structural balance, Ireland 2010-13

	Primary balance (incl. bank support)	Overall balance	Gross debt
2013 target as set in the May 2010 EFF programme	**-1.4**	**-7.5**	**124.5**
- Changed 2009 initial conditions	**0.4**	**0.5**	**-0.4**
- Revenue shortfall due to adverse GDP developments	**-0.6**	**-0.6**	
- Effect of lower nominal GDP		**-0.1**	2.1
- Interest rate on public debt		**-0.3**	
- Larger than expected overall deficits			2.5
- Fiscal consolidation effort (residual)	-0.2	0.5	
- Debt accumulation residual			-6.2
2013 figures as forecast in the Dec 2012 review	**-1.8**	**-7.5**	**122.5**

Source: Ireland: Request for an Extended Arrangement—Staff Report; Staff Supplement; Staff Statement; and Press Release on the Executive Board Discussion, December 2010, International Monetary Fund. Ireland: Eighth Review under the Extended Arrangement; Staff Report; Staff Supplements; and Press Release on the Executive Board discussion, December 2012, International Monetary Fund.

It is also worth emphasising that the Irish administration worked rather efficiently and implemented the reforms to a great extent as agreed. Our interviewees confirmed that one of the defining features of the Irish programme was the high degree of compliance of the Irish authorities with the agreed MoU. Some of the interviewees underlined that the programme and MoU actually had little impact on the fiscal adjustment path, because it was already largely decided on and planned before the Troika arrived in Dublin. In any case, the fact that the Irish authorities published their fiscal adjustment plan, which was more ambitious than that in the programme, at the beginning of the official Troika discussions shows that national ownership was a significant factor.

Was the agreed speed of fiscal adjustment appropriate and was the mix of expenditure cuts and revenue increases the right one? For the Irish economy, a frontloaded fiscal adjustment approach was probably justified. The Irish economy is very open and flexible, and thus adjusted relatively quickly from a condition in which the construction and domestic sector was dominant to one in which the external sector played the central role. Domestic demand compression in Ireland played a relatively limited role in explaining the negative growth surprise in the forecasts (Vihriälä, 2013), which suggests that fiscal consolidation was perhaps not the primary concern for the Irish economy. Instead, since the export sector is so large, Ireland’s adjustment went ahead very quickly in the external sector. As predicted by the Optimum Currency Area theory, a highly integrated economy with a large trading sector would also have relatively flexible prices. This would then facilitate adjustment, which was clearly visible in Ireland where prices, and in particular wages, fell significantly.

5.4.4 Financial sector reform

Reform of the financial sector was needed because the financial sector was largely priced out of the market and was oversized relative to the size of the economy. The years preceding the programme can be characterised as a period of major overhaul of the banking system with several banks running into serious difficulties, the creation of an asset management agency (NAMA) to purchase property loans and other difficulties (see for example, Honahan, 2012; and Donovan and Murphy, forthcoming). The government's pre-programme bank recapitalisation commitments were estimated by finance minister Michael Noonan to amount to €46.3 billion, of which €34.6 billion were used for IBRC (Anglo and INBS)[51]. It is very difficult to provide an overall assessment of the financial sector programme, in particular because many pre-programme decisions had already been taken and had a significant effect on the financial and fiscal outcomes of the programme.

One issue was particularly controversial and was repeatedly brought up in conversations with key stakeholders: the non-participation of senior unsecured bond holders in absorbing bank losses. A further question was raised about the speed of deleveraging. Both issues, which we discuss below, have led to significant criticism of the ECB's role in the Irish programme.

Turning first to the issue of senior bond holder involvement, a number of points need to be made. The 2008 state guarantee was given by the government unilaterally and without outside interference. Yet this guarantee meant that for two years (September 2008- September 2010) a large portion of unsecured senior bonds was in effect untouchable. During this period already, some commentators argued that the state guarantee should have been abandoned. Yet, this would have meant that de facto the government would have defaulted on its guarantee, an option that was therefore rejected. Ahearne (2012) describes in detail that, nevertheless, significant losses were imposed on bank creditors, in particular shareholders and junior debt holders. Yet, senior debt was left untouched, even if issued before the guarantee and expiring after the end of the guarantee.

In the autumn of 2010, a significant debate about the imposition of losses on senior unsecured and unguaranteed bond holders began. According to the Central Bank of Ireland, the total amount of unsecured and unguaranteed senior debt amounted to €16.4 billion in February 2011[52]. About €2.5 billion matured between September 2010 and February 2011 according to Coffey (2012)[53]. If this estimate is correct, about €19 billion of senior unsecured debt (ie about 12 percent of GDP) could have been used to reduce bail-out costs to taxpayers. Of this amount, a part was domestically held, eg by banks and pension funds, and would therefore not have reduced the savings for the national economy.

The controversy was about the imposition of losses on this €19 billion of unsecured and unguaranteed senior debt. One key distinction made was between the going concern and the gone concern. Gone concern referred to the creditors of the two banks that were in the process of being wound down, Anglo Irish Bank and Irish Nationwide Building Society. Many argued that for gone concerns, financial stability considerations and contagion effects would be of minor relevance, in contrast to going concerns for which there was more fear about potential financial contagion. The amount of senior unsecured debt in those two institutions is reported

[51] Response by Noonan to question by Deputy Noel Grealish, 18 April 2012, http://debates.oireachtas.ie/dail/2012/04/18/00157.asp

[52] http://www.financialregulator.ie/press-area/Documents/Information%20Release%20Note%20and%20Table%20Senior%20and%20Sub%20Debt.doc.pdf and http://www.financialregulator.ie/press-area/press-releases/Pages/Clarification-SeniorDebtandSubordinatedDebtIssuance.aspx . Both documents retrieved 12 April 2013.

[53] http://www.independent.ie/opinion/comment/seamus-coffey-so-how-much-has-been-paid-out-to-unsecured-unguaranteed-bondholders-in-the-irish-banks-26889017.html

at €3.7 billion[54]. A further important aspect was the size of the haircut that could have been imposed on this debt. Assuming that a haircut of above 50 percent is unlikely, we would speak of €1.9 billion for the gone concern and €9.5 billion for the total banking system. However, one has to acknowledge that at that time, the EU did not have clear resolution framework, rendering it difficult for the EU institutions to actually act on bank resolution.

Several interviewees confirmed the ECB's firm opposition to the imposition of losses on both going and gone concerns. The ECB was worried that any such move would substantially increase funding costs for the Irish banking system but, even more importantly, for the euro-area banking system. The Irish authorities could not act against the will of the ECB as they were dependent on significant ECB support in form of ELA[55]. In the eyes of the Irish public, the decision was perceived as a bail-out of French and German banks by Irish taxpayers (Ahearne, 2012), yet it is not clear if the owners of this debt really were euro-area banks. However, ECB board member Jörg Asmussen, in a 12 April 2012 speech, acknowledged that the bail out of Anglo Irish bond holders was *"to ensure no negative effects spilled-over to other Irish banks or to banks in other European countries"*[56].

However, the evidence that this decision was only due to ECB pressure is not entirely clear cut. One interviewee also pointed to the significant reservations of major IMF shareholders. Donovan and Murphy (2013) state that, while not on the public record, it is well known that US Treasury Secretary Timothy Geithner via the G-7 urged that a proposal to involve senior bondholders, which was being developed by the IMF negotiating mission in Dublin with the Irish authorities, be abandoned. The US position was driven by fears of the potential negative effects of any such moves on the CDS markets[57].

In any case, it is difficult to say whether the bail-out of senior bond holders was a mistake or not. From the Irish point of view, a more substantial contribution from senior bond holders would have been helpful. The Irish government paid a significant political price for paying the relevant creditors in full, in particular because, at the same time, significant fiscal adjustment was undertaken. The wiping out of senior unsecured debt of gone-concern banks could probably have been managed from a financial stability point of view, but this would have hardly affected the Irish government's debt burden. With regard to going concern banks, the imposition of losses on senior bond holders could have materially reduced the Irish state's debt. This could have potentially allowed for market access more easily but it could also have weighed on investor sentiment towards Ireland. More importantly, the financial system in the euro area at the time was very fragile. Large-scale and indiscriminate creditor bail-ins bear substantial risks that may ultimately lead to even higher costs. We therefore do not conclude that it was a mistake to use taxpayers' resources to pay the relevant creditors, but acknowledge that the burden sharing certainly deserves discussion (see below).

A second issue was the optimal speed of deleveraging, with some commentators pointing out that the speed of deleveraging of the Irish financial system agreed with the Troika was initially too high. It is difficult to assess whether this is true or not as this depends on a

[54] See Ahearne (2012) for a detailed discussion. Whelan (2012) emphasises that for the Irish Bank Resolution Cooperation, the entity emerging from Anglo Irish and Irish Nationwide Building Society, €35 billion would almost be "dead money" that would not be returned to the state. The amount discussed as regards the senior unsecured bond holders is thus small compared to the actual cost to the tax payer of bailing out the two institutes.
[55] See footnote 19 of Ahearne (2012) for more details.
[56] http://www.ecb.int/press/key/date/2012/html/sp120412.en.html retrieved on 12 April 2013.
[57] Donavan and Murphy (2013).

difficult risk analysis. From an Irish point of view, the speed was fast at the beginning[58] of the programme and was reduced only later[59]. The high speed of deleveraging also meant that early firesales of assets excessively reduced their prices since raising additional deposits was difficult. Donovan and Murphy (2013) report that the estimates in March 2011 by BlackRock Solutions showed that most of the increase in the bank recapitalisation needs resulted from the rapid asset deleveraging required under the bailout programme. On the other hand, the ECB insisted on a rapid deleveraging because it was concerned about its own exposure to Ireland. Lending to Ireland made up 25 percent of overall ECB lending with an estimated €35 billion in ELA[60]. The ECB felt that it was increasingly taking on risks that could ultimately become fiscal risks. It therefore had urged the Irish authorities to apply for a programme and it insisted on a significant part of the programme to be earmarked for banks[61]. In the winter review of March 2012, the European Commission confirms that on aggregate the Prudential Capital Assessment Review[62] banks had met their deleveraging targets during 2011, and that correspondingly, reliance on Eurosystem funding had declined (European Commission, 2012d).

Overall, in our assessment, the Irish programme is broadly on track and this success has hinged on the high degree of ownership by the Irish authorities from the outset. The fiscal reforms were necessary. On the financial side, the programme initially made the mistake of pushing for hurried deleveraging. This arguably deepened the recession in 2011, but the alternative was politically controversial. The authorities then changed course on the speed of deleveraging, implicitly admitting that it had been too rapid. The Troika took a difficult decision not to impose losses on senior bond holders for financial stability reasons. A bail-in could have reduced the size of the debt burden for the Irish taxpayer by a maximum of €19 billion on the basis that an unrealistic haircut of 100 percent would have been applied. Realistically, the relief might have ended up closer to between €5 billion and €10 billion. This would have alleviated fiscal sustainability concerns. Whether or not it would have been appropriate to take the risk of bailing-in private bond holders remains a matter of judgment. At any rate, since this decision was taken because of euro-area wide financial stability considerations[63], and because of the reported concerns of the US Treasury Secretary, it would have been appropriate to share the burden with taxpayers in other euro-area countries.

The ultimate aim of the Irish programme, namely full market access, is not yet fully ensured. The deal reached on promissory notes was an important intermediate step. Further support was demonstrated by the decision of the April 2013 ECOFIN meeting to extend the maturities of EFSM loans to Ireland by seven years. Ireland has recently been able to sell long-term government bonds in the international market at reasonable rates[64]. Yet, individual selling in the markets does not mean that full access is guaranteed. Certainly, the big fear is that the return to the markets will turn out not to be robust requiring a programme later on. Two

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[58] European Commission (2011) speaks of *"ambitious target loan-to-deposit ratios"* for each bank.
[59] European Commission (2012d)
[60] Emergency Liquidity Assistance, provided by the national central bank against collateral that is usually of lower quality than that used for getting liquidity from the ECB directly.
[61] European Commission (2011) provides the number of €35 billion as available funding to overhaul the banking sector.
[62] The design of the Prudential Capital Assessment Review (PCAR) was the responsibility of the central bank in cooperation with the Commission, ECB and IMF. It aimed to establish a true picture of the health of the banks.
[63] http://www.ecb.int/press/key/date/2012/html/sp120412.en.html retrieved on 12 April 2013.
[64] The Irish Times reports a rate of 3.3 percent for a bond maturing in 2017: http://www.irishtimes.com/business/markets/bonds/ireland-generates-2-5bn-on-bond-market-at-lower-yield-level-1.955999

factors would reduce that probability. First, Ireland as a small open economy needs a favourable external growth environment. A deepening of the current euro-area recession would be a central problem for Ireland and its return to the markets. Second, Ireland could benefit from a deal with the ESM to sell Allied Irish Bank, which is currently almost completely state owned, to the ESM. Such an operation would not necessarily constitute a transfer depending on the price at which Allied Irish Bank is sold. It would shift risks from Irish to European taxpayers and would therefore be consistent with the June 2012 declaration of heads of state and government to de-link banks from sovereigns[65].

5.5 Portugal

After several months of hesitation, the Portuguese authorities decided in April 2011 to make a formal request to the IMF and to European authorities for financial assistance. The country had no choice. It had lost affordable market access at a time when sizeable bond repayments were due.

The reform programme proposed by Portugal is described in the Memorandum of Economic and Financial Policies (MEFP) attached to the Letters of Intent addressed to the IMF and the European authorities. The stated objective was *"to restore market confidence and to raise the potential of our economy to generate socially balanced growth and employment"* (LoI, §1). In order to achieve this objective, Portugal proposed a *"strategy [that] envisions bold and upfront structural reforms to improve competitiveness, an ambitious but credible pace of fiscal adjustment, and measures to ensure a stable and dynamic financial system"* (MEFP, §2). The strategy was *"backed by substantial international financing to meet balance of payments needs"* (LoI, §1): €78 billion over three years, which corresponds to the public-sector financing gap due to reduced market access (see Table 1). This amount is indeed substantial since it represents roughly 50 percent of the country's 2011 GDP.

More specifically, the programme concerns four separate areas: (1) fiscal policy aimed at reducing public debt and deficit; (2) structural fiscal reform to streamline the public sector; (3) financial and corporate sector policies aimed at protecting the financial system amidst deleveraging; and (4) structural reforms to enhance competitiveness and rebalance growth from the non-tradable to the tradable sector.

This section examines three questions. First, was the programme well designed to meet the objective of restoring market confidence and regaining market access after three years? Second, was the programme well executed and is it on track two years after it was launched? Third, will Portugal be able to regain market access at the end of the programme and what are the country's prospects thereafter?

5.5.1 Programme design and risks

Since joining the euro, Portugal suffered from weak structural conditions with low growth and rising imbalances, which made it particularly vulnerable to shocks. The financial crisis and the euro sovereign-debt crisis were major shocks that had a big impact on Portugal.

The programme clearly recognised the nature of Portugal's problem, stating that: *"Competitiveness indicators have suffered, economic growth has been anaemic, and the*

[65] See Véron and Wolff (2013) for a detailed discussion of the matter in relation to the legacy asset debate.

current account deficit is at 10 percent of GDP. The global crisis exposed Portugal's weak fiscal and financial position with public debt at around 90 percent of GDP at end-2010 and private sector debt about 260 percent of GDP. Banks that financed this build-up in debt now have the highest loan-to-deposit ratio in Europe" (MEFP, §1). *"Against th[is] background of the structural challenges facing the Portuguese economy and contagion from the sovereign debt crisis in other euro area countries, financial conditions facing the Portuguese sovereign and banks have sharply worsened"* (LoI, §1).Although it clearly identified the measures that Portugal needs to adopt to boost growth and reduce imbalances, the programme probably lacked a full appreciation of the difficulty of implementing such measures within a monetary union undergoing a financial and a sovereign debt crisis.

As a result, the programme was somewhat over-optimistic. According to IMF staff reports, Portugal started on an ambitious and comprehensive programme, the policy mix and the speed of adjustment were well calibrated and the fiscal programme was well-balanced and credible (IMF, 2011, §45-47).

This likely over-optimism translated into over-optimistic projections of macroeconomic developments:

- Real GDP was expected to contract in 2011 and 2012 due to fiscal adjustment and private deleveraging, but to subsequently rebound.
- Unemployment was expected to rise in 2011 and 2012 but then to decline.
- Inflation was expected to be high in 2011 and 2012 because of tax increases but low afterwards.
- The fiscal deficit was expected to reach 3 percent of GDP by 2013 in line with the Excessive Deficit Procedure objective. Public debt was expected to peak at 115.3 percent of GDP in 2013 and then to decline.
- The current account deficit was expected to narrow gradually thanks to both decreasing imports associated with lower domestic demand and rising exports resulting from improved supply conditions.
- The net international investment position (IIP) was expected to reach a peak of -123.4 percent of GDP in 2013 and thereafter to improve.

Projections for the period 2011-14 are shown in the left-hand panel of table 10.

At the same time, IMF staff reports recognised that the programme entailed several important downside risks: (1) the programme might not alleviate sovereign debt concerns; (2) social support and political consensus in favour of the programme could erode; (3) lower growth than assumed by the programme could worsen substantially the public debt dynamics; (4) there could be unforeseen additional liquidity and solvency pressures on banks; and (5) there could be negative spillovers from deepening problems in other euro area countries (IMF, 2011, §43).

IMF staff reports also acknowledged that restoring competitiveness in a monetary union would be challenging (IMF, 2011, §51). In the absence of the exchange rate instrument, external rebalancing would require structural reforms to increase productivity and improve competiveness at given nominal wages. Otherwise rebalancing would entail a deep recession with a surge in unemployment and painful adjustment in nominal wages which *"will be socially very difficult"*. While acknowledging that a recession and a rise in unemployment in

2011-12 are unavoidable, the IMF staff considered that a gradual recovery in 2013 was feasible *"provided that the ambitious reform programme is implemented as planned"*.
The IMF's debt sustainability analysis (DSA) also insisted that Portugal's public debt sustainability will be *"highly dependent on the growth recovery starting in 2013 and, in the long-run, on the success of structural agenda reforms to boost potential growth"* (IMF, 2011, Annex 1).

5.5.2 Programme execution during the first two years

How has Portugal performed since the implementation of the programme and what are the revised projections for the period up to 2014 according to the winter Commission forecasts of February 2013? The major macroeconomic developments are the following:

- There was a slightly lower contraction of real GDP in 2011 than originally expected. On the other hand, the contraction will be 3.2 percent instead of the earlier predicted 1.8 percent in 2012 and will remain around 2 percent in 2013. A shallow recovery is now expected only in 2014. For the period 2011-14, the accumulated loss of GDP growth compared to the initial expectation will be 6.8 percentage points, an average annual shortfall of 1.7 points.
- Partly as result of the less favourable growth performance, unemployment is now expected to rise until 2013 instead of 2012, and to reach a much higher peak with a value of 17.3 percent in 2013 compared to an earlier predicted value of 13.4 percent.
- Inflation is more or less on track, with high values of about 3 percent in 2011 and 2012 and low values of about 1 percent thereafter.
- The fiscal deficit was lower than expected in 2011 but Portugal will not meet the EDP objective of 3 percent of GDP by 2013.
- As the IMF's DSA had suggested, a lower than predicted growth performance risks jeopardising debt adjustment. Instead of reaching a peak of 115.3 percent of GDP in 2013 as originally predicted, the Commission now predicts that Portuguese public debt will continue rising, reaching 124.7 percent of GDP in 2014.
- On the other hand, the current account deficit is reducing much faster than expected. It stood at 7.2 percent of GDP in 2011 instead of the originally predicted 9 percent and should reach 1.4 percent in 2013. For the period 2011-14, the reduction in the external deficit compared to the initial expectation will be 10.4 percentage points, an impressive figure.

Table 10 shows the details of these developments and their comparison with the programme forecasts.

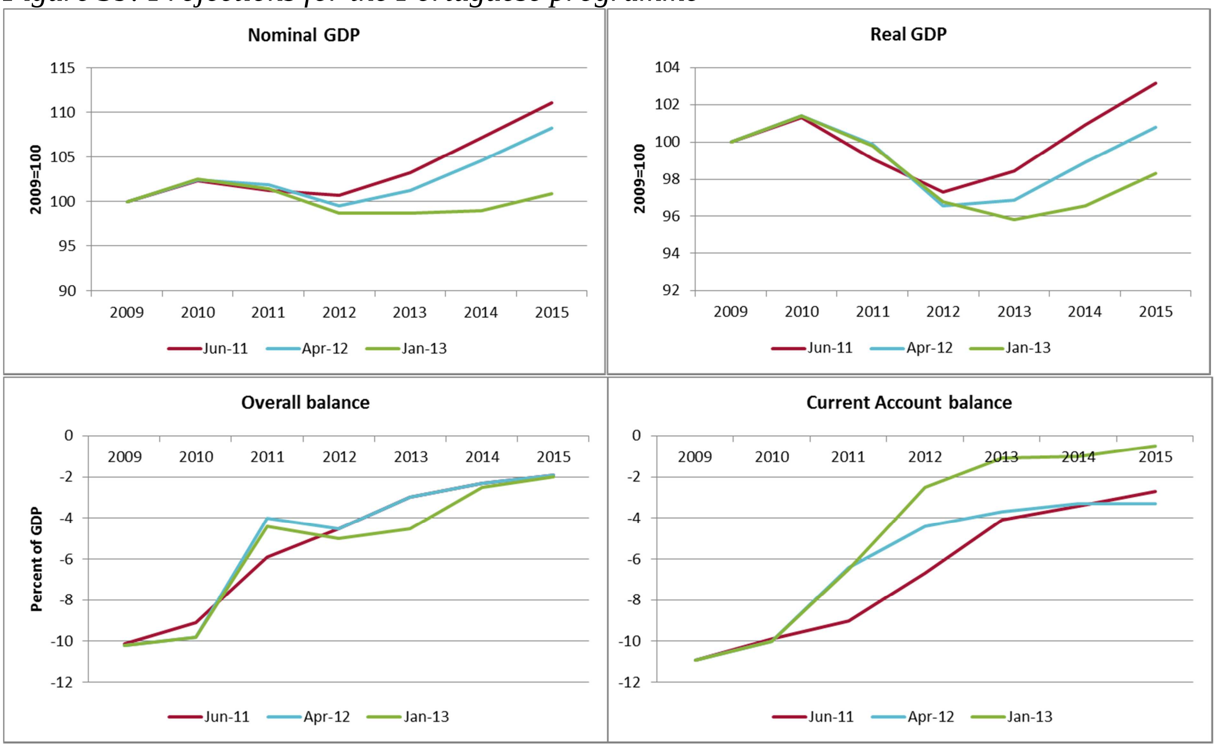
Table 10: Portugal, selected macroeconomic indicators, 2011-14 (In percent of GDP, unless otherwise specified)

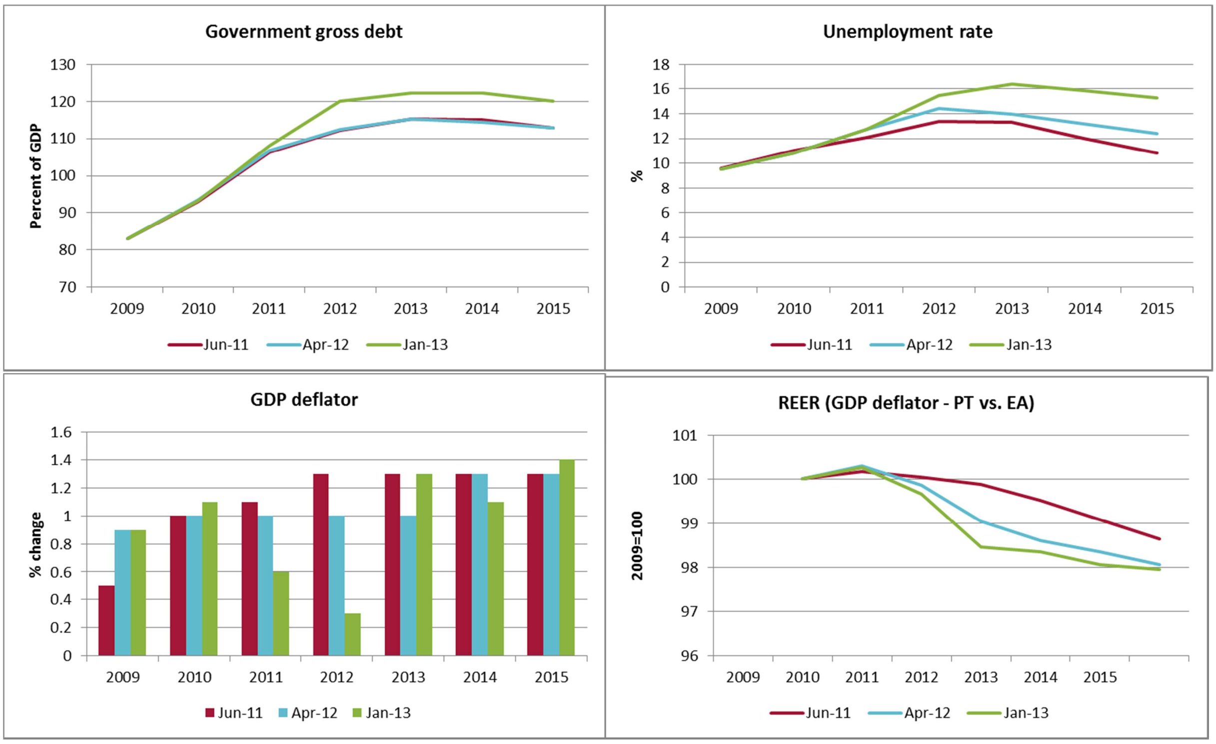
	Programme June 2011				**Projected February 2013**			
	2011	2012	2013	2014	2011	2012	2013	2014
Real GDP (percent change)	-2.2	-1.8	1.2	2.5	-1.6	-3.2	-1.9	0.8
Consumer prices (percent change)	3.5	2.1	1.4	1.5	3.6	2.8	0.6	1.2
Unemployment (percent)	12.1	13.4	13.3	12.0	12.9	15.7	17.3	16.8
General government deficit	5.9	4.5	3.0	2.3	4.4	5.0	4.9	2.9
General government debt	106.4	112.2	115.3	115.0	108.0	120.6	123.9	124.7
Current account deficit	9.0	6.7	4.1	3.4	7.2	3.0	1.4	1.2
Net IIP (negative)	116.9	123.3	123.4	121.4	103.8	n.a.	n.a.	n.a.

Source: IMF programme request (June, 2011) and European economic forecast - winter 2013

Figure 39 shows the differences between the initial (June 2011) projections and revised projections by the time of the third (April 2012) and sixth (January 2013) review missions. Once again the main elements are the disappointing growth and unemployment performance, and conversely the better than expected current account situation.

Figure 39: Projections for the Portuguese programme





Source: IMF programme documents.

Overall, Portugal's macroeconomic performance justifies the 15 March 2013 Troika statement, following its seventh review mission to Portugal, that implementation of the programme is *"broadly on track"*. After nearly two years of programme implementation, the situation in Portugal exhibits two contrasting trends compared to expectations. First, the recession in 2012 and 2013 has been much deeper than expected. The March 2013 Troika statement acknowledges that growth in 2013 and 2014 will be slower even than indicated in Table 2 and that unemployment could peak at over 18 percent. The government is even more pessimistic. It predicts that unemployment will reach 19 percent by end 2013 and remain above 17 percent till 2016. This disappointing performance can be attributed to three main factors: fiscal austerity measures and deleveraging of private-sector balance sheets; slower than anticipated productivity growth and rebalancing of economic activity from the non-tradable to the tradable sector; and continued weak demand in the euro area, especially in neighbouring Spain, which traditionally absorbs roughly one quarter of Portugal's exports.

The main problem is that, so far, the programme has not succeeded in boosting investment. On the contrary, investment performance has been extremely disappointing, with a contraction of more than 10 percent in 2011 and again in 2012, and a further contraction of 8 percent now expected in 2013. Portugal's investment performance is far worse than Ireland and only slightly better than Greece. It is also far worse than anticipated by the programme, with an accumulated loss of investment growth compared to expectation of nearly 19 percentage points for the period 2011-13.

Disappointing growth has made the deficit targets unachievable. In order to allow the operation of automatic fiscal stabilisers, the government was forced to request an upward revision of the deficit targets in 2013 and 2014, which the Troika staff supported in their March 2013 statement. As a result, the original 2013 deficit target of returning below the 3 percent excessive deficit threshold, which in 2012 was already postponed to 2014, was further postponed to 2015. Accordingly, public debt will rise further. In its March 2013 statement, however, the Troika predicted that public debt will still peak at around 124 percent of GDP, as already predicted by the Commission in February 2013. The lack of an upward revision for the debt despite the worsening deficit was probably due to the expectation of the Troika that EU lenders would reschedule some loans, an expectation that was fulfilled by the ECOFIN Council in April 2013 (see next section).

On the other hand, external adjustment has been much faster than expected, thanks to improved export performance and a fall in imports.

The apparent contradiction between these two contrasting trends arises from the fact that exports to non-traditional destinations outside the euro area seem to have increased rapidly despite the lack of significant changes in supply conditions in Portugal. One explanation for this apparent contradiction in the performance of exports is the possibility noted by the IMF staff that *"the improvement to date is simply cyclical [rather than] of a more durable nature"* (IMF, 2012, §16). There is evidence that the sharp fall in domestic demand that has occurred since the beginning of 2011 is the main driver behind the recent improvement in export market share. There is also evidence that, in Portugal, the relationship between export performance and domestic demand is asymmetric, being stronger and more significant when domestic demand is falling than when it is increasing[66]. This would suggest that the recent gain in market share is durable and may not be lost (or at least not entirely) when domestic demand rebounds.

5.5.3 Prospects for exiting the programme on time and for afterwards

Portugal is conscientiously swallowing the Troika's budgetary remedy, which was adapted in view of weaker growth prospects. Portugal's deficit will not return below 3 percent of GDP in 2013 as originally foreseen by the programme, or in 2014, but it probably will in 2015. The debt-to-GDP ratio will probably peak also one year behind schedule in 2014, by which time it will be about 10 points higher than initially foreseen.

The main reason for the slippage in public debt is the continuing growth under-performance. This is confirmed by the decomposition in Table 12, which indicates that four-fifths of the gap between the initial debt target for 2013 and the sixth review mission's revised estimate can be attributed to lower than expected nominal GDP.

[66] See Esteves and Rua (2013).

Table 11: General government structural balance, Portugal 2011-13

	Primary balance (incl. bank support)	Overall balance	Gross debt
2013 target as set in the June 2011 EFF programme	**2.1**	**-3.0**	**115.3**
- Changed 2010 initial conditions	**-0.9**	**-0.7**	**0.3**
- Revenue shortfall due to adverse GDP developments	**-1.8**	**-1.8**	
- Effect of lower nominal GDP		**-0.2**	**5.4**
- Interest rate on public debt		**0.9**	
- Larger than expected overall deficits			**0.7**
- Fiscal consolidation effort (residual)	**0.4**	**0.4**	
- Debt accumulation residual			**0.5**
2013 outturn as forecasted in the Dec 2012 review	**-0.2**	**-4.5**	**122.2**

Sources: Portugal request for a Three-Year Arrangement Under the Extended Fund Facility (June 2011), Portugal: 2012 Article IV Consultation and Sixth Review Under the Extended Arrangement and Request for Waivers of Applicability of End-December Performance Criteria – Staff Reports; Public Information Notice and Press Release on the Executive Board Discussion; and Statement by the Executive Director for Portugal (January 2013). Bruegel calculations.

Despite this situation, markets seem quite satisfied with Portugal. The country's National Debt Agency successfully issued 3- and 12-month treasury bills in January and February 2013. It also returned to the bond market with a 5-year issuance at a yield of 4.9 percent. At the same time, 10-year bond yields fell below 6 percent, a level last seen in October 2010 and well below the peak of more than 17 percent reached at the beginning of 2012.

The positive market sentiment is explained by three factors. First, there is a strong domestic consensus in favour of the Troika programme, though it risks being severely tested in the course of 2013 as the austerity measures lead to record unemployment levels and tax burdens[67]. Second, and related to the first point, there is the perception of a high degree of mutual understanding, trust and close cooperation between the Portuguese authorities and the Troika, which our private interviews corroborate. Third, and related to the previous point, market participants feel, and we agree, that Portugal will receive all the necessary support to be able to exit the programme on schedule in 2014. Such support was demonstrated by the decision at the April 2013 ECOFIN Council meeting to extend the maturities of EFSM loans to Portugal by seven years. Moreover, in case of difficulty after it leaves the programme, Portugal could benefit from insurance in the form of precautionary financial assistance from the ESM via its enhanced conditions credit line (ECCL) facility, which would then probably qualify the country for the ECB's OMT.

The seventh Troika review confirmed the positive view of market participants, stressing that, *"Provided the authorities persevere with strict programme implementation, euro-area member states have declared they stand ready to support Portugal until full market access is regained. Continued strong programme implementation and the envisaged adjustment of the*

[67] See, for instance, Pereira and Wemans (2012).

maturities of EFSF and EFSM loans to smooth the debt redemption profile will support the government's return to full market financing during 2013" (Troika, 2013).

Despite some tough times ahead provoked by the austerity measures and the delay in the implementation and/or the effects of growth-promoting structural measures, Portugal seems likely to exit the Troika programme on schedule. This would clearly be a success for Portugal and for the Troika.

Exiting the programme would not, however, be the end of Portugal's problems. In 2014, Portugal should be able to stand on its own feet and issue long-term debt, but the economy will remain fragile. One way to appreciate this is to go back to the situation before the crisis, when *"Portugal faced an unusually tough economic challenge: low growth, low productivity growth, high unemployment, large fiscal and current account deficits"* (Blanchard, 2007).

Table 10 compares the situation in 2004-08 with the situation that will prevail in 2014 according to the 2013 winter Commission forecasts. The good news is that the fiscal and the current account deficits will be much reduced. The bad news is that unemployment and public debt will be considerably higher. Social and debt sustainability will, therefore, be fundamental after Portugal exits the programme. The key will be growth. Here the problem, which the Troika programme correctly identified, is that Portugal needs to radically change its pre-crisis growth model, which produced stagnation after the country joined the euro[68]. With nominal long-term interest rates of around 6 percent, Portugal will need nominal GDP growth of at least 4 percent (which implies real GDP growth of at least 2.5 percent) and a sufficient primary balance surplus to ensure debt sustainability. This will be a major challenge.

Table 12: Portugal, selected macroeconomic indicators, 2004-08 averages and 2014 (in percent of GDP, unless otherwise specified)

	Actual (2004 – 08)	**Projected (2014)**
Real GDP (percent change)	1.2	0.8
GDP deflator (percent change)	2.4	0.8
Nominal LT interest rates (percent)	4.0	6.0
Productivity (percent change)	1.1	0.3
Unemployment (percent)	8.4	16.8
General government balance	-4.4	-2.9
Primary balance	-1.6	1.6
General government debt	70.0	124.7
Current account deficit	10.4	1.2

Source: European Commission, 2013.

Reis (2013) points out that Portugal was an outlier among peripheral euro-area countries during the 1999-2007 period. Like them, it witnessed huge capital inflows, but it saw no boom in production and employment. Reis ascribes Portugal's poor growth performance during this period to a combination of two factors: underdeveloped domestic credit markets that misallocated most of the capital inflows to unproductive firms in the non-tradable sector, and rising employment taxes that were levied to finance an over-generous pension system and

[68] See Andrade and Duarte (2011) for an analysis of the structural problems facing Portugal.

that discouraged work. Another factor, pointed out by many observers, including the Troika, is the low degree of contestability in non-traded activities that makes them relatively more profitable than traded activities, which are also affected by the small size of firms and the difficulty of obtaining appropriate financing. The structural reform measures contained in the EU-IMF programme aim precisely at enhancing competitiveness and rebalancing economic activity from non-traded to traded activities. These measures, however, will take time to implement and bear fruit, especially in a weak macroeconomic environment. The capacity of the Portuguese authorities to pursue the necessary reforms after the end of the programme will be an important factor.

Labour market reform is particularly crucial. Before the crisis Portugal had one of the euro area's strictest employment protection frameworks, one of the most generous unemployment benefit systems and one of the most rigid nominal wage arrangements. In addition, Portugal had one of the highest ratios of public to private compensation per employee in the euro area. The EU-IMF programme contains many reforms to correct this situation and the government has already taken significant steps to implement the reforms. However, a number of planned reforms have yet to be implemented. Also, the programme suffered a major setback in April 2013, when the Portuguese constitutional court rejected the government's attempt to reduce public sector pay, which would have helped improve the attractiveness of the tradable sector. Finally, even if and when the remaining reforms are passed, Portugal's labour market will still require further reform even after the programme ends.

5.4 A comparative assessment of the three programmes

Our assessment of the progress of the three programmes highlights common threads and differences:

- All three countries have one thing in common: the fall in domestic demand was generally larger or much larger than anticipated and unemployment increased much more. At the same time, the current account deficit improved more than originally forecast;
- In Ireland, better export performance helped moderate the consequences for output of a decline in domestic demand. Imports actually increased, in contrast to what was expected. In Greece and Portugal, the contraction in demand found its way into a contraction of imports beyond what the programmes foresaw.
- The Greek programme clearly stands out as the most disappointing and Greece's return to market is still far off. By contrast, in Ireland and to a lesser extent in Portugal, planned measures have been implemented to a great degree and a full return to market at the end of the three-year programme is seriously contemplated.

There are several reasons why domestic demand fell more than anticipated. One was fiscal adjustment: all three countries implemented significant budgetary consolidation and mostly followed through on their initial commitments. The macroeconomic impact of this consolidation appears to have been underestimated in initial programme design (ie the fiscal multiplier might have been larger). The second important factor was credit constraints. As explained, the ECB's collateral and ELA policies had a direct impact on credit supply. There was large-scale substitution of private lending by central bank liquidity, yet the credit supply was inevitably constrained, affecting domestic borrowers. Finally, the three countries all experienced adverse confidence effects, as indicated by elevated bond spreads and CDSs, which suppressed investment even further and prevented foreign direct investment. In our approach we cannot assess the relative contribution of these three factors.

It is less clear why unemployment deteriorated much more than anticipated. Its rise much above initial forecasts cannot be explained by adverse growth developments alone. A major reason for this discrepancy is likely to be the fact that job destruction took place in labour-intensive sectors such as construction and traditional services. Sectoral rebalancing was an unavoidable dimension of the adjustment but its social consequences proved more serious than assessed ex ante.

The speed of fiscal and financial adjustment has been a matter for controversy. From the point of view of the programme countries, the adjustment speed is naturally seen as having been too high and is associated with significant economic hardship. More fiscal leeway could have made it possible to frontload the rebalancing of competitiveness by devoting part of the higher indirect taxation revenues to cuts in contributions to social insurance.

From the point of view of creditors, however, prolonging adjustment periods almost inevitably means providing more finance. This tension between the national perspective and the creditor perspective is unavoidable in all programmes and has been particularly pronounced in the euro area, where programmes have been exceptionally large by international standards.

The Troika probably underestimated in its initial assessment the negative externalities across the euro area stemming from the spread of the crisis from the periphery to the core. Quite naturally, it expected the environment to be more stable than it turned out to be. Once Spain and Italy also came under stress, a significant part of the euro area was in turmoil and was applying austerity measures to try to keep bond yields under control. Addressing crises in individual euro-area countries on a case-by-case basis while the common monetary union was suffering from increased stress proved to be a shortcoming that affected all three programmes.

Turning to differences, Greece stands out. Here, internal factors played a major role, as we have discussed: the size of imbalances and the lack of ownership of the programme by the Greek political system and state machinery were severe hindrances. The Greek programme also suffered from European contradictions: the country was partly a guinea pig for the creation of institutions and policies to address euro-area crises that were absent from the EU treaty. Against this background, the combination of European indecision and a severe competitiveness-sustainability conundrum led the IMF and the EU to bet on optimistic assumptions that failed to materialise.

In Greece and Portugal, where competitiveness problems are most severe and where structural reform is most needed, there was probably too little appreciation of the fact that reform would take time to be implemented and to produce positive effects. As a result, the negative effect of austerity measures was greater than expected in these countries because their labour and product markets did not react quickly enough. By contrast in Ireland, where markets function much better, austerity measures have had less detrimental effects and the programme has been more on track than in Greece and Portugal.

6. Assessing the institutional set-up of assistance

In spring 2010, when Greece officially requested international financial assistance, the EU and the IMF were already providing joint assistance to three EU countries: Hungary (November 2008), Latvia (December 2008) and Romania (May 2009).

It was natural therefore to envisage that financial assistance to Greece would again involve EU-IMF cooperation. There were, however, three problems in implementing the same approach in Greece as in non-euro area countries. First, Article 143 of the EU treaty, which permits EU financial assistance to European countries, possibly together with the IMF or other international organisations, explicitly excludes euro-area countries. This situation was interpreted in two opposite ways in the political discussion inside the euro area. Some argued that Greece should only turn to the IMF, since the EU was not allowed to provide assistance. Others argued that Greece should only turn to members of the euro family, and exclude the IMF altogether. Neither option was feasible. The amount of financial assistance needed by Greece was well above what the IMF could provide on its own. However, the EU lacked the required expertise to design and monitor a financial assistance programme without IMF cooperation. The solution was EU-IMF cooperation.

The second problem was the financial terms of the cooperation. In non-euro area countries, the IMF was the majority lender to Hungary and Romania and the minority lender to Latvia, a first for the Fund. In euro-area countries, there was no choice. The amounts involved and the politics obliged the IMF to accept participation as a minority lender, though at the risk of losing its leadership as provider of policy advice and setter of policy conditionality, thus creating potential difficulties for non-European IMF members.

The third problem was the selection of EU institutions that should be involved in the design and monitoring of the programmes. In non-euro area countries, negotiations with national authorities were always conducted by the European Commission and IMF staff. In Greece, however, it was felt that the EU side should be represented by the European Commission *"in liaison with the ECB"*, resulting in the European Commission, ECB and IMF Troika. As already discussed in chapter 4, there are different possible explanations for the political decision to include ECB staff in the negotiation of EU-IMF programmes for Greece and other euro-area countries. The most convincing explanation is that the inadequate institutional arrangement in the euro area forced the ECB to operate as a quasi-fiscal actor in programme countries[69]. It is logical, therefore, that it sits at the programme table and on the lending side, whereas the national central bank of the country in question sits on the other side.

The remainder of this chapter is divided in two parts. After a brief assessment of EU-IMF cooperation in non-euro area countries, we assess the functioning of the Troika from the perspective of each of its members and from the broader EU-IMF perspective.

6.1 EU-IMF cooperation in non-euro countries

The European facility providing Medium-Term Financial Assistance (MTFA) for member states having balance-of-payments difficulties was originally established in 1988[70]. It was only used twice before the introduction of the euro: in 1991 for Greece, and in 1993 for Italy. After the introduction of the euro, the facility became only available for member states that

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[69] See, in particular, Buiter and Rahbari (2012).

[70] Council Regulation (EEC) No. 1969/88. of 24 June 1988.

have not adopted the single currency. The facility was revised accordingly in 2002[71]. The new facility was used for the first time in 2008 for Hungary and later for Latvia and Romania[72].

In principle, the Commission intervenes alongside the IMF in providing medium-term financial assistance and plays the same role as the IMF in the negotiation and monitoring of programmes, in the decision to provide assistance and in the actual lending. In practice, however, the Commission was the junior partner in Hungary and in Romania, mainly because it lacked experience in providing balance-of-payments assistance. The IMF took the lead in these two countries, providing more than 60 percent of the financing.

In Latvia, however, the roles of the EU and the IMF were reversed. The Fund was now, and for the first time in its history, the junior partner in a lending programme, providing less than 25 percent of the financing. The difference in approach between Hungary and Romania compared to Latvia reflected the difference in exchange rate regimes. Of the three countries, Latvia alone participated in the EU's exchange rate mechanism (ERM II), in which the exchange rate of a non-euro area EU country is fixed against the euro, and is only allowed to fluctuate within set limits[73].

Entry into ERM II is based on an agreement between the government and central bank governor of the non-euro participating countries, and the Eurogroup and the ECB, which neither the Latvian nor the euro-area authorities wished to abrogate. As is well-known, the European Commission and the IMF had a significant difference of opinion over whether Latvia should have been required to devalue its currency as a condition for receiving assistance. Eichengreen (2012) cites Lannin (2009) who quotes Latvia's prime minister as stating that the IMF favoured devaluation but that this was vetoed by the Commission. Eichengreen also cites Aslund and Dombrovskis (2011) who show that views within the IMF were not uniform. Apparently, the IMF's mission chief in Latvia was in favour of avoiding devaluation, whereas other IMF staff took the opposite view and pressed the Latvians and other Europeans to consider it. At the end, as Henning (2011) reports, the IMF's managing director and the responsible EU commissioner struck an agreement whereby the European position on this point was accepted and the EU contributed a larger share of a larger overall package than the IMF had envisaged.

Apart from some tensions over (rather than in) Latvia, EU-IMF cooperation in the three non-euro countries has worked fairly well. It was also a useful learning experience for the Commission and for EU-IMF cooperation relative to the assistance programmes in the euro-area countries.

6.2 Principles for assistance in euro-area countries: The EU and the IMF

To assess cooperation between the Troika members, we start (in line with Merler, Pisani-Ferry and Wolff, 2012) by describing the standard model used by the IMF in a financial assistance programme. Conditional assistance from the IMF is based on simple principles. Lending is intended:

[71] Council Regulation (EC) No. 332/2002.
[72] The new facility had a ceiling of €12 billion for the outstanding amount of loans that could be granted to Member States. This ceiling was raised to €25 billion in 2008 and to €50 billion in 2009.
[73] The Latvian lats joined ERM II in 2005. Like other ERM II countries, Latvia was allowed a fluctuation of its currency of ± 15 % around the central rate vis-à-vis the euro, but it unilaterally maintained a 1% fluctuation band.

> *"…to give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity"* (Art. 1 of Articles of Agreement).

> *"Conditionality helps countries solve balance of payments problems without resorting to [such] measures. At the same time, the measures are meant to safeguard IMF resources by ensuring that the country's balance of payments will be strong enough to permit it to repay the loan"* (IMF Factsheet).

The IMF model is therefore rather straightforward: the IMF acts as an independent principal that requests a country to implement policies that are conducive to:

(a) correction of the imbalances that led it to request assistance, and
(b) ensuring that the country will be able to repay the IMF, without resorting to measures that are harmful to itself or to other IMF members.

This is a well-defined role that on the face of it is free from any conflict of interest. It is important to note that the IMF does not have other objectives than those stated above and that it is not part of the policy system of the countries it provides assistance to.

In the euro area, the situation is different. To start with, the motivation for assistance is more specific. To quote from the ESM treaty, the purpose is:

> *"(…) to mobilise funding and provide stability support under strict conditionality, appropriate to the financial assistance instrument chosen, to the benefit of ESM Members which are experiencing, or are threatened by, severe financing problems, if indispensable to safeguard the financial stability of the euro area as a whole and of its Member States".*

Whereas in practice assistance has been granted in parallel to IMF assistance, in principle it also serves the purpose of preserving euro-area stability.

Second, the EU is a policy system, which has set itself many goals and is equipped with rules and procedures. The very fact that ESM assistance is reserved to countries that have ratified the Treaty on Stability, Coordination and Governance (TSCG) is telling in this respect. Policy conditionality reflects the explicit or implicit hierarchy of EU objectives and rules.

Third, the ECB and the Commission are parts of the EU policy system, whereas the IMF is external to the policy systems of the countries in which it intervenes. Together with the existence of aims and procedures, this creates the potential for conflicts of interest between the policy initiatives a 'trusted adviser' would recommend to a government, and the policies that are either recommended by EU institutions on the basis of rules and procedures, or carried out by EU policy institutions. The former applies to the Commission and both apply to the ECB.

Although they operate according to different logic and rules, the EU and IMF are bound to cooperate. From the EU side, the ESM treaty enshrines cooperation. Article 8 states:

"The ESM will cooperate very closely with the International Monetary Fund ("IMF") in providing stability support. The active participation of the IMF will be sought, both at technical and financial level. A euro-area Member State requesting financial assistance from the ESM is expected to address, wherever possible, a similar request to the IMF."

There is obviously nothing similar in the IMF's Articles of Agreement, but there has been a clear wish on its part since the start of the financial crisis to assist its EU members, both outside and inside the euro area, and to cooperate with EU institutions.

6.3 Assessing the role of the IMF in the Troika

In the euro-area programmes, the IMF is a minority lender. It provides only one-third of the financing, while the other two-thirds are provided by EU countries. This is an awkward situation for the IMF which is used to being the sole lender – or at least to being a majority lender – and to applying its own rules. It is especially awkward in view of the fact that the scale of IMF lending to Greece, Ireland and Portugal was unprecedented both in absolute terms and compared to the borrowers' quota.

At the time of the first Greek programme, some considered that it was very risky for the IMF to accept a junior role. For instance, Morris Goldstein, a former deputy director of the IMF's research department and a senior fellow at the Peterson Institute for International Economics, told the *Financial Times* that: *"This has the makings of a strange dog's breakfast… If a regional grouping can set IMF conditionality, what is the point of the Fund anyway? This could create a very dangerous precedent"* (Hughes, Beattie and Hope, 2010).

In addition to accepting that programme conditionality be devised, negotiated and monitored by the Troika, the IMF decided to modify its Exceptional Access Policy (EAP) criterion on debt sustainability in order to make it possible to lend to Greece, Ireland and Portugal.

The amendment to the EAP criterion on debt sustainability introduced during the same IMF board discussion that approved the Stand-by Arrangement requested by Greece in May 2010 reads as follows (added text is underlined):

A rigorous and systematic analysis indicates that there is a high probability that the member's public debt is sustainable in the medium term. <u>However, in instances where there are significant uncertainties that make it difficult to state categorically that there is a high probability that the debt is sustainable over this period, exceptional access would be justified if there is a high risk of international systemic spillovers</u>. Debt sustainability for these purposes will be evaluated on a forward-looking basis and may take into account, inter alia, the intended restructuring of debt to restore sustainability. This criterion applies only to public (domestic and external) debt. However, the analysis of such public debt sustainability will incorporate any potential contingent liabilities of the government, including those potentially arising from private external indebtedness.

As Committerri and Spadafora (2013) note: *"Other joint EU-IMF rescue packages with exceptional access were subsequently justified by referring to this clause: for Ireland (December 16, 2010), Portugal (May 20, 2011), and once again for Greece (March 15,* *2012). In all these cases, uncertainties about the future public debt paths made it difficult to state categorically that these countries' debts were sustainable with a high probability."*

Although the revised EAP criterion applies *erga omnes* to all IMF members, the fact of the matter is that so far only euro-area countries have benefitted from the new rule. This, together with the perception that programme conditionality has been more favourable for euro-area countries than it was during the Asian crisis, has created some resentment on the part of IMF members, especially in Asia and in Latin America, although the prevailing view is a sense of relief that the euro-area crisis has been contained partly thanks to IMF intervention.

The revised EAP criterion also seems to have been a bone of contention between the EU and the IMF and within the IMF, almost from the time when it was adopted. Many at the IMF considered that Greece's debt should have been restructured, if not prior to the first programme, at least much sooner than what was eventually decided. On the EU side, however, there was much less appetite for even considering that a restructuring would be needed. There was a sense that debt sustainability analysis, a key feature of IMF programmes, was inappropriate or unhelpful in a situation like the euro-area crisis. And although the IMF line eventually prevailed, the revised EAP criterion has clearly left a mark on the IMF staff.

Questions have also been raised about whether the IMF's junior position in the Troika has reduced its ability to conduct its role objectively. For instance, Arvind Subramanian, another former IMF official and senior fellow at the Peterson Institute, wrote in the *Financial Times* that *"the IMF has toed the official European/German line on the crisis, possibly to the disservice of Europe and the world. It has not been a source of new ideas or critical thinking… [and] has failed to challenge orthodoxy, forfeiting its role as a valuable referee in the policy debates. If things turn bad, the IMF will have to bear responsibility for its complicity in the less-than-optimal policy choices made in Europe"* (Subramanian, 2012).

Others are even more sanguine, at least as far as the Greek programme is concerned. For instance, Guillermo Ortiz, a former Mexican central bank governor, stated that: *"The IMF probably should have stayed on the sideline of this programme that is truly controlled by the [EU]. It is only risking damaging its reputation by intervening in a package in which it does not even have faith"* (Ortiz, 2012).

6.4 Assessing the role of the European Commission in the Troika

In non-euro area programmes the Commission, like the IMF, is 'vertically integrated'. It carries out all the functions, from the negotiation and monitoring of programmes, to the decision to provide assistance and to actual lending. This is not the case in euro-area programmes, in which, as already discussed in chapter 4, the role of the Commission is both narrower and more complicated.

It is narrower in the sense that the Commission acts merely as the agent of the Eurogroup, which decides whether to provide assistance and controls the actual lending through the ESM. This is in sharp contrast to the normal function of the Commission, which is to act as an independent principal protecting the EU interest.

The Commission's role is also more complicated for two reasons. First, the intergovernmental nature of the ESM, with its unanimity rule, makes the process highly political, involving not only finance ministers, but also heads of state and government and national parliaments. With so many participants, the process is prone to constant renegotiation, which greatly complicates the Commission's task. Second, the Commission obviously retains its normal role of enforcer of EU decisions, including in areas that affect the implementation of assistance programmes. There is a significant potential in two areas for conflicts of interest, with the Commission acting as principal in charge of enforcing EU rules while also being the agent of the Eurogroup. Though fiscal policy is an important component of all EU-IMF programmes, EU fiscal rules have had to be relaxed in all three euro-area programme countries. Similarly, the Commission has found itself in a complicated situation in attempting to enforce state-aid rules to avoid competitive distortions stemming from financial assistance to distressed banks in programme countries while ensuring the banks' financial viability.

Despite the complex institutional arrangement on the EU political side, which has greatly complicated its role within the Troika, the European Commission has been quite effective. It has learned from the experience it gained in the three non-euro area EU-IMF programmes and greatly improved its technical capacity to negotiate and monitor programmes. Also, it has been able to draw on the resources of its different services to take an active role in programme countries beyond macroeconomic and structural adjustment. In particular, the Commission's competition services have played an important role through the state aid control instrument in the restructuring of the banking sector. However, the Commission suffers from a lack of 'vertical integration'. Its technical expertise at staff level does not feed easily into the decisions to provide actual lending, which are taken by the Eurogroup both directly and through the ESM.

6.5 Assessing the role of the ECB in the Troika

The role played by the ECB in the Troika is difficult to assess simply because it publishes little or nothing about its involvement in the programmes. Unlike the IMF and the European Commission it does not produce assessments or programme monitoring documents. It does not participate in programme lending, but relies on its own instruments (collateral policy and Emergency Liquidity Assistance) to provide vital liquidity to the banking system in programme countries. By relaxing its collateral standards when programmes are agreed, as done for Greece, Ireland and Portugal, or by tightening them, and by setting limits to ELA access, the ECB plays a role of its own in the programmes[74]. Evaluations of this role, and of the pros and the cons of the ECB’s participation in the Troika, have been done by Merler, Pisani-Ferry and Wolff (2012) and by Whelan (2012).

Anecdotal evidence obtained by Merler, Pisani-Ferry and Wolff (2012) suggests that the ECB’s role in programme missions to Greece, Ireland and Portugal is mostly focused on the financial/banking side and on the fiscal side. The ECB does not appear to play a significant role in the actual computation of the financing needs of a country. This is mostly done by the European Commission and the IMF. On fiscal policy, the ECB usually adopted a rather strict line, urging more rapid consolidation than the IMF and the European Commission. For example, in Ireland, the ECB insisted on reaching a three percent deficit by 2013 while the other institutions leaned more towards achieving the goal in 2014. In Greece, the ECB also came out strongly against debt restructuring and, in particular, any form of involuntary restructuring of private claims on the Greek state. For the banking/financial component of the programmes, the ECB typically urged larger financial packages for banks to strengthen their

[74] See the ECB press releases of 3 May 2010, 31 March 2011 and 7 July 2011 on the relaxation of collateral standards for Greece, Ireland and Portugal issued on the occasion of programme agreements in the three countries.

capital base. Also, the ECB called for larger funds to protect bank depositors. In the design of the precise structural reforms that are part of the programmes, the ECB played only a supporting role to the European Commission, most likely because the Commission has broader and more detailed expertise in this area.

It is a matter for discussion if the twin role of the ECB – as an influential institution within the European policy system and as the joint provider of advice to a euro-area government within the framework of a conditional programme – creates conflicts of interest that are significant enough to outweigh the potential advantages of ECB participation in the design and the negotiation of conditional assistance.

There are three potential conflicts of interest. The first relates to the ECB's prime activity, monetary policy. The ECB's mandate is to secure price stability in the euro area as a whole. This means that the inflation performance of small countries such as Greece, Ireland and Portugal is essentially irrelevant for the fulfilment of the ECB's price stability mandate. Yet, by being closely involved in EU-IMF programmes, the ECB inevitably influences policies beyond monetary policy and starts to have different interests. The pursuit of such interests could lead to a conflict with its core mandate. The main danger is in relation to fiscal policy. The ECB might be tempted to deviate from its price stability objective in order to help improve budgetary sustainability in a given programme country. Or it might be biased towards fiscal consolidation because of its focus on price stability.

A second potential conflict of interest arises over the ECB's liquidity policy. Banks in programme countries are typically heavily stressed and need to rely on ECB liquidity for their operations or even their survival. In a financial assistance programme to a country outside a monetary union, the IMF would include liquidity management by the national central bank in its programme recommendation, advise the national central bank to provide liquidity to solvent but illiquid banks, and assist in the restructuring of insolvent banks. In the euro area however, the ECB decides on its own liquidity policy and influences the design of the programme on bank restructuring. *Ex ante*, the ECB might seek to minimise liquidity operations that constitute a risk to its own balance sheet, and to label banking problems as solvency problems that have to be addressed through budgetary support or by the bailing-in of private shareholders and creditors. *Ex post* however, the ECB might actually provide liquidity on soft terms as would any central bank interested in the success of the programme.

Third, by buying government bonds in the framework of the Securities Market Programme (SMP) or, in the future, the Outright Monetary Transactions (OMT) programme, the ECB becomes a creditor of the countries receiving financial assistance. This may influence its position in the negotiations on fiscal consolidation and private-sector involvement in debt restructuring. *Ex ante,* fear of such an outcome might lead the ECB to be tougher on fiscal consolidation than warranted on broader economic grounds. Again, this could turn the ECB into an interested party in discussions about the treatment of excessive public debt cases. Furthermore, as access to the OMT is explicitly conditional on the country's participation in an ESM programme (for which IMF involvement would probably also be sought), the ECB may end up making its actions conditional on a decision that it is itself part of[75]. This would be contrary to the separation, which the ECB considers essential, between monetary and fiscal decisions.

[75] See ECB press release of 6 September 2012 on the technical features of the OMT.

These three potential conflicts of interest are summarised in Table 13.

Table 13: Possible conflicts of interest

ECB Role	Ex ante (programme negotiation)	Ex post (programme implementation)
Monetary policy	Too tough on fiscal consolidation	Too soft on inflation
Liquidity policy	Too tough on bank solvency	Too soft on liquidity provision
Creditor (SMP/OMT)	Too tough on fiscal consolidation; ECB risks conditioning its OMT-related bond purchase decisions on its own programme decisions.	Too soft on inflation, too timid on restructuring

Source: adapted from Merler, Pisani-Ferry and Wolff (2012).

Based on available written material, it is difficult to assess if these conflicts have actually materialised in Greece, Ireland or Portugal. We are not aware of compelling evidence of conflicts of interest between the ECB's policy roles and its participation in the EU-IMF programme for Greece. On several occasions, however, the ECB has pursued conflicting aims and faced difficult trade-offs in Greece, such as when it redefined its collateral policy in 2010; in early discussions on debt restructuring in 2010-11; and in the 2011-12 negotiations on the contours of the restructuring.

Whelan (2012) is less positive about the ECB’s role in the Irish programme. To begin with, he is not persuaded by the argument that the ECB plays a quasi-fiscal role that justifies its involvement in programme design and monitoring. Yet his main quarrel with the ECB’s involvement in the Troika is the ECB's insistence that private unguaranteed bondholders be repaid although the programme makes no reference to such requirement. In his view, the ECB’s position has meant that most Irish citizens believe that repayment of unguaranteed bonds is a condition of the programme, a perception which he claims has undermined the popularity and legitimacy of the programme. His conclusion is that the ECB should not be a member of a Troika tasked with monitoring any future financial assistance programme.

6.6 Assessing the working of the Troika in EU-IMF programmes

Cooperation between the EU and the IMF in euro-area programme countries is complicated by the fact that each provides financial assistance according to its own logic and rules. Three differences between the EU and the IMF are particularly relevant here.

First, the ESM, like its predecessor the EFSF, can only grant financial assistance as a last resort. By contrast, the IMF tends to favour early intervention. It is fair to say that in all three euro-area programme countries, the late EU-IMF intervention was caused by the EU, while the IMF sought early intervention in each case. However, it would be unfair to view the EU institutions as solely responsible for the delayed intervention. The authorities in the crisis countries also bear significant responsibility because they were not keen to request early assistance for fear of the stigma linked to receiving IMF assistance.

The second difference is in the modus operandi of the EU and IMF. The IMF acts as a 'vertically integrated' and independent principal. It has a clear and narrow mandate that renders it less vulnerable to conflicts of interest[76]. By contrast, the EU side is extremely messy. First, the EU is represented in the Troika by two institutions, though with a clear hierarchy since the European Commission operates *"in liaison with the ECB"*. Second, as we have seen, neither the European Commission nor the ECB are free from potential conflicts of interest. Third, as far as financial assistance to euro-area countries is concerned, the European Commission is neither 'vertically integrated' nor an independent principal. Instead, it acts as the agent of the Eurogroup through a complicated political process prone to constant renegotiation, which greatly complicates the Commission's task. In addition, the unanimity rule within the ESM causes delay in taking decisions to grant financial assistance.

The third difference relates to the conditionality attached to an assistance programme. After the Asian crisis and the criticism of the IMF for imposing too many conditions (Stiglitz, 2002), the IMF decided to embrace the philosophy of *"parsimonious conditionality"* (IMF, 2002). Self-imposed guidelines adopted in 2002 included: programme-related conditions governing the provision of Fund resources will be applied parsimoniously; conditions will be established only on the basis of those variables or measures that are reasonably within the member's direct or indirect control; conditions will normally consist of macroeconomic variables and structural measures that are within the IMF's core areas of responsibility; and the IMF is fully responsible for the establishment and monitoring of all conditions attached to the use of its resources. There will be no cross-conditionality, under which the use of the IMF's resources would be directly subject to the rules or decisions of other organisations.

By contrast EU conditionality, contained in a Memorandum of Understanding on specific economic policy conditionality, is far more detailed and specific. And though the European MoU is consistent with the Letter of Intent and Memorandum of Economic and Financial Policies addressed to the IMF, some of its specific conditions of a structural nature are a source of potential conflict with the notion of no cross-conditionality. The EU's more extensive and detailed conditionality approach largely results from the nature of the EU policy system. It is in contrast to the standard IMF approach of parsimonious conditionality (Goldstein 2000). In the macroeconomic area, EU institutions are bound by EU fiscal rules such as the Stability and Growth Pact, the Six-Pack and the Two-Pack. The IMF is free to set the fiscal and, more generally, macroeconomic targets it considers appropriate, but the Commission and the ECB are much more constrained. In the structural area, the Commission has a duty to ensure that member states comply with EU treaty provisions and legislation in fields like financial services, energy or transport.

These differences between the EU and the IMF have led to a number of frictions between Troika members, though not among mission teams, but at a higher, more political level. First, the IMF has often been frustrated with the EU's procrastination in deciding that assistance was needed, and later in taking difficult but inevitable decisions, such as to restructure Greece's debt. Second, all three members have been frustrated by the messy EU system which has not only slowed down decisions but has often also made them sub-optimal. Finally, the different approaches to conditionality have also been a source of friction. This includes the greater flexibility of the IMF versus the treaty-bound approach of EU institutions, and the recourse to implicit (ie not specified in the programme) conditionality by the ECB, as in the

[76] It is worth recalling that one of the main objections against the proposed Sovereign Debt Restructuring Mechanism as proposed by Krueger (2002) was that it would create a conflict of interest for the Fund.

case of Irish bank senior bondholders. The exemption of the bondholders was - at least initially - opposed by the IMF.

Finally, the different roles of the three institutions make communication with national stakeholders and public opinion more difficult than it would be for a single institution. At a time when the IMF doctrine emphasises transparency and ownership, the Troika does not make things easy. This has been particularly clear in Greece. Being composed of three very different institutions, the Troika is by essence unaccountable as an entity. There is accountability at national level for the commitment and use of ESM funds but the Troika's operations are not accountable because none of the participating institutions are accountable to national parliaments. The European Parliament can hold the Commission accountable, but the situation is unclear for the ECB, and the IMF is not accountable to regional entities. All in all, there is currently less transparency and accountability than is normally the case for IMF lending operations.

Viewed against this background, cooperation within the Troika has been remarkable, at least on the ground between mission teams. All those we interviewed repeatedly emphasised two very positive points: first, the complementarity that exists between the three institutions based on their respective comparative advantages; and second, that there are checks and balances stemming from the respective roles and rules of the three institutions, and from their (implicit for the ECB) financial participation in the joint EU-IMF programmes.

7. Conclusion and recommendations

7.1 Economic issues

In 2012, GDP per capita was 5 percent below its peak level in Portugal, 10 percent below in Ireland and more than 20 percent below in Greece[77]. These numbers alone summarise the extent of the economic and social setback in the three countries receiving financial assistance. They do not, however, tell us whether the Troika programmes – by far the largest in the history of international financial assistance – have been successes or failures.

The judgement of success or failure is less easy to make than it might seem. Such a judgement cannot be based on outcomes alone, because the circumstances of the programme countries were, and still are to a great extent, truly exceptional and were bound to make economic revival especially challenging. A judgement cannot be based only on a comparison between forecasts and outcomes, as the latter were affected by unforeseen developments in the euro-area environment. Nor can it be based on comparisons with what an alternative strategy might have delivered, as it is impossible to construct a counterfactual and to benchmark the programmes against it. Furthermore, in none of the three countries has the Troika yet declared victory or admitted failure.

Three conditions set the euro-area crises apart from earlier crises that required international assistance. First, the crises in the euro-area countries developed on the coattails of the Great Recession that followed the 2008 global financial crisis. Economic and market environments were therefore especially unstable and inauspicious to adjustment and recovery. Second, the three programme countries belong to a European policy system with an incomplete architecture that was partly responsible for the crisis they suffered from. These conditions also made crisis resolution particularly difficult and were at the origin of recurring changes in the principles and modalities of assistance that cannot be found in standard programmes. Third, the size of the macroeconomic imbalances at the beginning of the programmes was unique, and the challenge of adjusting within monetary union particularly daunting. Large net international liabilities, high public debt and substantial relative price misalignments meant that the process was bound to be painful and long.

A simplistic judgement of programme effectiveness, based on a comparison between reasonable expectations and outcomes, would be that the Irish programme seems to have been successful. At the time of writing, Ireland is on track to exit the three-year programme and regain access to financial markets on time, though subject to risks. The programme in Portugal could also prove successful, though the Portuguese economy remains structurally weak and fragile against shocks. In Greece, however, the programme has been unsuccessful. Greece is on a totally different trajectory to Ireland and Portugal, and it would be right to ascribe this difference in trajectory to three factors. First, initial conditions were especially adverse in Greece. Second, Greece has a much weaker administrative and political system than the other two countries. Third, Greece suffers from having been the first country in need of financial assistance inside a monetary union that was totally unprepared for a crisis.

This simplistic interpretation is, however, not satisfactory. A more subtle answer would be that the programmes have been successful in some respects and unsuccessful in others. The main success has been the current account, with deficits shrinking much faster than expected.

[77] Measured in GDP per capita, constant prices in Euro. Taken from IMF, WEO 2013 in

This can, however, be attributed to both positive and negative developments. The positive development, in particular in the Irish case, is the improvement in exports. The negative development is the collapse of imports, which relates to one of the failures of the programmes: a much deeper and longer recession than expected.

The three countries have by and large adopted the austerity measures prescribed to them by the Troika. They had little choice, since lender countries were unwilling to provide more financing.

The alternative to austerity would have been debt restructuring. In the Greek case, an earlier restructuring would have been preferable, at least from a Greek point of view. In the Irish case, the bail-in of bank senior bondholders might have been desirable from the Irish point of view, though it would have improved the programme's sustainability far less than in Greece and it could have had significant negative implications for the funding of Irish banks. From the point of view of the rest of the euro area, the balance of costs and benefits was less clear-cut.

With hindsight, Greece should have restructured earlier. Delay led to the substitution of public for private creditors and thereby to the passing-on of losses to taxpayers. This is likely to be a major point of contention in the years to come when official European creditors will have to acknowledge that Greece is unable to repay its debt.

The bailing-in of senior creditors of Irish banks would have sent a signal and further weakened fragile banks in the EU. The fundamental problem, however, was that Europe was much too slow to address its banking problems. Had banks been strengthened earlier, Ireland could have adopted a solution consisting of creditor bail-in now advocated as part of a systemic overhaul of bank resolution regimes.

In the absence of expansionary measures elsewhere in the euro area, and with austerity measures in some surplus countries, austerity in programme countries, together with the loss of confidence and the fragmentation of the financial system, severely depressed growth by more than anticipated. The Troika, for sure, was not responsible for setting the policy course in non-crisis countries. But it was responsible for predicating the success of the programmes on favourable external conditions that failed to materialise.

A final failure of the programmes is the level of unemployment, which is far greater than anticipated and which jeopardises the sustainability of the adjustment. Austerity measures are not the only reasons for such high unemployment levels in all three programme countries. Another reason is the malfunctioning of the labour market in two of the three countries (Ireland is the exception). Another is the fact that labour-intensive sectors, in particular construction, benefitted from the expansion during the boom years and now need to adjust.

The period during which the programmes were implemented is associated with exceptional social hardship, though not only in programme countries, as the situation in Spain illustrates. It was beyond the scope of this study to analyse changes in income distribution and wealth, or the social implications of the large increase in unemployment. We also did not perform an analysis of the major increase in youth unemployment, which we see as one of the most dramatic fallouts of the crisis.

7.2 Institutional issues

Institutional matters relating to EU-IMF cooperation have played a significant role in the design, monitoring and, ultimately, the implementation of the programmes.

Though fraught with many potential problems, EU-IMF cooperation to deal with the crisis was inevitable in euro-area countries. From the EU side, despite political misgivings from some quarters – those who feared that the euro area would come under the influence of 'Washington', and those who regretted that the EU was missing the chance to build a European Monetary Fund – recourse to the IMF was eventually deemed normal and necessary. It was normal because it had been applied just a year or two earlier in other EU countries and because participants in the euro each remain full members of the IMF; and it was necessary because the EU lacked expertise on, and experience of, crisis funding, and also lacked sufficient trust in its own institutions to act alone. All these factors explain why an explicit reference to the IMF was introduced in the ESM treaty. On the IMF side, there were also clear misgivings. Never before (except in the case of small Latvia) had the IMF been in a situation in which it would cooperate with a regional entity on a minority basis. Accepting the minority lender role represented a clear threat for the independence of the Fund, for its ability to treat all members on equal terms and for its role as a 'trusted advisor'. At the same time, it was in the interest neither of the IMF nor of the global community to abstain from what was going on in the area posing the biggest threat to global stability.

We have argued that despite a number of tensions stemming from their different remits and rules, the EU and the IMF have succeeded in cooperating in Greece, Ireland and Portugal. The one issue on which Troika members appear to have disagreed is the risk of financial spillovers between euro-area countries. The ECB and the European Commission seem to have been more sensitive than the IMF to such risks. This would explain why the two European institutions long opposed Greek debt restructuring and why the ECB was so opposed to imposing losses in senior bondholders of Irish banks, whereas the IMF viewed these options favourably.

One interpretation of these differences is that the IMF was more concerned with debt sustainability and the success of programmes in individual euro-area countries, whereas the ECB and the European Commission were more concerned with the consequences of the programmes for the financial stability and sustainability of the euro area. Yet, the IMF did put forward major proposals to improve the financial stability and sustainability of the euro area in the medium term. This difference in approach was particularly visible in the discussions on Greek PSI and over the issue of senior bondholder involvement in Ireland. The different mandates of the two European institutions and the IMF is what led to their different views on the appropriate measures for handling Greek public debt and Irish bank debt. No similar problem arose in the case of Portugal.

Based on these considerations, a number of lessons can be highlighted and proposals for reforms made.

7.2.1 Lessons for the euro area

As far as the euro area is concerned, it appears that EU-IMF cooperation will continue to operate whenever countries require financial assistance, as is the case in Cyprus at the time of writing. This is partly because of the ESM treaty, which explicitly calls for IMF involvement, but is also because there is still insufficient trust in EU institutions, at least in some EU countries.

But an agreement on the principle of EU-IMF cooperation in crisis countries does not necessarily mean that such cooperation will not change in the future. Compared to the situations that prevailed in Greece, Ireland and Portugal, several amendments are possible or desirable for each of the three Troika members.

- To start with the IMF, as long as individual euro-area countries are IMF members, they are obviously entitled to seek its assistance, even if they also receive ESM assistance. How should the IMF respond to requests to collaborate with the EU? Three options seem possible: *The IMF could retain an important lending role, at the level of one-third of the total programme*, as was the case in the first Greek programme and in the Irish and Portuguese programmes. This option does not seem feasible, neither in view of the IMF's resources, nor its global role. Non-European members are already complaining that the IMF has lent too much to Europe. Even more importantly, participation by the IMF as a minority, but substantial lender alongside the ESM raises questions about its independence. Should the IMF and Europeans disagree, the Fund can neither exit (because its share of lending is too large) nor prevail (because it is a minority lender);
- *The IMF could provide technical assistance to EU-led programmes but no financial assistance,* leaving this role entirely to the EU. But who would be the recipient of the IMF's technical assistance: EU institutions or the EU country in difficulty? Presumably it would be the latter since only individual EU countries are IMF members, but this would be problematic since the IMF and EU institutions would then be on opposite sides of the negotiating table rather than on the same side as is currently the case. The reverse, to have the IMF act as formal advisor to EU institutions, does not seem feasible. In practice this option would amount to leaving euro-area countries on their own, an odd solution as long as euro-area member states remain individual members of the IMF;
- *The IMF could function as a 'catalytic lender'*. Here it would provide the minimum financing to the programme necessary to exercise conditionality and would provide expertise to both the borrowing country and the EU institutions, while retaining the option of exit in case of disagreement. In other words, it would have enough money in the game to be a player, but as little as possible to avoid losing its independence. The right amount would probably be somewhere around ten percent of the total programme, the figure proposed by the IMF's managing director for the Cyprus programme.

We view the third option as the best choice for both the IMF and the EU. It would leave the IMF the option of agreeing or disagreeing. Most likely, the EU would seek IMF participation because of the Fund's expertise and because of the credibility its involvement provides. But it could, financially and by now technically, go ahead without it.

Nonetheless, we are aware that this solution does not fully solve the problems associated with the IMF's position as a minority lender and the potential accusations by other IMF members that it offers preferential treatment to EU countries. However, these other IMF members should recognise that their interests are better served by having the IMF participate in solving problems in the euro area, rather than by staying out altogether.

In our view, involvement of the IMF in euro-area programmes would remain advisable as long as euro-area governance is incomplete. Should the euro area become a member of the IMF – a development that we consider desirable for the medium term[78] – and be able therefore to request IMF assistance directly (rather than through one of its member countries), the situation could be reconsidered. But in this scenario, assistance would in all likelihood be unnecessary, because the euro area would have acquired all the necessary institutions and policies to address its problems independently.

Turning to the second Troika member, the European Commission, we view its current role in euro-area programmes as necessary but problematic. As discussed in chapter 6, it acts as an agent of the Eurogroup rather than as the independent principal protecting the EU interest that it should be. Its role in the Troika could create a conflict of interest with its normal and much more encompassing role of 'guardian of the treaty'.

A solution would be to give the Commission full responsibility for negotiation, financing and monitoring of EU assistance, as it is the case for non-euro area members. The Commission would thus become the vertically integrated counterpart of the IMF. The advantage of this option would be to give an EU institution pivotal responsibility in an area of vital importance, instead of relying on the intergovernmental ESM. The Commission would also be tasked with ensuring that programmes are in line with the Treaty. However, we see two objections to this solution. First, it would face considerable objections from the United Kingdom and other members of the EU who do not participate in the euro and do not want to share financial risk. Euro-area member states have also proved reluctant to give extensive powers to the Commission and there is no indication that they have changed their attitudes. Second and more importantly, it is not by accident that the IMF is a specialised organisation with a defined mandate and non-political governance. The IMF was built to fulfil its mission and if needed to be deeply unpopular in the countries where it intervenes. The Commission is a political institution with a broad mandate, which does not make it easy for it to play a role akin to that of the IMF. A more clearly defined and narrow mandate would help in fulfilling a specific function.

We would prefer to give the responsibility for negotiation, financing and monitoring of EU assistance to a new EU institution, a European Monetary Fund (EMF), which like the IMF would be equipped with effective decision-making rules rather than being a technical subsidiary to the Eurogroup, as is presently the case with the ESM. The EMF would be one of the pillars of a European Treasury and would replace the intergovernmental ESM. This solution would only be feasible in the medium term since it would require a change to the EU treaty. The new European Monetary Fund (which may or may not deal with both euro and non-euro area programmes) should be a fully-fledged EU institution and operate like the IMF. It would define conditionality, though the Commission would be consulted to make sure that the conditionality is compatible with EU rules.

EMF membership would include all euro-area countries and possibly other EU member countries. Its board (consisting, like the board of the European Investment Bank, of representatives of member countries and of the Commission) would decide whether or not to grant financial assistance by a qualified majority rather than by unanimity (or by an 85 percent majority in emergency situations), as is the case for ESM decisions. Since the EMF would hopefully be far less active than the IMF, the EMF would need only a small permanent

[78] See Sapir (2007) and the chapter therein by Coeuré and Pisani-Ferry.

staff. It could obtain some Commission staff on secondment during crisis times. Such secondment would also ensure the coherence of staff surveillance in the context of EU procedures with the definition of policy conditionality in a programme.

Turning finally to the ECB, we find the current situation perplexing. As already discussed in chapter 6, its formal role in the Troika, in which the EU is represented by the European Commission *"in liaison with the ECB"*, is not well defined. In fact it is rather confusing. The ECB does not formally take part in programme negotiations, it does not provide programme financing, nor does it, like the other two Troika members, issue reports about programme implementation. Yet it issues joint statements with the European Commission and the IMF about Troika missions. From the published documents, one cannot determine whether the ECB takes or does or does not take responsibility for programme decisions.

The ECB is obviously a key player in programme countries. It decides whether or not to relax collateral standards, whether or not national central banks can provide ELA to domestic banks, and whether it is ready to provide OMT assistance to countries after they regain market access. The Cypriot case in March 2013 demonstrated that, by threatening to withdraw ELA access, the ECB can have very substantial leverage.

With the creation of the EU Single Supervisory Mechanism (SSM) the ECB will acquire a key role in banking supervision. This will greatly improve its knowledge about the risks in the banking system. Yet, even with that information, the ECB will still need to have access to information about programme developments in order to be able to properly assess risks beyond banking. We consider, therefore, that it should continue to participate in Troika field missions. It should also be able to exercise its voice as far as its willingness to provide ELA and OMT assistance is concerned. But it should not be party to programme negotiations that by nature cover a scope that extends far beyond the remit of a central bank. It should thus become a (mostly) silent participant in the Troika.

In order to avoid misunderstandings about its role and responsibility in the Troika, which should be limited to obtaining information and voicing concern, the ECB should not issue any statements (alone or together with the other Troika members) about programmes. Hence, while its role in programme countries is and will remain crucial it should be clearly delimited to its own instruments.

Our proposal would also improve accountability. We would suggest that the European Monetary Fund be subject to the oversight of the European Parliament. We do not advocate the parliament having a vote on individual programmes – nor do we consider healthy the idea that programmes should be subject to the approval of national parliaments other than that of the programme country. But the European Parliament should be given right of oversight, including as regards the *ex-post* assessment of individual programmes and the included conditionality.

7.2.2 Lessons for the rest of the world

IMF intervention in the euro area alongside European institutions could offer lessons for other regions of the world that have already or may create regional institutions capable of playing a similar role.

Eichengreen (2012) considers that the lessons from IMF cooperation with the EU are of limited relevance to the rest of the world because no other region has a similar weight within the IMF, both formally and informally – because of history, tradition and intellectual background. While we tend to agree that Europe is a specific case, we nevertheless believe that lessons can be drawn from the current experience.

The main lesson is that the IMF can – if not always easily – coexist with regional institutions. In retrospect, US and European opposition to the creation of an Asian Monetary Fund when the suggestion was made in the late 1990s was not justified. From an Asian standpoint, the fact that the IMF agreed to collaborate with the EU institutions is often regarded as illustrating an inequality of treatment. In the future, similar cooperation with regional entities should be possible, provided such entities are economically and financially meaningful, equipped with effective common institutions, and are capable of mobilising financial resources for dealing with member countries going through crises. Under such conditions regional entities should be allowed to collaborate with the IMF.

The issues we have raised in this report about the principles and modalities of cooperation would still be relevant. The question of whether the IMF is again willing to act as minority lender and, if so, under what conditions would also need to be addressed. Inevitably, a case-by-case approach would be required. But lessons learned and principles agreed on during the European crises could inspire crisis response in the future.

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Appendix 1: Derivation of the financing needs of the three countries

		Greece	Ireland	Portugal
		10Q2-13Q2	2010-2013	2011-2014
5	**GG deficit**	53		22
6	**Debt amortisation**	138.3		80.9
	B1) of which short-term	50		42.9
	B2) of which long-term	88.3		38.1
7	**Adjustment**	1.5		2.1
8	Gross financing need (A+B+C)	**192.8**	**98.9**	**105**
9	**Rollover rate of short-term debt**	94%		72%
10	**Rollover rate of long-term debt**	34.99%		42%
11	Debt issuance/Roll-over	**93.5**	**48.9**	**47**
	G1) of which short term (B1*E)	47		31
	G2) of which long term (B2*F)	30.9		16
12	Privatisation	**0.0**	**0.0**	**5**
13	Net Financing need (D-G-H)	**99.2**	**50**	**53**
14	**Bank support**	10	35	24.9
	J1) Of which Bank Solvency Support Mechanism			12
	J2) Of which other*	10	35	12.9
15	Total Financing need (I+J)	**109.2**	**85**	**78**
16	**External loan commitment**	110	85	78
	Contribution IMF	30	22.5	26
	Contribution EFSM, EFSF, ESM, EA countries	80	45	52
	Use of country's financial buffers		17.5	

Appendix 2: Methodology for Table 6 (Breakdown of gap between initial and actual fiscal targets for Greece)

(All variables expressed as % of GDP)	Primary balance	Overall balance	Gross debt
2013 target as set in the May 2010 SBA programme	3.1	-4.8	149
- Worse 2009 initial conditions	-1.8	-2.0	14.3
- Revenue shortfall due to adverse GDP developments (1)	-9.0	-9.0	
- Effect of lower nominal GDP (2a), (2b)		-1.0	38.4
- Interest rate on public debt (3)		4.5	
- Larger than expected overall deficits (4)			1.7
- Fiscal consolidation effort (residual) (5a)	7.7	7.8	
- Debt accumulation residual (5b)			1.7
- Debt restructuring (6)			-26.6
2013 outturn as forecasted in the January 2013 review	0	-4.5	178.5

In order to disaggregate the impact of different variables over the government balance and debt, we start with the basic government balance equation $B = P + I$, where B is the overall government balance, P is the primary balance and I represents interest payments.

$NGDP_i^j$ is the nominal GDP for year i as forecasted in year j. The difference between the currently (2013) and the originally (2010) forecasted government balance ratio in 2013 can be written as:

$$\frac{B_{2013}^{2013}}{NGDP_{2013}^{2013}} - \frac{B_{2013}^{2010}}{NGDP_{2013}^{2010}} = \frac{B_{2013}^{2013}}{NGDP_{2013}^{2013}} - \frac{B_{2013}^{2013}}{NGDP_{2013}^{2010}} + \frac{B_{2013}^{2013} - B_{2013}^{2010}}{NGDP_{2013}^{2010}}$$

$$= \underbrace{\frac{B_{2013}^{2013}}{NGDP_{2013}^{2013}} - \frac{B_{2013}^{2013}}{NGDP_{2013}^{2010}}}_{\text{Effect of lower nominal GDP (2a)}} + \underbrace{\frac{I_{2013}^{2013} - I_{2013}^{2010}}{NGDP_{2013}^{2010}}}_{\text{Interest payments effect (3)}} + \frac{P_{2013}^{2013} - P_{2013}^{2010}}{NGDP_{2013}^{2010}}$$

For the primary balance we use the European Commission's estimates of the tax revenue elasticity to output gap found in the 2012 edition of the Taxation Trends publication and assumed to be equal to the elasticity of tax revenues to nominal GDP $(\varepsilon_{T,NGDP})$.

$$\frac{P_{2013}^{2013} - P_{2013}^{2010}}{NGDP_{2013}^{2010}} = \underbrace{\varepsilon_{T,NGDP} \times \left(\frac{NGDP_{2013}^{2013} - NGDP_{2013}^{2010}}{NGDP_{2013}^{2010}} \right) \times 100\%}_{\text{Revenue shortfall due to adverse GDP developments (1)}} + \underbrace{E}_{\text{Fiscal consolidation effort (residual) (5a)}}$$

Table 14: Tax revenue elasticity to output gap

Member State	Percent change in tax revenues (as ratio to GDP) in reaction to a 1% change in the output gap
Ireland	0.36
Greece	0.42
Portugal	0.41

Source: OECD, Commission services

For the debt ratio, the difference between the initially forecasted government debt-to-GDP ratio and the current forecast for 2013 can be written as:

$$\frac{D_{2013}^{2013}}{NGDP_{2013}^{2013}} - \frac{D_{2013}^{2010}}{NGDP_{2013}^{2010}} = \underbrace{\frac{D_{2013}^{2013}}{NGDP_{2013}^{2013}} - \frac{D_{2013}^{2013}}{NGDP_{2013}^{2010}}}_{\text{Effect of lower nominal GDP (2b)}} + \frac{D_{2013}^{2013} - D_{2013}^{2010}}{NGDP_{2013}^{2010}}$$

$$\frac{D_{2013}^{2013} - D_{2013}^{2010}}{NGDP_{2013}^{2010}} = \underbrace{\frac{\sum_{j=2010}^{2013} B_j - B_j^{2010}}{NGDP_{2013}^{2010}}}_{\text{Larger than expected overall deficits (4)}} + \underbrace{R}_{\text{Debt restructuring (6)}} + \underbrace{r}_{\text{residual (5b)}}$$

The effect of debt restructuring is calculated as the difference between the gross debt variation between 2012 and 2011 plus the overall government balance:

$$R = \left(\frac{D_{2012} - D_{2011} + B_{2012}}{NGDP_{2013}^{2010}} + \frac{D_{2013} - D_{2012} + B_{2013}}{NGDP_{2013}^{2010}} \right) \times 100$$

$$= \left(\frac{D_{2013} - D_{2011} + B_{2013} + B_{2012}}{NGDP_{2013}^{2010}} \right) \times 100$$

Annex 1: Framework for cooperation between the IMF, the European Commission and the ECB

Box 1 of the May 2010 report on Greece's Request for Stand-By Agreement prepared by the IMF decribes the framework for cooperation as follows:

Close cooperation between the three institutions is crucial in three areas:

Programme design

The authorities' programme represents a coordinated framework for policy adjustment and financing supported by the EC, the ECB and the IMF. Programme discussions were conducted on a quadrilateral basis between the authorities and the three institutions, resulting in a unified and consistent set of macroeconomic and structural policy parameters. These are set out in the MEFP/TMU of the IMF and the MEFP/MoU of the EC. The MEFP focuses on macroeconomic policies and selected structural measures, while the MoU covers the full structural reform agenda agreed between the authorities and the EC.

Programme monitoring

Conditionality for Fund Board reviews is based on a standard quarterly framework of performance criteria and structural benchmarks. For the EC, conditionality is based on an overall assessment of progress against the structural agenda in the MoU as well as the macroeconomic targets. The EC conducts this assessment in liaison with the ECB, and then makes a recommendation to the Euro Group committee of finance ministers, to approve the disbursement. Conditionality for both the IMF and EC is set on the basis of regular end-quarter test dates, with joint review missions consisting of IMF, EC and ECB staff and with disbursements intended to coincide to the extent possible in a fixed proportion of 3-8 between the Fund and the European financing mechanism, described next.

Financing arrangements

Bilateral support is provided by Greece's 15 partner eurozone countries, in ratio to their shares in ECB capital. The loans will be governed by a single loan agreement between Greece and the euro countries, signed by the EC on their behalf, covering the full three years of the programme. The loans will have the same maturities as the Fund purchases, and will carry floating rate interest rates (3-month Euribor) plus a spread of 3 percentage points, rising to 4 percentage points for amounts outstanding beyond three years. Each drawing is subject to a one-off service charge of 0.5 per cent. Greece has undertaken to draw on the IMF and EC facilities in a constant 3:8 ratio throughout the programme period.

Annex 2: Timeline of Events

Greece

December 2009

23. Parliament adopts the 2010 budget setting a general government deficit target of 9.1 per cent of GDP.

January 2010

15. Government submits the updated Stability Programme (SP), projecting a reduction of the government deficit of 4 percentage points to 8.7 per cent of GDP in 2010, and correction of the excessive deficit by 2012. The debt ratio was projected to peak at 121 per cent of GDP in 2011.

February 2010

1. 2-year bond spreads reach 347 basis points; 10-years bond spreads reach 270 basis points.
2. Greece announces a set of measures in addition to those announced in the SP (freezing wages and raising excises with the aim of reducing the government deficit).
3. The Commission adopts a proposal for a Council Decision, in view of the excessive deficit correction in Greece by 2012, a draft Council Recommendation with a view to ending the inconsistency with the broad guidelines of the economic policies, and a draft Council Opinion on the SP.
11. European Council invites the ECOFIN Council to adopt these documents, and calls on the Commission to monitor implementation of the Council decision and recommendation, in liaison with the ECB and drawing on the expertise of the IMF. The euro area Member States declare their readiness to take determined and coordinated action, if needed, to safeguard the financial stability in the euro area as a whole.
16. Council adopts the above-mentioned documents, after discussion in the Eurogroup.

March 2010

3. Shortly after a visit of Commissioner Rehn to Athens, Greece announces new deficit reducing measures of over 2 per cent of GDP, including an increase in the VAT rates and other indirect taxes and a cut in the wage bill (through the reduction in allowances, and partial cancellation of the Easter, summer and Christmas bonuses, of civil servants). These measures are welcomed by the Commission, the ECB and the IMF.
8. Greece submits a report on the progress with implementation of the SP and additional measures.
9. The Commission concludes that Greece is implementing the Council Decision of 16 February 2010 and the measures outlined in its SP, and that the additional fiscal measures announced by the Greek authorities appear sufficient to achieve the 2010 budgetary targets.
15. The Eurogroup welcomes the report by Greece. It embraces the Commission assessment that the additional measures appear sufficient to safeguard the 2010 budgetary targets, if fully implemented.
25. Heads of State and governments of the euro area countries reaffirm that they fully support the efforts of the Greek government and welcome the additional measures announced on March 3, which appear to be sufficient to safeguard the 2010 budgetary targets.

April 2010

8. 2-year bond spreads reach 652 basis points; 10-years bond spreads reach 430 basis points.
11. The Eurogroup reaffirms the readiness by euro area Member States to take determined and coordinated action, if needed. It clarifies the technical modalities enabling a decision on coordinated action, highlighting that the objective is not to provide financing at average euro area interest rates, but to safeguard financial stability in the euro area as a whole.
15. Greece requests "discussions with the European Commission, the ECB and the IMF on a multi-year programme of economic policies (…) that could be supported with financial assistance (…), if the Greek authorities were to decide to request such assistance."
23. Announcement that Greece missed the 2010 budget deficit target by a wide margin at 13.6 per cent.
23. Greece requests financial assistance from the euro area Member States and the IMF.
27. 2-year bond spreads reach 1552 basis points; 10-years bond spreads reach 755 basis points.

May 2010

2. Greece, the European Commission, the ECB and the IMF announce an agreement on a three-year programme of economic and financial policies. The Eurogroup unanimously agrees to activate stability support to Greece via bilateral loans centrally pooled by the European Commission.
4. The Commission adopts a Recommendation for a Council Decision according to Articles 126(9) and 136 of the Treaty. The draft Decision includes the main conditions to be respected by Greece in the context of the financial assistance programme.
6. The Greek Parliament votes to accept a series of policy measures included in the programme of economic and financial policies, including an increase in VAT and excises, as well as further reductions in public sector wages and pensions.
6. ECB adopts temporary measures relating to the eligibility of marketable debt instruments issued or guaranteed by the Greek government.
7. 2-year bond spreads reach 1739 basis points; 10-years bond spreads reach 1287 basis points.
7. The Council adopts a Decision according to Articles 126(9) and 136 of the Treaty including the main conditions to be respected by Greece in the context of the financial assistance programme.
9. IMF executive board approves the Stand-by arrangement (SBA).
9./10. The Council and the EU Member States endorse a financial stabilisation mechanism.
18. The euro area Member States disburse the first instalment (EUR 14.5 billion) of a pooled loan to Greece.

August 2010

5. 1st review mission finishes. Staff teams conclude that the programme has made a strong start and that the economy is contracting as projected in May.

November 2010

15. Greece's 2009 budget deficit was revised upward to 15.4 per cent from 13.6 per cent as reported in April.
23. 2nd review mission finishes. The overall assessment is that the programme remains

broadly on track. However, data revisions and weaker-than-expected revenue collection make 2011 deficit targets more difficult to achieve.

December 2010

7. IMF announces that it supports an extension of loan repayment for Greece and says that it is open to the idea of converting the programme to an extended fund facility (EFF).

February 2011

11. 3rd review mission finishes. The overall assessment is that the programme has made further progress towards its objectives.

June 2011

3. 4th review mission finishes. The mission reached agreement with the authorities on a set of economic and financial policies needed to meet programme objectives.

July 2011

3. Spreads increase to new highs after European finance ministers postponed any further decisions in regard to the Greek programme.

October 2011

11. 5th review mission finishes. Further measures are announced to bring the programme back on track in regard to the deeper- and longer-than-expected recession.
27. Euro area leaders agree on a new deal in which creditors would accept 50 per cent losses on their Greek debt and Greece receives EUR 130 billion in additional loans in turn.
31. PM Papandreou calls for a referendum on the new financial assistance programme.

November 2011

11. PM Papandreou resigns.
16. Papademos forms a provisional government and wins the confidence vote in Parliament.

February 2012

21. Agreement on the disbursement of EUR 130 billion to Greece after the parliament's approval of new austerity measures.

March 2012

14. Euro area finance ministers approve financing of a second Greek economic adjustment programme. The financing vehicle of the euro area will be the EFSF rather than bilateral loans as in the first programme. From the IMF side, financing shifts from a stand-by arrangement (SBA) to an extended fund facility (EFF) allowing a longer repayment period. Additionally, it was agreed on a private sector involvement (PSI), which will make a high contribution to make Greece's debt sustainable.

May 2012

6. Parliamentary elections.

June 2012

20. A new unity government was formed and Samaras appointed as PM.

August 2012

20. EUR 3.1 billion bond repayment to the ECB.

November 2012

7. Greek Parliament approves new austerity package and the 2013 budget.

January 2013

18. The IMF concludes in its 1st and 2nd Review of Greece's EFF Arrangement that the programme is back on track.

Ireland

May 2010

7. Irish 10-year bond yields peak at 311 basis points over German bonds, a euro area record, as the fear of contagion grows due to the Greek rescue. Spreads fall immediately but rise again through May and June as market concerns return.

July 2010

23. Allied Irish Banks and Bank of Ireland, Ireland's two largest banks, pass EU-wide stress tests.

August 2010

Concerns grow about losses in the banking sector and the imminent ending of the two-year government bank guarantee cause spreads to rise, reaching 366 points by the end of the month.

September 2010

8. Bond spreads reach 386 points. Government announces plan to split Anglo Irish Bank into a funding bank and an asset recovery bank, and to provide an estimate of the final cost of restructuring and resolution of the bank.

Minister for Finance signals that the fiscal correction required in 2011 would be of the order of EUR 3 billion.

23. Second quarter national accounts for 2010 are published. They show a worse-than-expected fall of 1.2 per cent in GDP quarter-on-quarter. Spreads reach 425 points.

30. Final cost to the state of the banking sector of EUR 46 billion with a worst case scenario of EUR 51 billion is estimated. The Government announces that this cost will require further fiscal consolidation measures. Spreads fall in early October.

October 2010

26. Government announces that EUR 15 billion of consolidation is required over the period 2011-2014, up from the EUR 7.5 billion under existing plans. Spreads rise again to 401 points.

November 2010

4. Government announces that EUR 4 billion of consolidation is to be frontloaded in 2011. Despite this, spreads go above 682 points by 11 November, a new high.

21. Irish authorities make request to European Partners and the IMF for assistance in assembling a financial stability package.

24. National Recovery Plan is published by the government, detailing fiscal

consolidation and structural measures from 2011 to 2014.
28. Staff level agreement on financial stability support and macroeconomic adjustment programme for the period to 2013 is reached.

December 2010
7. Eurogroup and ECOFIN Council formally agree on a financial assistance package for Ireland and on an extension of the excessive deficit target to 2015 from 2014.
15. Irish parliament votes on the Memorandum of Understanding on Specific Economic Policy Conditionality, Memorandum of Economic and Financial Policies and Technical Memorandum of Understanding.
16. The programme is agreed by the IMF board. Irish spreads remain elevated at 531 points.

January 2011
12. First instalment of the EFSM loan is disbursed to Ireland.

April 2011
5-15. 1st and 2nd review mission finish. Ireland is making good progress in overcoming the worst economic crisis in its recent history. Programme implementation has been determined, despite the period of political change and an uncertain external environment. The new government, through its ‘Programme for Government’ and its decisive approach to banking sector reforms, has taken full ownership of the goals and key elements of the EU-IMF-supported programme.

July 2011
6-14. 3rd review mission finishes. The authorities have continued to steadfastly implement programme policies. Tensions in sovereign bond markets have escalated during the visit, but programme financing is cushioning the impact of this shock on the Irish economy and public finances.

October 2011
11-20. 4th review mission finishes. The authorities had completed the key initial phase of the comprehensive financial sector reforms launched in March.

January 2012
10-19. 5th review mission finishes. The Irish authorities have continued to advance wide-ranging reforms to restore the health of the financial system so it can support Ireland’s recovery. Reforms to enhance competitiveness and support growth and job creation are moving forward. The substantial fiscal consolidation targeted for 2011 has been achieved with a margin. Budgetary measures of 3.5 per cent of GDP reduced the estimated general government deficit to about 10 per cent, well within the programme target of 10.6 per cent.

April 2012
17-26. 6th review mission finishes. Fiscal targets for 2011 were met with a “healthy” margin and consolidation remained on track in the first quarter of 2012.

July 2012
5. Ireland raises successfully EUR 500 millions in a short-term debt auction.
12. 7th review mission finishes. The policy implementation is considered to be on track

despite challenging macroeconomic conditions. In line with the conclusions of the euro area summit statement of 29 June, EC/ECB/IMF teams are discussing with the authorities possible technical solutions to further improve the sustainability of its well-performing adjustment programme.

October 2012

25. 8th review mission finishes. Ireland's policy implementation has remained strong and its budget is on track towards the 2012 targets.

February 2013

7. The 9th review mission finishes. Rigorous programme implementation has contributed to substantial improvements in market access and foster economic recovery. On the same day, Ireland officially announces that it has reached an agreement with the ECB on restructuring its promissory notes. These notes, used to shore up Irish banks in 2010, had left the state saddled with large repayment obligations over the following decade. Markets and rating agencies unanimously welcome the deal, which significantly eases Ireland's financing burden. Following the announcements, Irish 10-year bond yields drop below 4 per cent for the first time since 2008.

March 2013

13. Ireland returns to the 10-year bond market and raises almost EUR 5 billion for an interest rate of 4.15 per cent.

Portugal

December 2009

2. EU Council addresses recommendations to Portugal in accordance with Article 126(7) TFEU with a view to bring an end to the situation of an excessive government deficit by 2013.

May 2010

8. Portugal announces a revised target of 7.3 per cent of GDP for the 2010 deficit, 2.1 percentage points below the 2009 deficit outturn.

13. The 2011 deficit target was revised to 4.6 per cent of GDP reflecting the consolidation measures announced on that day.

November 2010

25. The Parliament passes austerity budget aimed at bringing down high public debt levels. The budgetary deficit target for 2011 is set at 4.6 per cent of GDP.

February 2011

23. The Portuguese government announces that it had successfully achieved a 2010 deficit below 7.3 per cent of GDP.

March 2011

11. The Portuguese government addresses to European Commission and ECB a note in which it engages to undertake substantial fiscal and structural measures.

23. Stability Programme spelling out the measures included in the note sent to the Commission and the ECB fails to be approved in Parliament.

24. The Portuguese government resigns, but remains as a caretaker government.

29. Portugal's statistical office (INE) reports a government deficit of 8.6 per cent of GDP for 2010, above the target of 7.3 per cent, as a result of the statistical rulings on the booking of two defeasance structures, a guarantee that was called and the inclusion of three state-owned enterprises in the government accounts.
31. S&P downgrades Portugal's credit rating to BBB-.

April 2011
6. Interest rates for 2-year bonds exceed 10 per cent, while 10-year bonds reach yields of nearly 9 per cent.
7. Portugal requests financial assistance from EFSM/EFSF and IMF.
8. The President of the Republic calls general elections for 5 June.
11. Technical mission of Troika starts discussions with Portuguese authorities.
23. Portugal's statistical office (INE) reports a government deficit of 9.1 per cent of GDP for 2010, as a result of the statistical re-classification of three PPP contracts.

May 2011
3. The Programme is agreed at technical level between Troika mission and Portuguese authorities.
17. Signature of the Memorandum of Understanding.
20. The Programme is agreed by the IMF board, which approves a EUR 26 billion extended arrangement for Portugal.
30. Council adopts Implementing Decision on Granting Union Financial Assistance amounting to EUR 78 billion.

June 2011
5. National elections.
7. Request for a three-year arrangement under the Extended Fund Facility (EFF).
16. Social Democratic Party and People’s Party sign an agreement for a government. Pedro Passos Coelho is appointed PM.

August 2011
12. 1st review mission to Portugal finishes. Staff teams welcome the new government’s commitment to the programme and conclude that the programme is on track.

November 2011
16. 2nd review mission to Portugal finishes. The mission concludes that the programme is off to a good start. Yet, staff members see difficulties in implementation of the 2011 budget due to spending overruns relative to programme objectives. Additionally, they stress the importance of continued reform implementation to improve Portugal’s competitiveness.

February 2012
28. 3rd review mission to Portugal finishes. Staff teams conclude that the programme is on track but challenges remain. They warn of weaker exports as demand from abroad is likely to weaken. Nevertheless, the fiscal deficit target for 2012 of 4.5 per cent of GDP is expected to be met. In regard to structural reforms, they conclude that important measures have been implemented in particular in the labour market. They identify, however, a structural reform backlog in the service sectors.

June 2012

4. 4th review mission finishes. Staff teams conclude that the programme remains on track as the authorities are implementing the reform policies broadly as planned and external adjustment is proceeding faster than expected. The 2012 fiscal deficit target of 4.5 per cent of GDP remains within reach. They recommend further policy action in regard to the surge in unemployment.

September 2012

11. 5th review under the EFF arrangement finishes. As a result of a weaker than expected macroeconomic outlook, the fiscal targets have been revised. The budget deficit target has been revised upward to 5 per cent of GDP in 2012 and to 4.5 per cent in 2013. The threshold of 3 per cent will be met in 2014.

22. After massive protests in Lisbon, the Portuguese government agrees to look for alternatives to a social security tax rise proposed some days ago that would have increased the workers' wage deduction and cut the tax for employers. Some days later, the government decided to change the tax brackets instead. This will result in a sharp increase in the average tax rate.

October 2012

3. Portugal successfully exchanges a bond with maturity in 2013 for one with maturity in 2015. The authorities plan a return to market financing during 2013.

November 2012

19. 6th review mission finishes. Staff teams conclude that the programme is broadly on track and that the fiscal consolidation efforts are in line with the revised deficit targets.

March 2013

15. 7th review mission finishes. Staff teams conclude that the programme implementation remains broadly on track and the end-2012 fiscal deficit target of 5 per cent of GDP has been met. Against the background of difficult economic conditions, the deficit targets are suggested to be revised up from 4.5 to 5.5 per cent of GDP in 2013 and from 2.5 to 4 per cent in 2014.

April 2013

5. Portugal's constitutional court rejects four out of nine contested austerity measures that the government had introduced as part of its 2013 budget as being unconstitutional as they are discriminating against public-sector workers. Thereafter, prime minister Coelho announced further spending cuts on social security, health, education and state-owned companies and ruled out further tax increases.