

**IMF adjustment programmes: Tailor-made
or one-size-fits-all?:**

**A critical analysis of the design and
implementation of three Eurozone programmes**

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Resumo

O FMI tem desenvolvido várias ferramentas ao longo dos anos, para ajudar as economias com problemas a corrigir os seus desequilíbrios macroeconómicos, tais como desequilíbrios da Balança Corrente. Embora, em grande parte dos casos, as debilidades sejam refletidas na Balança Corrente (Portugal e Grécia), encontramos casos em que tal não sucede (Irlanda).

As razões por detrás do fraco desempenho dos países são variadas: a Grécia sofreu um abrandamento abrupto em consequência do arrefecimento da economia global em 2008 e tem uma elevada dívida pública externa; a Irlanda, por seu turno, tinha um sector financeiro com sobre-exposição ao risco em consequência da bolha imobiliária de 2008; Os problemas de Portugal são uma mistura de progressiva perda de competitividade com uma elevada dependência de crédito. Apesar de diferentes, o resultado foi o mesmo: a situação tornou-se insustentável e foi necessária intervenção externa.

Neste contexto, os casos da Zona Euro revelam-se particularmente interessantes. Apesar de serem de naturezas diferentes, eles são todos consequência da mesma crise, pelo que se tornam um excelente caso de estudo para se comparar a abordagem do FMI (e demais instituições internacionais), permitindo-nos concluir se eles atendem às particularidades de cada caso, ou se, pelo contrário, apenas repetem a receita. Aproveitaremos também a oportunidade para abordar o sucesso ou insucesso na implementação dos mesmos e que fatores influenciam essa implementação. Adicionalmente, dado o facto de estes casos ocorrerem dentro de uma união monetária, representa uma oportunidade única de analisar os ajustamentos quando a desvalorização cambial não é uma opção.

Palavras-chave: Ajustamento da balança corrente; FMI; Portugal; Irlanda; Grécia; BCE; EU; Zona Euro

Classificação JEL: F32; F35; O42

Abstract

The IMF has developed several tools throughout the years in order to help troubled economies correct their macroeconomic problems such as imbalances on the Current Account. Even though, in most cases, debilities seem to be reflected in the Current Account (Portugal and Greece), we found cases in which it does not happen (Ireland).

The reasons which lie behind the poor performance of the countries are varied: Greece suffered a slump as a consequence of the Global Economy's cooling in 2008 and has a high stock of external public debt; Ireland, in its turn, had a financial sector that was overexposed to risk as a consequence of the real-estate bubble of 2008; Portugal's problems are a mix of progressive loss of competitiveness and high dependency on credit (both on public and private sector). Despite their differences, the outcome was the same: the situation became unsustainable and international intervention was required.

In this context, the three Eurozone cases reveal themselves as being of particular interest. Despite their different natures, they all are a consequence of the same crisis, making it an exceptional case study to compare the approach of the IMF (and other international institutions), allowing us to conclude whether they take in account the particularities of each case or, instead, just repeat the recipe. We will also use this opportunity to analyse the success or failure of the implementation of the programmes, and what factors affect such implementation. Also, given the fact they all happen inside a monetary union, it represents a great opportunity to analyse the adjustments when currency devaluation is not an option.

Keywords: Current account adjustment; IMF; Portugal; Ireland; Greece; ECB; EU; Eurozone

JEL classification: F32; F35; O42

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1. Introduction

Over the last few years, the Eurozone has been facing an adverse macroeconomic conjuncture, which threw some of the most vulnerable countries into a delicate situation and what can be considered the toughest test it has ever faced since its creation. Greece, for instance, is facing a scenario where it must be able to rebalance the public debt whilst ensuring economic growth, in order to be able to pay the debt service. That required an ambitious austerity plan (as a condition for an international loan), which clearly led to social riots. Greece is not alone though. Ireland, and then Portugal joined Greece, shortly after, in the group of countries that had to resort to international loans from the IMF, European Union and European Central Bank. Even though all these three countries belong to the Eurozone and share some common problems, their difficulties are of different kinds and, therefore, based on different aspects. Nevertheless, they all share a common denominator, the severe 2008 banking crisis that affected many countries around the world.

It is, then, pertinent to analyse whether the international institutions have used the same “recipe” to tackle the imbalances in all 3 cases, or if they considered the particularities of each country, designing a custom plan for each case. It is, thus, our aim to answer the following questions: “Did the IMF (and other international institutions) tailor a specific plan for each case or, instead, did it use the same recipe for the three economies of the Eurozone, despite the differences they have?”; “What factors are behind a successful implementation of these programmes?”

Sure these topics have been exhaustively analysed in the past by many authors, some of them belonging to the so-called “*Hall of fame of economics*”. This dissertation, however, intends to differentiate this analysis from others, through critical analysis of the adjustment programmes that are currently occurring in Greece, Ireland and Portugal, as a consequence of the sovereign debt crisis that has been haunting the European Economic Area since late 2009. A peculiar characteristic of these programmes is that they are occurring inside a monetary union area which, therefore, hinders the use of currency devaluation, one of the policies the IMF usually attaches to its loans.

Firstly, an analysis of the IMF role will be carried out, looking at the aid provided to countries facing balance of payments issues and/or current account

imbalances, trying to understand what the primary objective of the IMF is. This will provide a comprehension of which factors are behind the imbalances and the decision of such countries to resort to the IMF's aid. In this respect, the analyses conducted by BARRO and LEE (2005), CONWAY (1994), PREEWORSKI and VREELAND (2000), DREHER (2004), BIRD (1996), amongst others, will provide a good and solid base. This analysis, however, will not be based solely on economic factors. We will also analyse some studies that have assessed the impact of political and institutional factors on the IMF's decision.

We will also dedicate part of this work to the analysis of the factors that determine the implementation of a programme, trying to understand how some political differences can affect the execution of an adjustment programme.

Afterwards, we will move on to the analysis of the three adjustment programmes that are currently occurring in Europe. By analysing these three programmes reports done by the European authorities, alongside with other relevant documents and literature, we intend to highlight the differences between the three cases, stress out which factors were responsible for the imbalances in each country and analyse the policies that are being used or will be used in each case.

Subsequently, we will analyse the execution of the three programmes, looking to relate it to the factors previously found on the literature. This will allow us to assess the success or failure, so far, of the implementation of these programmes.

It might be asked why we have decided to choose the three European cases. First, given the fact that these three cases occurred within the same crisis and within the same conditions, it allows a better comparison of the three adjustment programmes. Second, despite having occurred within the same conditions, the problems subjacent to each case are different and, thus, are expected to require different programmes for each country. Third, the analysis of these specific cases proves to be very pertinent given the fact they are still very recent so, not many studies about them have been carried out yet. Fourth, these cases are of a rare kind, since they are occurring inside a monetary union, so it allows us to analyse what policies are used when currency devaluation is not an available option. Finally, this study may also serve as an introductory analysis for future cases which might occur within the Eurozone and within the same set of conditions, such as Cyprus and Spain.

2. Literature Review

2.1. External accounts: some theoretical concepts

Before proceeding, we should clear out the definition of some key concepts.

The Current Account and the Balance of Payments. As known, the Current Account is one of the components of the Balance of Payments alongside with the Financial Account. Whilst the former registers all operations related to the international trade of a country, such as the sale of merchandise and services, net royalties and net investment income, amongst others; the latter registers all operations regarding financial investments.

In essence, what the Current Account tells us is whether a country needs to borrow from the exterior or if, instead, it is a lender. In other words, it is what is left of the GDP after subtracting all the domestic spending regardless of whether it was done by families, companies or the government itself. If it is > 0 , it means the country is a lender. If, however, it is < 0 , it means the country needs to finance itself abroad.

Regarding the imbalances, and given the definition of the Balance of Payments (it should equal 0 by definition), the imbalance of one of the two components, should be offset by an imbalance, on the opposite direction, of the other component.

Given the definition of the Current Account, it is easy to observe that a degradation of a country's performance (usually reflected in the degradation of the traditional measures of economic performance) will be directly/indirectly reflected in the Current Account, making it a rather good indicator of a country's economic health, but will also lose some of its explanatory power when other variables are present.

It is also important to discuss the implications of a global unbalance of the Balance of Payments. When that happens, the only way out is an intervention from the official authorities (usually the central bank) to offset the unbalance. The compensation is usually in the form of purchase/sale of reserves of foreign currencies (BIRD, 1996). Such situation is not, however, sustainable. Whilst a country can easily survive with a surplus (meaning it can buy reserves of foreign currencies, i.e. lend money to countries with deficits), it will not be able to survive with a persistent deficit, as the reserves that the authorities have will, sooner or later, end. This will throw the country into a

situation where it will be forced to adjust its current account with structural policies, rather than *mending* it with the sale of reserves.

There is also another item that is commonly found in the Balance of Payments: Errors and Omissions. This item is merely a formality and its only objective is to force the Balance of Payments to have a balance of 0. Since the data used to calculate the Balance of Payments is obtained through several sources, the existence of a mismatch is expected. However, as BURDA and WYPLOSZ (2005) mention, this item can sometimes be of a large amount.

2.2. IMF Adjustment Programmes

2.2.1. The Objectives of the IMF

For many years, the IMF has been the *knight in shining armour* for many countries facing difficulties. And that has been indeed its main objective since its creation in 1944, as result of the Bretton Woods Summit. Amongst others, the main objective of the IMF back then was:

“(v) to give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with the opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.” (DE VRIES apud CONWAY, 1994:366)

Furthermore, the IMF should also ensure that the “par adjustable peg system” worked, which turned the IMF into some kind of “guarantor of fixed exchange rates” (BARRO and LEE, 2003:4).

However, in 1973, this fixed exchange rate system collapsed, which threw the IMF into a more secondary role. Hence, the IMF saw its purposes being reviewed, which from then onwards also included the support of developing economies and managing crisis (*ibidem*).

2.2.2. IMF adjustment programmes

It is also worth analysing the different instruments the IMF uses to accomplish its mission. These instruments have evolved over time, adapting themselves to the new conditions and framework. During the past decade we have witnessed a huge change on those instruments. For instance, the Stand-by Arrangement (SBA), considered the IMF’s workhorse by the IMF itself, and the most widely used instrument to aid developing countries has recently, in 2009, become more flexible and responsive, to meet the interests and needs of the developing countries.

However, the intervention of the IMF is not just about helping developing countries correct their macroeconomic difficulties. Nowadays, the mission of the IMF has three main purposes: soften macroeconomic adjustments as a response to external shocks; unlock other sources of financing, given the credibility and confidence the IMF gives to the countries; also a preventive purpose: the IMF might concede loans to

countries in order to avoid economic and financial crisis or contagion of a crisis to other countries.

The actual instruments used by the IMF depend greatly on the programme objective and country under intervention. Countries with stronger fundamentals and which have proved in the past to be trustworthy might have a more tenuous supervision, higher amounts ready and available for disbursement upon request and fewer conditions. Countries with weaker fundamentals and which have proven to not obey the conditions in the past will have a tighter control and more restricted access to the funds, which will only be disbursed upon some conditions being met. Also, the typical duration for an adjustment programme is around three years, with additional programmes being available if the three years prove not to be enough.

Currently, the IMF aims the following lending facilities to stronger economies and with high income:

The traditional SBA (which was the lending facility used for Greece); the Flexible Credit Line (FCL), aimed at economies with strong fundamentals and policies, which allows the countries to withdraw the required amount to correct their macroeconomic debilities. With a typical duration of between 1 and 2 years (renewable), this lending facility does not tie the country to any conditions.

The Precautionary and Liquidity Line (PLL), which is another lending facility that grants financing to countries facing liquidity issues, whilst binding them to the observance of ex-post conditions.

Other lending facilities include the Rapid Financing Instrument (RFI) and the Extended Fund Facility (grants financing allowing countries to correct Balance of Payments unbalances that are based on structural debilities).

2.2.3. What lies behind the decision of resorting to an adjustment programme

Before moving on to the analysis of the three adjustment programmes, we should analyse what, according to the literature, are the causes of the imbalances these countries face. As said before, it should be remembered that a Current Account imbalance is not, by itself, a cause, but rather reflects debilities at other levels. It can be, however, a good indicator of a country's economic health (and sometimes used in studies). Also, the existence of an external imbalance does not make an intervention by the IMF inevitable. As BIRD (2007) mentions, there are three "layers of protection" that countries should try before resorting to the IMF. First, the financing of an external imbalance can be carried out by private sector, if the savings are greater than the investment ($S > I$). The second "layer of protection" is the financial account. In the event of a current account deficit, a surplus on the financial account should help offsetting that deficit. Shall both previous options fail, the only alternative left will be the sale of foreign currency reserves, but as said before, that will not be sustainable in the long term. If, even with the sale of reserves, the correction of the external imbalances is not possible, and if the imbalances prove not to be sustainable, then the intervention of the IMF becomes inevitable.

Also, it is relevant to stress that the participation on these programmes is a joint decision between the IMF and the troubled economy, rather than just a unilateral decision, so we should analyse what reasons justify a country's decision to resort to IMF programmes and what reasons justify IMF's decision of conceding the loan (KNIGHT and SANTAELLA, 1997; PRZEWORSKI and VREELAND, 2000; BARRO and LEE, 2003; EASTERLY, 2003; SWEDBERG 1986; DREHER, 2004). However, as pointed out by KNIGHT and SANTAELLA (1997), most of the early studies conducted up until then, did not take in account this reality, considering only what factors were responsible for the decision of a country requesting external aid.

Regarding the methodology used on these studies, most authors opted for econometric tools, using either OLS, probit or tobit models. However, one study stands out from the others, by using statistical methods instead of econometric tools. SANTAELLA (1996) chose to compare the economic performance of a group of countries that was under intervention from the IMF, with the performance of a group of

countries that was not (control group). The author gathered some data regarding the economic performance of those countries and ran some nonparametric tests in order to assess whether there was a significant difference between the sample that underwent IMF intervention and the control group. A discriminant analysis was also carried out in order to observe which variables held the most explanatory power.

This matter has been discussed and deeply analysed by many authors in the past, but understanding what motives are behind this decision will allow us to better understand the real objective of the adjustment programmes.

To justify the decision made by the troubled economy the literature points out a wide set of variables that range from the traditional measures of economic performance to others that are not intrinsically related to the economic performance of the country. Amongst them and for the moment, it is worth to stress the balance of payments imbalances, the amount of the country's international reserves and the real exchange rate (closely related to inflation).

Firstly, Balance of Payments imbalances. A country facing a severe imbalance on this item is expected to have a higher chance of seeking help on the IMF to correct it. An imbalance on the Balance of Payments, however, might not be a factor by itself, and rather reflect debilities at other levels, as mentioned by BIRD (1996).

As mentioned by PRZEWORSKI and VREELAND (2000), this relation is especially true with deficits, but it can happen that countries with Balance of Payments surpluses also seek the help of the IMF. Notwithstanding the fact that one of IMF's objectives clearly states that its mission should be helping its members to correct their Balance of Payments imbalances, they are not enough to explain the intervention. SANTAELLA (1996) and BUTKIEWICZ and YANIKKAYA (2004) backs up PRZEWORSKI and VREELAND's study, finding the Balance of Payments an important factor.

Other studies such as KNIGHT and SANTAELLA (1997), CONWAY (1994) (amongst others) do not find this variable important. This does not mean that the Balance of Payments does not have explanatory power. As we mentioned, the Balance of Payments might instead work as a proxy of others variables. When those are present in the study, we might find that the predictive power of the Balance of Payments will be

distributed amongst those, which can reveal a problem of correlation between the variables.

Another factor that is expected to have a great impact on a country's chance to seek IMF help is the amount of international reserves the country possesses. This data is usually expressed in monthly import needs; i.e. a value of 3 means the country has in reserves, an amount that equals three times the amount they need monthly. As PRZEWORSKI and VREELAND (2000) mention, when this item is low, countries tend to have a higher chance of looking for IMF support. The study they conducted does indeed show that evidence, with a coefficient of -0.83. But once again, they found several examples of countries that had high ratios of international reserves and still requested a loan and saw it being approved. For instance, Portugal participated in one IMF promoted programme in 1983, whilst having an average ratio of international reserves equalling 9.6 times its monthly needs. Just as reference, and quoting the study conducted by PRZEWORSKI and VREELAND (2000), whilst countries that took part in IMF programmes had an average ratio of international reserves of 2.54, countries that did not take part in any programme had a higher value of 3.64. Thus, whilst the ratio of international reserves justifies part of a country's decision to participate in an IMF programme, it is not sufficient to predict such participation, as concluded by BIRD (1996) and PRZEWORSKI and VREELAND (2000).

BIRD and ORME (1981), in turn, did not find the ratio of international reserves to be relevant on their first model at 99% level of confidence. Lowering the level of confidence to 95%, however, made it relevant.

SANTAELLA (1996) found this factor to be the most powerful one predicting participation. The ratio of reserves successfully predicted nearly 85% (sensitivity) of the participations (with a threshold value set at 3.54 months of imports).

HARRIGAN *et al.* (2006) conducted a study using a sample of countries from the Middle East and North Africa, and whilst their study focused mostly on political factors, they found the ratio of international reserves to be one of the important economic factors.

Other authors also analysed the explanatory power of this variable. BARRO and LEE (2003), BIRD (1996), CORNELIUS (1987), JOYCE (1992), JOYCE (2004) and KNIGHT and SANTAELLA (1997) found it to be relevant.

An overvalued real exchange rate is also expected to have some impact on the likelihood of a country to request aid from the international institutions. A recent study (BIRD, 2007) found that this variable is indeed one of the most consensual amongst the majority of the studies. KNIGHT and SANTAELLA (1997), SANTAELLA (1996) and BIRD (1996), share a similar result, finding that an overvalued real exchange rate is significant. More recently, JOYCE (2004) reiterated the same idea, confirming the finding of earlier studies. However, it is also worth taking in account the causes of an overvalued real exchange rate. BIRD (1996) concluded that an overvalued exchange rate can be the result of two causes: an excess of domestic inflation or; a decline on the real equilibrium exchange rate. Inflation is, therefore, another factor worth analysing.

Concerning the inflation rate however, we seem not to be able to find straightforward conclusions. Some early studies, such as BIRD and ORME (1981), GOLDSTEIN and MONTIEL (1986), EDWARDS and SANTAELLA (1993), CORNELIUS (1987) found it to be particularly significant. Still, CONWAY (1994), SANTAELLA (1996) and KNIGHT and SANTAELLA (1997) found the rate of inflation to be irrelevant. It should be taken in account that the study conducted by KNIGHT and SANTAELLA (1997) also included the overvalued real exchange rate as one possible variable, which probably decreased the predictive power of inflation (correlation between the two variables).

Another factor that has been exhaustively discussed in the literature is regards the impact of a degradation of the terms of trade in the likelihood of a country requesting external intervention from the IMF and other institutions. It is expected that a degradation of a country's terms of trade will have a negative impact on the Current Account (and therefore on the Balance of Payments) through a degradation of the Trade Balance. Regarding the empirical studies that analyse the impact of this variable, most report the expected relation between these. Early authors such as KILLICK and MALIK (1990) found the terms of trade to be significant (they also found that the exports based mostly on primary products are a good predictor of participation). Other authors (SANTAELLA, 1995; CONWAY, 1994 and PRZEWORSKI and VREELAND, 2000) backup their findings, reporting a significant impact of the terms of trade on the likelihood of a country requesting intervention from the IMF. SANTAELLA (1996) found the terms of trade to be the second most powerful variable (being the

international reserves the most powerful one) with a sensitivity of 70.19%. It is also worth mentioning the study conducted by KNIGHT and SANTAELLA (1997) that finds a negative, yet insignificant, impact of the degradation of terms of trade on the demand for external intervention. Given the fact that most studies report a positive impact, BIRD (1996) considers the study conducted by KNIGHT and SANTAELLA (1997) more of an outlier. Another interesting study is the one conducted by LANE and MILESI-FERRETTI (2011). Even though they do not analyse what factors are responsible for the demand of IMF funds, they analyse instead what factors were responsible for Current Account imbalances on the pre-2008 crisis. They found that an improvement on terms of trade will lead to an improvement on the Current Account, reducing the likelihood of a country needing to draw funds from the IMF (through the aforementioned relation). They note, however, that this conclusion mostly applies to emerging markets only.

Regarding the external debt, authors have opted for different ways to assess the impact of this variable. Some authors, such as JOYCE (1992) and CONWAY (1994) opted use the external debt itself, whilst others (CORNELIUS (1987) and HARRIGAN *et al.* (2006) just to name a couple) preferred to use the debt service as factor. KNIGHT and SANTAELLA (1997) used both.

Despite being related to a similar phenomenon, external debt and debt service are different realities. Even though the latter depends on the former, it also depends on exogenous factors that are not controlled by the government (interest rate charged by the capital markets) and, therefore, one should not be used as a proxy for the other.

Concerning the impact of these factors, we found somewhat mixed results. CORNELIUS (1987) found the debt service ratio to be significant, but only after dropping the level of confidence to 95%. KNIGHT and SANTAELLA (1997), who used both factors, found the debt service ratio to be significant, whilst finding the inverse regarding the stock external debt. In turn, JOYCE (1992) found the external debt to be insignificant, but later, in 2004, he found it to be significant. BIRD and ORME (1981) had similar conclusions, but regarding the external debt service ratio. SANTAELLA (1996) used both the external debt and external debt service, concluding that they are somewhat relevant. CONWAY (1994) found the external debt to be significant, especially the short term debt, as mentioned by BIRD (1996). More

recently, PRZEWORSKI and VREELAND (2000) found the debt service to be significant. DREHER (2004) concluded that adjustment programmes are more likely to occur the lower the short term debt and the higher the debt service. HARRIGAN *et al.* (2006) reiterated the findings made by PRZEWORSKI and VREELAND (2000).

Another factor expected to have a strong impact on the demand for funds from IMF is the income of a country, frequently assessed by their level of GDP. As with the external debt, authors also opted for different approaches to this factor. CORNELIUS (1987) for instance, used the GNP per capita instead of the GDP per capita used by many authors. Some other also used the growth rates of these factors instead of their stock level. Concerning the results, they are pretty much consensual. BIRD and ORME (1981) found the GNP per capita to be relevant, a result shared by CORNELIUS (1987). JOYCE (1992) found the level of GDP per capita to be significant. GOLDSTEIN and MONTIEL (1986) chose to use the real GDP as their assessment of a country's income and found it to be relevant as well. As with the external debt, KNIGHT and SANTAELLA (1997) used not only the level of the GDP per capita, but also its growth rate, finding both to be significant. EDWARDS and SANTAELLA (1993) used the GDP per capita relative to the US, finding it to be significant. SANTAELLA (1996) found the growth rate of the GDP per capita to be relevant with a sensitivity of 58.65%. CONWAY (1994) found the GDP growth rate to be important. More recently, BARRO and LEE (2003) share the same conclusion regarding the growth rate of the GDP per capita and the level of GDP per capita (especially for low income countries). PRZEWORSKI and VREELAND (2000) did not find a relevant impact of the GDP growth rate on the demand for funds. KNIGHT and SANTAELLA (1997) also found the GDP per capital to be important. STONE (2008), as cited by STEINWAND and STONE (2007) also found it to be an important predictor. Given the consensus amongst most studies, it might be safe to consider PRZEWORSKI and VREELAND's study an outlier.

We will now turn our attention to the imports. This factor has not been as widely used as many of the others pointed before, but still, a few studies decided to use it. BIRD and ORME (1981) found it to be important, as did CORNELIUS (1987). CONWAY (1994) also found it to be relevant, as reported by KNIGHT and SANTAELLA (1997).

The Current Account has also been used by some authors in their studies. However, the conclusions are somewhat mixed. On the one hand, BIRD and ORME (1981) report a significant impact of a deficit on the current account, as do other early authors (MONTIEL and GOLDSTEIN, 1986 and JOYCE, 1992). On the other hand, CORNELIUS (1987), EDWARDS and SANTAELLA (1993), CONWAY (1994) and KNIGHT and SANTAELLA (1997) found it to not be relevant. More recently, authors have either not used this factor on their studies, or found it to be irrelevant (PRZEWORSKI and VREELAND, 2000; BARRO and LEE, 2003; DREHER, 2004; HARRIGAN *et al.*, 2006 and BIRD, 2007). JOYCE (2004) goes against the tide, and concluded it is a relevant factor.

The investment ratio has been a somewhat under looked factor. Most of the early studies, such as BIRD and ORME (1981) and CORNELIUS (1987), did not even consider this variable in their studies. Later on however, authors started to take a closer look at the effects of this factor on the likelihood of requesting funds from the IMF. KNIGHT and SANTAELLA (1997) found it to be somewhat significant, as did SANTAELLA (1996) who found it to have a sensitivity of roughly 52% (null hypothesis is not rejected completely, however), which is still amongst the highest. PRZEWORSKI and VREELAND (2000) found the investment ratio not to be significant. Other recent studies have also not used this factor or found it to be irrelevant. More recently, STONE (2008), as cited by STEINWAND and STONE (2007), found it to be relevant.

BIRD (1996) found the Investment ratio to be important, whilst also pointing out the reasons that justify a low investment ratio. A low investment ratio can have three origins:

A limited access to the international capital markets: A difficult access to the capital markets by a country will raise severe obstacles in what concerns to the possibilities of obtaining the financing needed for investments. This is especially true for low development countries, which have an extremely limited access (if any) to the international capital markets, and therefore have to rely on international institutions such as the IMF to finance (and perhaps provide technical assistance as well) their needs and programmes to reduce poverty and foster economic growth. Nevertheless, a difficult access to the capital markets is not a characteristic that is related exclusively to

low-income countries. Developed and richer countries might see their access to the markets more hampered when they face a problematic economic situation. A degradation of a country's economic profile will trigger responses from the international capital markets, raising the interest rates associated to the country's debt, which will in turn decrease the inflow of investment and increase the debt's service, making the "price" of an IMF loan (interest rates, usually lower than market's rates, plus the conditionality) more appetizing. In this context, a few authors have considered the access to capital markets a factor that might help explaining the demand for IMF funds. CORNELIUS (1987), for instance, found it to be a significant factor. KNIGHT and SANTAELLA (1997) also found the limited access the international capital markets to be relevant for low-income countries. DREHER (2004) has found that higher LIBOR (proxy for the interest rates charged in the international markets) will lead to higher amounts amount drawn from the fund, and therefore, a higher likelihood of needing a loan.

The second cause pointed by BIRD (1996) to justify a low investment rate is a limited import of capital and intermediate goods. A country facing a difficult situation will not likely be an attractive candidate for foreign investment, thus limiting the inflow of capital and intermediate goods.

Third, according to BIRD (1996) a low investment rate can also be the result of a distorted domestic credit market. Even if the economy has all the needed resources, a fully functional and efficient domestic credit marker is required to leverage those funds and direct them to where are they are needed. A distorted credit market will not be able to efficiently finance the economy, and as a result, decrease investment ratios.

A number of authors have also assessed to what extent past participation in IMF programmes increase the likelihood of future participations. It is expected that the participation in past programmes increase the participation in future ones, given the reduced costs of negotiation. CONWAY (1994) found this factor to be significant, as did BIRD (1996). More recently, PRZEWORSKI and VREELAND (2000) found it not be important, whilst BIRD and ROWLANDS (2001) and JOYCE (2004) found it to be a significant factor. STEINWAND and STONE (2007) also mention a number studies that found this relation (ATOIAN and CONWAY (2006); JENSEN (2007); POP-

ELECHS (2007) and STURM *et al.* (2005)). BIRD (2007) considered the past participation to be one of the consensual factors amongst the literature.

Many other economic factors have been used in each one of the studies, but given the fact they are not widely used across the studies and, in some cases, not relevant at all, we believe it is not worth stress them out.

The analysis of the factors that affect the supply of IMF funds is not as extensive as the analysis regarding the demand of funds. In fact, most of the early studies conducted in the 80ies and before, did not take in account this side, focusing on demand side only.

It is expected that the IMF, given its main objective and purpose, would look solely at the economic performance of the economies. Nevertheless, the IMF is also subject to some political influences from its major shareholders, which will affect its decisions. Thus, the analysis of political and institutional factors, along with supply side factors, is essential to fully understand the process that is subjacent to the negotiation of an IMF arrangement.

The early studies did not take in account this reality, and rarely considered political and institutional factors, focusing on demand side factors only. For instance, BIRD and ORME (1981) focused on demand side only, as did CORNELIUS (1987) and JOYCE (1992), and neither of those considered the influence of political and institutional factors. Even though, since then we have, not only, experienced a growing interest on the analysis of what factors affect the IMF's decision of lending funds, but also an increasing concern regarding the influence of political and institutional factors. This new approach gave the studies a somewhat better predictive power, whilst also providing a better understanding of how the lending process actually works. However, it also raised some problems regarding the neutrality of the IMF.

KNIGHT and SANTAELLA (1997) were amongst the pioneers in the analysis of the supply side variables. They found that, for instance, a nominal depreciation of more than 5% is likely to increase the chances of a programme approval by the IMF per 1.77 percentage points, proving to be the most significant factor of the ones tested. Changes in the stance of the fiscal revenue and expenditure policy also seem to hold some explanatory power. A raise on fiscal revenues also seems to have a larger impact on the probability of a programme than a decrease on expenses (0.19% vs 0.11%). A

change in the stance of the monetary policy is not as significant as the previous factors, only proving to be significant at the 12% confidence level (others were significant at the 1% level).

CONWAY (1994) also considers the process of negotiation of the adjustment programme a joint process between the country and the IMF itself. However, his estimations do not take in account this distinction.

More recently, PRZEWORSKI and VREELAND (2000) have also considered the distinction between the factors that affect the demand and supply of funds. They found that a Balance of Payments deficit increases the likelihood of a country seeing its programme approved by the IMF. The number of countries that are in a given time undergoing an adjustment programme is also expected to influence the supply of funds. A higher number of countries undergoing adjustment programmes mean a tighter budget and, therefore, a lower probability of countries seeing their programmes approved. The authors have also considered the political regime of the country. They find that the IMF is more likely to sign agreements with dictatorships rather than democracies, perhaps because of the lower political costs of negotiation.

BARRO and LEE (2003) also consider the distinction between supply and demand side factors. However, they also used another kind of factors that are not strictly economic. For instance, they argue that countries that have higher quotas on the IMF, have more staff in the IMF or that belong to the OECD, have a higher chance of seeing the loans approved. Additionally, political interferences also seem to be important. They noticed that countries that show some political correlation with the US or other major shareholder of the IMF, will have a higher likelihood to see their loans approved.

This approach is not new. ROWLANDS (1995) have also noted that the political interests of the USA can affect the approval of a loan. Higher interests by the USA, will mean a higher likelihood of a country seeing its loan approved. Also, he noted that countries in Asia or the Western hemisphere have a higher chance of having their loans approved than, for instance, African or European countries. JOYCE (2004) has also detected that USA interests are indeed affecting the decisions by the IMF regarding approvals and rejections of loans.

BIRD and ROWLANDS (2001) have also picked a few of these variables. They concluded that amongst the most important, we can find the political regime of a country (the more liberal, the higher the likelihood of seeing a loan approved), Civil freedom of its citizens (the lower the freedom, the higher the chance of a loan being approved), imminent debt rescheduling (the existence of imminent debt rescheduling might indicate a future intervention of the IMF, as usually debt rescheduling is a prerequisite for latter) and the proximity of elections (the closer we are from elections, the lower the chance of a country requesting aid).

SVENSSON (1998, 2000) and TORNELL and LANE (1999), as mentioned by ALESINA and WEDER (2002) found no evidence that corruption affects the concession of IMF loans. The study conducted by ALESINA and WEDER (2002), found similar results

PRZEWORSKI and VREELAND (2000, 2002) and VREELAND (2003) have also detected that, sometimes, countries seek IMF aid because they want conditions to be imposed or because the government faces a tough political and/or social opposition and cannot make the necessary adjustment measures be approved, making international intervention inevitable.

Earlier, EDWARDS and SANTAELLA (1993) have also pointed some non-economic factors that are responsible for IMF loans. According to their findings, non-democratic governments have a higher likelihood of requesting loans. Additionally, Political instability have the expected impact, but with a somewhat large standard error. The more the instability, the less the credibility the countries will have with the IMF and, therefore, the lower the chances of seeing their loans approved.

KNIGHT and SANTAELLA (1997) carried out an analysis with this kind of factors as well. They found that the need for technical assistance is another reason behind the international interventions.

ALESINA and DOLLAR (2000) have found evidences that foreign aid is usually conceded based on political interests rather than actual economic need. These conclusions are similar to the ones found by THACKER (1999).

We also have the study conducted by HARRIGAN *et al.* (2006). The study they conducted focused mostly on non-economic variables. They concluded that influences on the IMF board do have an impact on the approval of loans. The presence of a

democratic government is also expected to impact the decisions. Lastly, they found, similarly to BIRD and ROWLANDS (2001) and JOYCE (2004) that the closer to national elections, the lower the chance of a country requesting help.

DREHER (2004) has found that democracy is also a good indicator. There is a higher chance that non democratic governments will engage an agreement with the IMF. Lower political stability will also increase the amounts drawn from the fund, as will a better rule of law.

STEINWAND and STONE (2007) also mention a study by STONE (2008) and another by COPELOVITCH (2005), in which they conclude that many times, the IMF is subject to influences in its decisions by private shareholders, powerful economic groups and private investors. Additionally, they also mention STONE (2002, 2004), EDWARDS (2005) and POP-ELECHES (2007), that found that close relations with the USA or other major IMF shareholders usually results in less conditions in the programmes. These findings have also been found by KILLICK and MALIK (1990).

2.2.4. The problem of the recurrent loans and compliance

Another topic that is worth to explore, is the problem of the recurrent loans. Even though, the literature focuses this analysis on developing countries, some of the conclusions can be applied to developed countries, such as Greece, who has negotiated a second bailout plan with the *Troika*.

EASTERLY (2003) and PRZEWORSKI and VREELAND (2000) mention that a significant number of the conceded loans are directed to recurrent economies. This fact might be surprising on a first glance, as we may think that one adjustment lending is enough. However, the authors refer that there could be several reasons behind this reality. Firstly, they point out that each adjustment lending could be a part of a multistage programme, with each lending having a different set of conditions attached. Another cause pointed out by EASTERLY (2003) is that it could be due to the fact that the troubled economy failed to correct its macroeconomic difficulties, whether it was because the government, for any reason, did not obey the loan conditions, or because there was a degradation of the Global Economy Framework that had a negative impact on the home economy performance. JOYCE (2004) also points out that an unsuccessful

implementation of a programme can be explained by a poor design by the IMF and national authorities.

Even though both these readings explain why there are countries that face consecutive adjustment loans, they also raise additional questions.

Regarding the first reason pointed, EASTERLY (2003) argues that if countries are subjected to a multistage adjustment programme, why don't they gradually show a better performance after each successive loan, or at least after a certain number of loans? To illustrate this fact, we can point the example of Cote d'Ivoire, which was under IMF intervention for 26 times between 1980 and 1999 and registered a shameful annual average per capita GDP growth of -1.40% (EASTERLY, 2003), which does not really nurtures the IMF main objective.

Concerning the second cause, the author wonders why the IMF keeps helping economies that have shown, for several times, not being able to comply with the conditions attached to their loans. A government lacking the political will needed to carry out the reforms or facing a strong opposition can justify why the country was not up to the requirements, but still does not clarify why the IMF keeps financing them (*ibidem*). It could be argued that the IMF could be under pressure from some of its members to concede the loan, even knowing the country will most likely not obey the conditions, as mentioned by KILLICK (1995) and BARRO and LEE (2003).

In this context, some authors have focused on the characteristics of recidivist countries. We can highlight the study conducted by JOYCE (2004) and BIRD *et al.* (2004) who have found a set of similar characteristics amongst recidivist countries.

They have noticed that countries that are constantly resorting to the IMF are usually low income countries, experiencing a low investment and with a very fragile structural condition. At the external level, they are usually countries with a high Debt to GDP ratio, a high debt service and usually with low reserve ratios and large Current Account deficits. This leaves these countries with few, if any, alternatives to the IMF for financing, given their low investor's confidence and credibility on the international markets.

It is also noted by JOYCE (2004) that recidivist countries are usually more optimistic on their macroeconomic projections than those that do not constantly resort to the IMF.

JOYCE (2005) concluded that longer participations are more typical in countries with low GDP, exports concentrated in primary goods and with autocratic political regimes.

Regarding the compliance with the programmes, there are also some studies that analysed this matter.

KILLICK *et al.* (1990) concluded that a high stock of debt can be responsible for a non compliance. As more funds have to be allocated to debt service, fiscal targets will be harder to achieve, as social opposition will arise against additional austerity measures to achieve those targets. Additionally, a high stock of debt will make currency devaluation not desirable (as it would increase the debt burden even more), leaving the country with one instrument less to achieve its targets.

They also mention that inadequate financial support may also be responsible for non compliance, as did KILLICK and MALIK (1990).

Other early studies, such as KILLICK (1995) and MUSSA and SAVASTANO (1999) have found that compliance will be lower in countries with high indebtedness and low IMF credit.

KILLICK and MALIK (1990) have found that a negative evolution on the terms of trade will make compliance harder. Furthermore, they also note that a poor compliance is sometimes due to an overoptimistic forecast of the fiscal targets by the IMF, making the programmes not feasible at all, or a lack of flexibility to adjust the programmes to external shocks that occurred.

More recently, JOYCE (2006) has found that political factors play a major role in the compliance with the programmes. They argue that political cohesion, regime and degree of openness will affect the implementation.

DREHER (2003) has also concluded that the proximity of general elections will also affect the implementation of the programmes.

In DREHER (2004) we also find some other factors affecting the implementation and compliance. He mentions that countries facing high political and social opposition and/or political instability will have more difficulties complying with the programme and conditionality. Social and ethnic fragmentation will also make it harder to comply with the programmes. Regarding political instability, these finding are

also shared by some authors mentioned by STEINWAND and STONE (2007) (IVANOVA (2003); STONE (2002); ARPAC *et al.* (2006)).

STEINWAND and STONE (2007) also mention some studies (STONE (2002, 2004) and NSOULI *et al.* (2006)) that found democracies have a higher chance of implementing the programmes than authoritarian regimes. POP-ELECHES (2007) found the inverse.

2.2.5. Moral Hazard

This is a subject that has been introduced by VAUBEL (1983), but later reiterated by authors such as HILLS *et al.* (1999), GOLDSTEIN (2001) and BIRD (2007), that argue the existence of the IMF itself places a problem of Moral Hazard, not only to the borrowing countries, but also to private investors. Knowing that the IFM is there, and is able to help a country overcome some difficulties, might lead the country to lower their defences and actually face a problem. Additionally, investors may not correctly assess the risk of their investments, if they know that the IMF is there and able to help a country, should it face difficulties.

3. Methodology

We have started this study with a literature analysis of the determinants of participation in IMF promoted adjustment programmes, as well as factors that determined the successful implementation of those. Subsequently, we will proceed to a description of the programmes as they were originally created. We will highlight the problems that led to the difficult situation these countries are facing, as well as the main instruments that will be used to tackle those problems. This will be achieved mostly through the analysis of the memorandums of understanding that each of the countries signed with the *Troika*.

After that, we will proceed to a comparative analysis of the three programmes. To aid the comparison effort, we will use statistical data to illustrate the similarities and differences amongst each case, which will also help at highlighting the most determinant factors in predicting the participation, as well as answering one of the main questions of this study.

Afterwards, we will carry out a quick analysis of the implementation of the programmes. We will highlight the highs and lows of some revisions (three for Greece, two for each one of the other two countries), allowing us to spot factors that were responsible for a successful or unsuccessful implementation of the programmes. This will also be achieved through the analysis of the Adjustment Programme reviews issued by the international authorities.

Regarding the statistical data that will be used, we opted to use data from the Eurostat when possible. On the one hand, this will ensure comparability between the data, and on the other hand, it is also the main source that was used by the authorities, so it makes perfect sense to use the same.

4. The three European adjustment programmes

It is now time to turn our attention to the cases we will be analysing.

Before proceeding to the actual comparison of the three programmes, and analysis of their implementation, we will expose them individually and the way they were designed originally.

4.1. Greece

Greece was the first of the countries that had to request external intervention by the IMF, European Commission and the European Central Bank in May 2010. The need for the intervention was not a direct consequence of the global crisis of 2008. Rather, it was an accumulation of factors that were worsened by the crisis. The agreed amount of the loan was €110 billion.

The performance of the Greek economy on the decade preceding the intervention was quite extraordinary, with an average growth rate of nearly 4%. The adoption of the euro was the main catalyst of this performance, fuelling a boom of demand and wages, whilst the dropping on the interest rates boosted the domestic investment. This allowed Greece, one of the poorest Eurozone members, to catch up, recovering some of the income gap it had (from about 75% of the Eurozone average in 2000 to roughly 90% in 2009). However, this performance was not sustainable. A progressive loss of external competitiveness (as a result of wages growth constantly outpacing productivity growth) coupled with a boom on domestic demand led to a decrease on exports (from about 25% of the GDP to 19%) and an increase in external imbalances which ultimately slowed down the economic growth and made these imbalances unsustainable. In fact, the real effective exchange rate of Greece has appreciated by approximately 20% during the past decade.

Furthermore, Greece has had a poor record on complying with objectives. The objective that was traced for Greece, after being decided it would adopt the Euro in 2001 (a balanced budgetary position), was never fulfilled. A high level of tax evasion, consistent overspending and overoptimistic tax projections are the main causes of this situation.

The pension system is also another culprit. The Greek population has been showing signs of ageing (just like the rest of Europe), which creates a sustainability

issue. More elderly people mean more pensions to be paid and less active people financing the pension system, which forces the government to intervene and further worsening its finances.

Public health system is not exempt either. As the population ages, more health care needs to be provided which translates into additional costs to the government. Without reforming, the long-term sustainability of the public health system is compromised.

The labour market also further contributed to the loss of competitiveness. A high rigidity in the labour market hindered company's ability to adapt to the constantly changing market conditions, undermining the economic performance of Greece and consequently raising unemployment. An agile labour market is required to allow companies to operate efficiently and to stimulate employment.

The amazing performance of Greece in the past decade had some severe downside effects however. The expansion of the economy coupled with a progressive loss of competitiveness led to an increase of the external imbalances over the years. The overall government deficit has worsened from about 3% in 2000 to roughly 14% in 2009, after being estimated not to exceed 7%. Primary government deficit in 2009 was nearly 9%. External debt and government debt also rose: Government debt went from about 105% to just over 115% of the GDP, after touching a low of roughly 95% in 2007, whilst external debt more than doubled from 2000 to 2009. As a consequence, debt service also rose, and given the lack of economic growth, it became unsustainable.

The global crisis of 2008 was, as said, a catalyst that worsened and ended up exposing the debilities that Greece had been accumulating throughout the decade. Moreover, the statistics office of Greece (EL.STAT) had some severe and serious deficiencies that covered up the problems of the Greek Economy and delayed the actions by the government. The inefficiency of the statistical office, coupled with the inactivity of the government caught the markets, investors and analysts in surprise, as the actual condition of the Greek economy started to reveal. As a consequence, rating agencies downgraded the classification of government bonds, which saw their yields skyrocketing on both primary and secondary markets, as did the yields on the credit default swaps. Confidence on the ability of the government to honour their commitments also went down. As banks were exposed to government bonds (banks

possessed roughly €32 billion in government bonds which represented about 6.4% of their assets), they also saw their rating being downgraded, as the bonds lost their value on the secondary markets. Consequently, the lower rating created more constraints on the financing from external markets and, therefore, they became more and more dependent on financing from the European Central Bank.

The socialist government that came out from the elections in October 2009, led by George Papandreou, immediately started to fight the situation by implementing fiscal austerity policies. Those measures relied most on expenditure cuts, such as the cuts on bonuses and overtime payments to the public sector. Not being enough, the government, one month later, in March 2010, decided to proceed with further cuts, this time cutting the 13th, 14th and 15th month payments by 30%, as well as further cutting bonuses by 12%. Salaries were also cut by 7% in both public and private sectors and VAT rates rose in all three ranks.

Despite all the measures, in April 2010, the situation became unsustainable. Yet, the government was still able to meet the finance needs for that month, with the issuance of bonds in the preceding months, albeit at an increasing cost. Sovereign bonds yields spread over German bonds increased dramatically from roughly 200 basis points on both the 2 years and 10 years window in January 2010, to a peak of about 1,000 basis points on the 10 years bonds and just over 1,700 basis points on the 2 years bonds in April 2010. Faced with the possibility of not being able to honour their financial commitments in the upcoming months (public servants salaries, pensions and maturing debt, for instance), the government had to request aid from the international authorities on April 23rd. Following the request of the Greek authorities, a 3 year economic adjustment programme financed by the European Commission, European Central Bank and the IMF was approved on May 2nd. The economic adjustment programme for Greece consists of a €110 billion loan that will be disbursed in instalments, upon the observance of certain conditions regarding policy implementation, expenditure cut and revenue increase, amongst others.

We will now turn our attention to the objectives and the policies and measures that must be taken under the duration of the programme, how they tackle the problems and effectively meet the objectives that were traced.

The economic adjustment programme has traced short term, medium term and long term objectives.

In the short term, the programme looked to improve and tackle the most prominent problems of the economy, stopping it from further deteriorating. As banks lost access to the international markets (due to their downgraded rating), they started facing liquidity issues. The European Central Bank was able to finance the banks for the time being, however, in order to avoid possible bank runs that could result in the collapse of the Greek banking system (and contagion effects to other vulnerable banking systems), a swift intervention was needed to restore the credibility, sustainability and allow the Greek banks to return to the markets.

On the government side, fiscal policy also needed an overhaul in order to allow sustainability in the medium and long term, whilst also regaining the confidence from the markets. The persistent external imbalances had to be contained, in order to prevent a further deterioration of the economy. The consolidation should be done mostly through policies that allowed savings on public sector expenditures, such as the promotion of structural reforms that allow a better efficiency. Nevertheless, the government should also seek to increase revenues both by implementing policies that tackled corruption and tax evasion (one of the biggest problems of the Greek fiscal system), and policies that increased revenues, such as tax rising. In this context, expenditure cuts are expected to account about 66% of the total effect, whilst revenues increases are expected to be roughly 33%.

Structural reforms are also needed in order to improve the competitiveness of the economy and lay the foundations for a sustainable growth in the future. These will be put in place in the short term, but the effects will only be observable in the medium and long term. These reforms will aim at 5 of the Greece's most prominent problems: a) improve labour market flexibility; b) reduce government participation in the economy; c) foster savings by the privates; d) incentivise investment; e) improve the competitiveness of the economy and increasing exports.

Another important characteristic of the programme is that a large share of the total effect is expected to occur within the first year, and the most difficult and unpopular policies (such as the raise of the VAT rates and cuts on wages and pensions) will be implemented in the first year as well.

However, the authorities also note that Greece does not have a very good record of coping with objectives and/or deadlines and, therefore, it should implement the policies in a rigorous and timely manner in order to regain the confidence of the markets and be able to finance itself, with a sustainable cost, and without the help from the international institutions.

The adjustment of Greece will be subject to some limitations and challenges. First and foremost, Greece lost the control over monetary policy, which is often used by countries to sort out their external imbalances. With the adoption of the Euro, Greece lost the ability to devalue its currency, which would lead to an improvement on its exports and eventually curb imports. Additionally, currency printing is not available either. Outside a monetary union, Greece would have the ability to control the amount of money in circulation and, if necessary, introduce additional monetary mass into circulation to pay off its liabilities, albeit the consequences such decision would carry.

On the other hand, the gains of competitiveness will have to be done through structural reforms. Given the low gains of productivity, the nominal rigidity of wages and the expected low inflation, cuts on the real unit labour costs will be hard to achieve.

Such reforms however, will come at a cost. The policies that must be implemented will restrain domestic demand, and reduce the disposable income, which will result in a contraction of the GDP. The recession is foreseen in the programme, although ex-post data has confirmed that the impact was even worse than expected, which also affected the forecasts by the European authorities for the years to come. Unemployment rate is also expected to rise under the term of the adjustment programme. Once again, the initial forecasts by the *Troika* were quite overoptimistic, and ex-post data has shown that the reality has been way worse.

Regarding the expected impact of these measures, government accounts are expected to improve over time. For instance, the international authorities forecast an improvement on government deficit from -13.6% in 2009 to a more sustainable -2.6% in 2014. Primary balance is expected to become positive already in 2012. The ex-ante data (forecasts) were once again overoptimistic, and the ex-post results confirmed, once again, the inability of the government to cope with targets.

One of the most important measures of this programme is regarding the cuts on public servants wages and pensions, especially the cut of the bonuses and a nominal cut

on higher wages/pensions. According to the authorities, these items represent an extremely large slice of the total government expenditure. The cuts are expected to account for more than 1.2% of the GDP in 2010, four times the expected impact of the increase of the VAT rates in the same year. In subsequent years, these policies will still have impact, through a carry-over effect, albeit lower. Raises on other taxes, such as alcohol, cigarettes and fuel will have a nearly insignificant impact.

In 2011 we can find a sharp increase in the revenues whilst expenditure cuts will decreased slightly. The increase of the revenues can be easily explained by the introduction of new taxes on certain items, changes on other taxes, such as the changes that occurred within the VAT categories and rates. From 2012 onwards, revenues will nearly stabilize whilst expenditure cuts will accelerate. By 2013, the revenues are expected to decrease, which can be explained by the contraction of the economy and subsequent decrease on fiscal revenues.

So far, we have focused mostly on temporary policies, and policies that do not have a deep impact on the fundamentals of the Greek economy. One of the most important aspects of the programme, and largely praised by the authorities, is the emphasis of the programme on structural reforms rather than on temporary policies, which we will now analyse.

The cuts on pensions, allowed the sustainability of the social security system in the short term. However, in order to ensure its sustainability in the medium and long term, an overhaul is needed. Retirement ages are expected go up (allowing not only savings on pensions, but also a longer contributory period), and from 2020 onwards, it will be automatically updated in line with life expectancy. Additionally, people who want to retire before the statutory age will suffer penalties, discouraging early retirements. Should the government proceed without any reforms, the government debt would reach unsustainable levels (350% of the GDP by 2057) due to the abysmal increase on pension expenditure that would be a consequence of the population ageing. Regarding the public sector and public administration, they will also be subject to reforms, making them more flexible, transparent and efficient, which will eventually translate in savings. Also, the agility of these services will have a positive impact on the private sector.

Labour and product market will also have to be reformed. Widening the range of the formal economy will allow the government to increase tax collection. Simultaneously, fighting corruption and vested interest groups will make the economy, product and labour markets much more flexible, promoting economic growth and employment. A more flexible labour market will allow companies to more easily rotate the work force and hire young people, usually with higher and more up to date formation. Regarding wages, they will not go down administratively, but are expected to go down through regular market forces and through the reforms on wage bargaining. Additionally, an administrative lowering of wages could potentially affect the economic activity in a negative way. Also, the Greek economy is highly dependent on the export of goods and services that are either non price elastic or highly capital intensive, i.e., wage cuts would not have any significant effect. Furthermore, the authorities also point out that given the highly oligopolistic characterization of many of the sectors, a wage reduction could lead to an absorption of the savings by the companies (higher mark-ups), instead of translating them into lower costs, and therefore, lower prices (higher competitiveness). The government can, however, create favourable conditions to attract investment and promote employment, such as making business environment more flexible and agile, making public services less bureaucratic and improving the conditions and requirements for the creation of new companies. Moreover, the government will agree with the social partners a measure that allows companies to practice wages under the minimum wage for long term unemployed and young people.

Fiscal system will also undergo an overhaul. Creation of ceilings for deficits and a tighter control of the spending of each ministry, local administration and social security are parts of that reform. The Finance Minister will also see his powers strengthened, and will be able to influence the preparation and execution of the budgets of each minister, which will have to go in line with the deficit ceilings that were set.

Tax system will be reformed as well, making it more efficient, more equitable and faster. Additionally, measures will be taken in order to tackle tax evasion, one of the largest burdens Greece has to carry.

Another of the objectives of the programme was to reduce the presence of the government on the economy. For this purpose, the government will liberalize some sectors (such as the energy and gas), and reforming others that show persistent deficits,

such as the railways. A strong and ambitious privatisation plan (valued in roughly €50 billion) will also be prepared, which will help, not only reducing the government's footprint on the economy, but also help the consolidation efforts.

The Greek statistics office will also be reformed. Ensuring its independence from the government is vital, and an improvement of its efficiency and accuracy is also essential. To achieve this, more funds will be channelled to the EL.STAT and it will work closely with the Eurostat to ensure the quality of the information. Also, monthly reports about the government budget will be issued, to help authorities better follow the progresses.

Regarding the financial sector, some changes are also needed. Since banks lost access to the international markets and were being financed mostly by the European Central Bank, policies to restore market confidence on the banking system are urgently needed. Besides the exposure to assets that were seeing their rating being downgraded (such as government bonds), and which could result in losses in the future, the Greek banking system was also experiencing an increasing outflow of deposits and a high level of leverage, which could compromise the fulfilment of the new requirements set by the authorities, and that are a result of the new BASEL III criteria which was created as a response to the debilities found on the banking systems after the 2008 crisis. Therefore, the international authorities have decided to lift some conditions and allowed the Greek Central Bank to intervene with emergency lending. This intervention will take the form of a credit line of €10 billion. Should a bank fail to increase its capital through their shareholders, it can request a loan to help the recapitalisation. Additionally, the European Central Bank decided to accept government backed liabilities (such as government bonds) of any rating (rather than imposing a minimum rating as it normally does). In order to avoid similar problems in the future, banking supervision will also be tightened and a better coordination between the banks and the national authorities will be needed.

As we can see, the adjustment programme created for Greece answers the debilities found on the economy. Despite playing a secondary role, the banking system was also subject to reform, which required the authorities to open a credit line to help the capitalization efforts. Regarding the economy, we can see that the programme is

based mostly on structural reforms, with the objective of preventing similar problems to happen again in the future. Fiscal austerity is also present, and is intended to help the government correcting its imbalances. The most important imbalances were found on the government deficit and current account, which confirms our findings in the literature regarding the factors that are behind the request for external assistance. An increasing external debt also played a major role, as did the increasing and unsustainable debt service. Shall the government successfully apply this programme, it will be able to correct its imbalances, whilst creating solid foundations to improve the competitiveness of the economy, preventing similar problems from happening again in the future.

The programme also offers some degree of flexibility. The government is responsible for implementing additional measures and policies to ensure the fulfilment of the defined targets, and in case of better than expected performance, the government should speed up the adjustment process. Delays on the fulfilment of the targets in case of a worse than expected performance are not, however, foreseen in the programme.

The programme forecasts negative impacts on the economy on the short term, before forecasting an improvement in the medium/long-term. Additionally, it also foresees the risks that Greece will face and that might affect and hinder a timely and successful implementation of the programme. Some of these risks are directly associated with the political institutions of Greece, and therefore, it's the government's task to reduce these risks to a minimum. Regarding the exogenous risks, i.e., those which the government cannot influence directly, the government will have to look for ways to ensure they do not compromise the implementation of the programme. Therefore, political will plays a very important role on the implementation of the programme.

Regarding these risks, we can classify them in two types. First, we have the economic risks, which are a consequence of, not only, the development of the economic conditions of the country, but also a consequence of the development of the international economic framework. In this group we can find the growth rate of the economy and the inflation rate. Whilst they are both partially influenced by the government action, there is some uncertainty on how these will evolve. Regarding the evolution of the international economic framework, it is not controlled by the government in any way, and therefore there is no way to control this variable and its

impact in the economy and in the implementation of the programme. An adverse evolution of the international economical framework (such as a rise in the oil prices or recession in the Eurozone, for instance) can curb exports which can, in turn, undermine the recovery of the Hellenic economy. On the other hand, we have the institutional risks. These risks are not intrinsically related to the economy, but they can affect the implementation and the success of the programme. The reaction of the markets to the policies implemented is one good example of these risks. A poor implementation of the programme will stress the markets, making it more difficult for Greece to return to them in the scheduled time. The lack of political will from the government is also a risk that Greece is facing. The programme foresees very difficult and unpopular policies that the government must implement in a rigorous and timely manner. However, the implementation of these measures will most likely cost votes on the next elections, and therefore, political parties must put the interests of the country before their own interests.

Another important risk Greece will be facing is regarding the data. We noted before that the Greek government has, in the past, been extremely overoptimistic regarding budget executions. Additionally, given the current economic situation and climate, revisions of the targets and implementation are expected to occur and can be addressed during the quarterly programme review.

The banking sector is also another risk. Despite playing a secondary role on the development of the Greek debt crisis, it plays a major role on the recovery. A strong banking system is required to be able to finance companies that will, in turn, promote employment and economic growth. Notwithstanding the efforts already put in place (such as the €10 billion recapitalization credit line), the banking system is still facing stress. Lack of financing from private sources and a deposit run by the privates might create severe problems on the banking system and ultimately compromise the implementation of the whole programme.

On table 1, we can find the summary of the past performance and forecasts for the Hellenic economy, according to the Economic Adjustment Programme.

Table 1 - Evolution and projections of the main macroeconomic indicators for Greece (values in red are forecasts)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP growth rate (%)	4.5	4.5	2	-2	-4	-2.6	1.1	2.1	2.1
General Gov. balance (% of GDP)	-3.55	-5.05	-7.62	-13.6	-8	-7.6	-6.5	-4.9	-2.6
External Public Debt (% of GDP)	97.51	95.34	98.75	115.1	133.2	145.2	148.8	149.6	148.4
Unit Labour Costs (%)	0.7	3.5	3.9	6.3	-0.6	-0.4	0.0	-0.4	---
Unemployment rate (%)	8.9	8.3	7.7	9.5	11.9	14.8	15.3	14.9	14.6

Source: Memorandum of Understanding

4.2. Ireland

Ireland was the second in line to request a bailout also in 2010. In the years preceding the adoption of the Euro as currency, Ireland went through one of the most impressive growth episodes in history, which allowed the country not only to catch up the EU average of income, but also to overtake it, achieving 113% of the EU average of GNI in 2006. The main factors that contributed for this huge success were fundamentally an extraordinary investment ratio, attracted by extremely favourable conditions of the Irish fiscal system, consistent productivity gains in both tradable and non-tradable sector, a low level of unemployment (always hovering 5% until 2008) and growing wages (at lower rates than productivity) to fuel private consumption. Favourable demographic conditions (i.e., population not too aged) allowed the government to keep social care costs low. All this increasing competitiveness of the Irish economy allowed exports to grow at nearly 18% per year. Unfortunately though, this growth was not sustainable.

Regarding the banking sector, the adoption of Euro brought some changes. The adoption of a strong currency allowed banks to finance themselves on external markets at lower rates. Therefore, credit expanded rapidly, outpacing the growth rate of deposits (loan to deposit rate grew from 1.4 in 2003 to 2.1 in 2007). As a consequence, investment boomed, especially in the housing sector, which also bumped employment. The optimism inherited from the impressive performance of the economy in the preceding decade is also, in part, responsible for this growth. As a consequence, banks underestimated risks and assets started to become overvalued, especially in the housing sector that saw prices nearly doubling in just 6 years. Fiscal policy is responsible for this investment boost as well, incentivising the investment with favourable fiscal conditions.

Outside the banking sector, we can also find other factors that lay behind the external aid request by the Irish Government.

Ireland had an extremely competitive economy on both tradable and non-tradable sectors prior to the adoption of the Euro. However, since then, the competitiveness of the Irish economy has been going down. In one hand, that is due to the fact wages started to grow more rapidly than productivity. In fact, real unit labour costs in Ireland went up by approximately 16% in just 5 years (2003-2008). On the

other hand, the Euro is a very strong currency that appreciated quite a lot since its introduction, which further worsened the loss of competitiveness, especially since the main economic partners of Ireland are the United States and the United Kingdom, both countries that do not use the Euro and that saw their currencies lose some value vis-à-vis the Euro. As a consequence, exports growth started declining, and given the fact it was one of the main catalysts of the Irish performance, so did the economic growth.

The government is also responsible for overheating the economy. Despite being able to maintain a positive budgetary position in pretty much the whole period ranging from the adoption of the Euro, until the burst of the real estate bubble, the government did not adopt a cautious behaviour. Instead of using one off revenues to reduce government debt, they were used to further overheat the economy, contributing to a further degradation of the competitiveness and external accounts.

As the economy cooled down, savings started to decrease, and consequently investment slumped. Current account became negative (as investment exceeded the savings) and unemployment started to rise, trebling in just three years (4.5% in 2007 to 13.5% in 2010). Emigration also started to increase once again, suggesting that the real numbers of unemployment were even worse. 2009 and 2010 were also years marked with deflation, which can give us a hint about the retraction of consumption not only from the economic partners, but also internally.

The external imbalances and the government deficits that started building up, made financing from international markets harder, as sovereign bonds yields went up.

In the banking sector, problems also started to arise. After all the euphoria in the early 2000's and the reckless behaviour adopted, which translated into rapid credit expansion at low rates and a huge investment increase with little precaution, the housing bubble burst. As the economy cooled down, demand for new houses went down substantially, bringing down the prices with it (house prices were dropping by 38% in 2010, after peaking in 2006). Consequently, unemployment in the construction sector rose, banks started to see their assets values dropping and nonperforming credit increasing. This originated a serious problem of sustainability of the banking system and made financing on international markets more difficult, given the contagion of the increasing yields of government bonds. The European Central Bank therefore, became an increasingly important source of financing for the Irish banking system. National

banking authorities, which are expected to supervise banking activity, and avoid imprudent behaviour did little in this respect.

Government finances also got severely hit by the crisis. In one side, the retraction on consumption and rising unemployment led to a decrease on fiscal revenue, whilst also bringing up social care costs. On the other hand, the problems on the banking sector were so severe, that it forced the government to inject billions of Euros to prevent the collapse of the whole banking system in both 2009 and 2010. These interventions affected investor's confidence even further and had a detrimental impact on the Irish Public deficit which hit a staggering 32% of the GDP in 2010. This left the government in such a situation that the only way to solve both the banking system and government imbalances was to request international intervention by the IMF, ECB and EU. In this context, such help was requested in November 2010 and culminated with the approval of a €85 billion bailout programme. From this package, up to €35 billion will be used to help the banking sector to recover its solidness whilst the remaining €50 billion will be used to help the government correct its imbalances and also to enhance the competitiveness of the economy.

The financing of this programme will be different from the other two. In fact, €17.5 billion will be financed by Ireland itself, through available funds. Regarding the remaining €67.5 billion, they will be financed in one third by the IMF, and the other two thirds from European partners, as well as Sweden, UK and Denmark.

Regarding the programme, we can clearly see it focus in 3 main pillars that also have a very deep and important connection between them:

1) Banking sector: Unlike the Greek programme, the Irish one shows a greater focus in the banking sector. However, given the much more troubled condition it was facing, this was expected. Ensuring that the banking sector regains the confidence from the investors and recovers access to the funding from the international markets at sustainable costs, i.e. lower interest rates is essential to ensure the recovery of the economy.

2) Public finances sustainability: This is another important pillar. Keeping the public finances stay in a healthy shape is essential to retain the confidence by the investors. This will allow the government to finance itself at lower costs, and therefore maintain attractive conditions for investment, stimulating growth.

3) Structural reforms to enhance competitiveness: Even though Ireland has a record of a very competitive economy, that competitiveness has been vanishing since the second half of 2000's, which curbed and limited growth. Reforming not only the labour market, but also the product market, will allow Ireland to be more competitive, and therefore grow closer to its potential growth rate. Allowing companies to better adjust themselves to the ever changing market conditions is essential to grow.

But how will these objectives be achieved?

Regarding the first pillar, the programme assigns up to €35 billion to help the banking sector regain solidity. This will be achieved by promoting the downsizing and deleveraging of the banking sector.

Efforts in this regard have begun in early 2010, with the National Asset Management Agency (NAMA), an agency created by the government with the objective of buying impaired assets from troubled bank institutions, helping them regain their solvency and strength. This agency, however, operates through a Special Purpose Vehicle (SPV) that is 49% owned by the NAMA. This procedure allowed the banking system to transfer nearly €80 billion worth of impaired assets to the SPV, mainly assets related to property and commercial related activities, such as loans and had an average haircut of over 50%.

Regarding the €35 billion from the programme, these will be used primarily to cover banks' needs of capital to achieve the needed deleveraging and downsizing and cover capital losses, allowing banks to meet the Tier 1 capital requirements and, consequently, regain some of the lost confidence. These measures will account to nearly €10 billion, with capital injections representing about 80% of this total. Banks will also carry out some Liability Management Exercises (LME), which can make the real requirements below €8 billions, potentially freeing up more capital for deleveraging (originally estimated to be about €2 billion).

Additionally, rigorous stress tests, capital reassessments and liquidity reassessments will be conducted in order to clearly determine the real capital needs of the banks. Banks that prove not to be viable will be resolved. One good example is the one concerning the Anglo Irish bank and the Irish Nationwide Building Society. A resolution plan was sent to the international authorities (both IMF and ECB) and aims to

salvage these 2 banks, minimizing further capital losses, and therefore, minimizing the compensation from the government, who had already injected nearly €35 billion before. This resolution plan culminated with the merging of these 2 banks and the creation of a whole new society, the Irish Bank Resolution Corporation.

The plan also mentions other measures that will help banks to regain their solidity and investor's confidence. On one side, the role of the national banking authorities will be reinforced, allowing it to be more interventive and agile when a situation of a bank in a tight spot, risking the collapse of the whole system arises. On the other hand, banks will be incentivised, by the government, to further streamline their assets, by provisioning nonperforming assets, and disposing assets that are not core, either by securitisation or sale.

These measures pretty much sum up the plans the programme sets for the banking sector. It is expected that these measures will have an impact on the supply of credit to the economy, and therefore might affect growth, effect that is foreseen in the programme, and that will be tackled with growth stimulation policies through structural reforms.

In what comes to the second pillar, the objectives will be achieved through an ambitious, yet reasonable overhaul of the public finances to achieve a fiscal sustainability. Even though a large part of the external imbalances registered in the years preceding the programme can be attributed to the intervention in the banking sector, the Irish public finances have been worsening since 2006, even if we exclude the impact of the intervention in the banking sector.

Regarding objectives, the programme expects the programme to have a total effect of €15 billion, with 2/3 of that amount coming from expenditure reduction. From the €10 billion of expenditure reduction, €7 billion will be from current expenditure, whilst the remaining €3 billion will be from capital expenditure cuts. Regarding the distribution of the measures throughout the programme duration, it is expected that the adjustment in 2011 will account to nearly €6 billion, which once again proves the need to demonstrate credibility and willingness, both essential to recover the confidence from the international markets. The remaining €9 billion of consolidation will be achieved in 2012 and 2013.

Revenue rising (expected to account to nearly €5 billion during the 3 years) will be achieved through tax rising. Regarding income tax, not only will it go up, but also, the spectrum of activities that are taxed will be broadened and tiers will be lowered, which will net approximately €1 billion in 2011. Additionally, social contributions will go up for high income earners, netting an additional €0.3 billion in the same year, which makes the total effect of tax rising in 2011 about €1.4 billion. During the second and third year of the programme, other taxes will also go up. These taxes include the carbon tax, tax on capital gains and the property tax. Authorities have no plans to change corporate tax, as it is essential that it is kept at low levels to maintain Ireland as an attractive destination of investment, essential for growth. Tax rising are expected to have an impact of about €1.4 billion in 2011, which when coupled with windfall revenues of €0.7 billion in the same year, will make revenue side effect to total roughly €2 billion.

Current expenditure cuts will be mostly achieved through cuts on public servants wages and pensions, cuts on the expenditure ceilings of each ministry and further cuts on other social benefits, such as unemployment benefits. In 2011, these cuts will sum up to nearly €2.1 billion.

Regarding public investment it will go down to sustainable levels, after successive years at high levels (roughly doubling EU's average), one of the conditions that allowed Ireland to maintain an impressive performance in the years preceding the crisis. This will mean a cut on capital spending of about €1.9 billion.

However, fiscal policy will also be used with the objective of stimulating the economy. Even though fiscal policy will not be as attractive as it was for the real estate sector, given the property tax raise, stamp duties will be significantly lowered, which will help stimulating this sector.

Structural reforms are also an important aspect of the programme. Their main objective is enhancing competitiveness, building solid foundations for growths and also to correct the structural problems that were responsible for the adversities Ireland is facing.

First of all, these structural reforms will aim at the fiscal system. Ensuring the sustainability of the system in the long run is essential, so, taking in account the tendency of population ageing is essential. In this context, retirement ages (currently at

65) will go up to 66 in 2014, and from then onwards, rising one year every seven, until hitting 68 years by 2028. Pension values will also have a new formula, based on average career earnings, which should translate into additional savings. Furthermore, budgetary framework will need a revision. Authorities have noted that Irish procedures are not amongst the most efficient in the Euro area, and therefore a reform is needed. Adopting more efficient procedures, setting multiannual plans with expenditure ceilings for each ministry and creating an independent supervision team, responsible not only for the assessment of the execution of the government budget, but also for the forecasts are some fine examples, amongst the measures' package, of how this efficiency improvement is expected to be obtained. Lastly, it has been agreed that any extra revenue should be used to reduce public debt.

Another important target of the structural reforms will be the labour market. Even though labour market already shows a great degree of flexibility, additional measures are needed to tackle the problem of labour mismatch. The sectors that were mostly affected by the crisis were construction but also financial services, meaning unemployment rise was especially high in these sectors. If the mismatch persists when the economy starts recovering, there is a risk this unemployment will turn structural, rather than cyclical which will have a negative impact on growth and therefore the recovery of the economy. In order to correct this problem, several measures will be put in place. On one hand, some labour market obstacles will be removed, promoting a better labour rotation and allowing companies to be more flexible and easily adjust to the market conditions. Furthermore, minimum wage will drop by roughly 12%, to offset the negative inflation registered in the preceding years that nullified previous wage cuts that aimed at improving competitiveness. Other wages will have a downward trend. Agreements with certain sectors that establish higher minimum wages for those sectors will also be reviewed, as it can affect the adjustment. On the other hand, unemployment benefits will be reduced. Ireland is amongst the countries with the highest unemployment benefits, and given the way such benefits are designed, it creates a large inactivity trap, especially for low income earners. Redesigning and lowering unemployment benefits will, not only reduce government's expenditure with these benefits, but also increase the incentive for unemployed to search for new opportunities. These benefits will also become dependent on the fulfilment of some criteria such as

active job searching or training. Furthermore, training will be incentivised as it will help correcting the problem of labour mismatch.

Additionally, reforms on some sectors of the economy will be carried out. Ireland is amongst the countries with the best business environment regarding competition, but a few problems remain. Some sectors, such as gas and electricity still show a high level of protectionism originating price manipulation to some extent. Ensuring a healthy competition in them, by revising governance frameworks, which can ultimately result in the privatisation of some of the companies. Additionally, it is necessary that competition authorities stay alert to avoid potential collusion between companies. It is expected that the rise of competition will bring some beneficial effects. On one hand, it is expected that the increase of companies competing in the open market will drive prices down. On the other hand, the open market will promote the surge and creation of new companies, which, in turn, will promote employment.

We will now turn our attention to the expected macroeconomic effects of this programme. As with the Greek programme, the Irish one will have a negative impact on the economy, before the first significant improvements show up. This happens mostly because structural reforms, one of the major points of this programme, do not have an effect on the short run, but rather, take some time to produce effects. Additionally, the austerity measures that are needed to balance public finances will contract both public and private consumption, which will affect output, and therefore growth.

Regarding unemployment, it is expected that it will go down. It hit a maximum of roughly 13.5% in 2010, trebling the low values registered during the early 2000's. According to the projections by the authorities, these values should start going down right in 2011, however, ex-post data has confirmed the opposite, having unemployment rate nearly touched 15% in 2011. This is partially due to the characteristics of the Irish recovery. The programme set for Ireland looks to utilise one of the strongest characteristics of the Irish economy and that was responsible for its phenomenal performance in the 90ies: Exports. The Irish exporting sector is characterized mostly by companies that have a stable (i.e. not cyclical) demand, and are capital intensive. These characteristics will allow unemployment to decrease steadily, yet slowly. Some uncertainty will, of course, remain, given the fact that the evolution of exports relies

heavily on the evolution of exogenous factors, such as currency fluctuations and economic performance of trading partners.

Regarding economic growth, it will also improve over time. After a dramatic fall of 7% in 2009, real GDP dropped by an additional 0.4% in 2010, to finally start growing again in 2011 by 0.7% (0.2 pp lower than initially forecasted by the programme, and down from the 2.6% forecasted in 2009). For 2012, the initial forecast hints for a growth rate of 1.9%, but later revised to 0.5% given the worse than expected evolution of the international framework. Domestic demand has also been contracting. The rise on unemployment, associated with high debt from the families (and consequently lower disposable income) led to a drop on demand, which consequently affected growth. Domestic demand contracted by 11.3% in 2009 and by an additional 4.4% in 2010. It is expected that it keeps contracting until 2013, when it is projected to expand by a modest 0.3%. Lastly, the reforms that the banking sector will undergo will affect the supply of credit to the economy, which will affect investment, and therefore growth.

Inflation, which has been negative since 2008 is expected to improve as the economy starts recovering. However, given the pace at which the economy will recover, inflation will remain at low levels, not being expected that it will exceed the 2% until 2015. Additionally, wages will see little increases. Private sector will have small wages increases, whilst the public sector will see no increments at all, given the negotiated wage freezes until 2014.

As we said, one of the main catalysts of the Irish recovery will be exports. It is therefore appropriate to analyse how this item is expected to evolve. Given the reforms that are being implemented, Ireland's competitiveness is expected to improve. Low inflation coupled with modest wage growths will lead to higher competitiveness, and therefore, faster export growth. Favourable evolution from the trading partners will also play an important role and may originate positive surprises.

Regarding external accounts and external imbalances, these are also expected to improve over time. Ireland has been warned before by the authorities and had a deficit reduction programme set up in 2009. This programme foreseen a gradual reduction of the government deficit over time, until 2014, when it was expected to achieve the 3% (maximum allowed under the Maastricht Treaty rules). However, a set of unfavourable

conditions dictated that the deficit target was not achievable anymore, and was therefore postponed by 1 year. Amongst these unfavourable conditions there is the worse than expected performance of the Irish economy, but also a more severe than expected impact of the crisis on the banking system that, consequently, translated into a loss of confidence by the markets. Additionally, the intervention by the government on the banking system had a detrimental impact on the Irish government accounting further alarming investors and posing additional confidence problems. Consequently, government bonds yields rose sharply and both government deficits and debt started to get out of control.

After a peak of 32% in 2010 (again, this value is justified by the intervention on the banking system; should there not be any intervention, general deficit would not exceed 10%), deficit will gradually go down and is expected to hit 2.9% in 2015. Primary deficit will also improve over time but at a slower pace than the general deficit, reflecting not only the increased costs of financing, but also the fact that government debt will be increasing until 2013. Starting at 29% in 2010 (for the same reasons mentioned above), primary deficit will then start going down, achieving a 1.2% superavit in 2014, and 3.2% by 2015. Interest payments (responsible for the difference between primary and general deficit) will increase dramatically. The effect of the GDP contraction cannot be neglected either, since the interest payments are expressed as a % of the GDP, and therefore increases as GDP decreases.

Additionally, regarding the deficit targets set in 2009, postponing their achievement will allow the government to take a softer approach and postpone some of the adjustment to a time when the economy is already growing and recovering, making it easier and reducing the risk of further depressing the economy, as achieving the 3% by 2014 would require a larger budgetary effort of roughly 50% to 66% more than what is required with the agreed postponing.

The execution of this programme is not, however, exempt from risks. The evolution of the major macroeconomic performance variables, are dependent on a set of factors, some of them not controlled by the authorities. For instance, government debt is dependent on the evolution of the government deficit, which is, at least partially, controlled by the government. However, other factors also influence the evolution of this variable. Economic growth and the rate of interest paid for the debt play a major

role on its evolution of the debt. If the average interest rate paid for the debt is higher than the growth rate of the economy, it will be extremely hard for the government to reduce the debt burden over time, unless it manages to achieve a primary superavit that offsets the difference. Moreover, even if a country is growing at a rate higher than the average interest rate paid for the debt, a primary deficit might offset the difference and total debt may still increase. Therefore, to ensure that debt stays in a sustainable path, and to avoid a potential snowball effect, it is essential to make sure that, on the one hand, economic growth is promoted and, on the other hand, market confidence is restored, to make interest rates drop. Thus, the projections made by the authorities regarding the evolution of these variables, especially debt, are based on some prudent assumptions. As these variables we mentioned are not directly controlled by the government, some variations might occur. For instance, it is mentioned that in case the banking sector would require the whole €35 billion package, debt would be expected to top at just over 124% of the GDP in 2011.

There are also other factors that are decisive in the success of the programme. Exchange rate, for instance, will be decisive regarding the exports. If the Euro gets too strong vis-à-vis the USD and GBP, Ireland's exports could suffer and consequently affect growth. Inflation can also affect the execution of the programme. A lower inflation would be favourable to some extent, by further improving competitiveness, but would also carry some negative effects to both public and private debt dynamics.

The banking sector is also another source of risk. Even though a prudent analysis of the real needs of each bank will be carried out, surprises cannot be excluded. Initially, only €10 billion of the €35 billion are going to be used. The remaining €25 billion will be used in case further losses or needs are found, or in case the situation further worsens.

Besides all these, there are also a wide number of other factors that may have an impact on the success of the programme. Political risks are always present, but in this case, given the proximity of elections, this risk is especially high. Also, the structural reforms may require the agreement of many stakeholders and will have a deep impact on them; negotiations with these may delay or hamper the implementation of some of these reforms.

As we have seen, this programme answers the most prominent problems that the Irish economy is facing, and aims to sort them out, by putting Ireland back on a sustainable growth track. A timely implementation of the policies is essential to ensure the credibility of the programme and to show the will from the authorities to solve the problems. The funds from the European authorities and the IFM will allow Ireland to finance the reforms needed at sustainable costs and will give it time to get back on the right track. Even though this programme foresees transfers totalling roughly €85 billion, Ireland will not be completely absent from the sovereign debt market. It is expected that Ireland will gradually go back to the market during the middle of 2012 (what has indeed occurred) to issue some short term debt. Over time it will be able to gradually roll over a higher amount of debt at more sustainable costs, as confidence gets restored.

On table 2, we can find the summary of the past performance and forecasts for the Irish economy, according to the Economic Adjustment Programme.

Table 2 - Evolution and projections of the main economic indicators for Ireland (values in red are forecasts)

	2008	2009	2010	2011	2012	2013	2014	2015
GDP growth rate (%)	-3.5	-7.6	-0.2	0.9	1.9	2.5	3.0	3.0
General Gov. balance (% of GDP)	-7.3	-14.4	-32.0	-10.6	-8.6	-7.5	-5.1	-2.9
External Public Debt (% of GDP)	44.3	65.5	95.0	112.4	118.7	120.5	119.1	115.5
Unit Labour Costs (%)	4.5	-3.5	-5.5	-1.5	-1.2	-0.2	0.0	0.5
Unemployment rate (%)	6.3	11.8	13.6	13.4	12.7	11.6	10.7	10.0

Source: Memorandum of Understanding

4.3. Portugal

Portugal was the third country needing external intervention by the European Authorities and the IMF.

In this case, the problems lie in both the private and public side, with a progressive loss of competitiveness and a stagnated economy further deteriorating the imbalances. The banking sector on the other hand, proved to be quite solid apart from two banks that were nationalized.

Since the adhesion to the Euro, in 2001, Portugal has been suffering of low economic growth. In the 90ies, the economy was able to grow at an average rate of 3%, especially during the second half, with the adhesion to the Euro in the horizon. In the following decade, it only grew by 1% per year, in average.

We can find a wide set of reasons behind this cool down, some of them being structural.

It comes to no surprise that an overvalued real exchange rate is amongst these factors. Even though the Eurozone countries are Portugal's most important trading partners, and therefore, nominal exchange rate fluctuation do not exist, the real exchange rate has evolved in an unfavourable way, by appreciating between 4% and 8%, depending on the deflator used, between 1999 and 2010. Vis-à-vis other countries, the evolution has been even more unfavourable, given the evolution of the nominal exchange rate of the Euro. This unfavourable evolution shows us that wages have been outpacing the growth of productivity, a problem that has been already identified in the other cases as well. Furthermore, the loss of export market shares has also been seriously affecting the performance of the economy. Portugal has been an exporter specialized in sectors that are characterized by a low technological content, high labour intensity, and low growing potential. This reason, coupled with the growing labour costs, and the specialization of other countries that are more cost attractive in these sectors (mainly China and Eastern European countries, some of them Eurozone members), made Portugal lose some export competitiveness. At a structural level, we can find some other factors that contributed to further deteriorate the export competitiveness. These include a complex and slow legal system, a defective competition environment with little supervision that promotes inefficiency, an extremely rigid labour market, a rigid housing and renting market that hampers labour

mobility, essential to ensure competitiveness and low skilled labour, which leaves little room for diversification in a short term. Lastly, we also have the retraction on the demand for Portuguese exports, given the fact that the main economic partners have been growing slower than the world trade.

In the services sector, the reality is slightly better, with Portugal being more competitive and actually showing a superavit. However, the focus on slow growing sectors is making the total effect on the trade balance nearly nil.

This has, of course, translated into a deep Current Account deficit. Despite the efforts to improve it in the preceding years, it still shows a great deficit in the trade of goods, partially explained by the high needs of energy imports. Trade of services, as said before, has been improving, but still shows a shy superavit given the problems aforementioned. Regarding the remaining two items that constitute the Current Account, they have been evolving negatively. Primary income, which was positive back in 1995, now shows a deficit of roughly 3 to 4% of the GDP, whilst current transfers, have been decreasing steadily throughout the years (but still remains positive). This reduction in current transfers can be partially explained by the reduction of transfers by national workers abroad, whilst the outflow of transfers by foreigners in Portugal has remained the same.

The borrowing needs of the economy also reveal some debility. We can clearly see that since 1995, Portugal has been a net borrower from the exterior. Households' savings have increased, especially in the three years preceding the programme, but are still too low to offset the heavy borrowing needs. Corporations represent a huge share of these needs, but in the late years preceding the programme, and given the cool down of the economy, their borrowing needs have been decreasing. The general government is also responsible for these heavy borrowing needs, and given the anti cyclical policy that has been followed in the years after the boom of the crisis in 2008 (especially in 2009, given the general elections that took place), its needs have been increasing rapidly, offsetting the decrease on the corporate sector needs. As a consequence, and given the inability of the domestic savings to finance these heavy needs, external indebtedness has started rising, with private indebtedness breaking the 200% of the GDP barrier in 2007 and public debt started growing more rapidly in 2008. It should be noted though, that

most of the private credit mentioned was done through banks that, consequently, achieved high leverage ratios and an augmented risk

It is also worth analysing how the financing of these needs have evolved. Back in 2006, it was mostly through interbank loans, which were responsible for financing about 40% of the financing needs with both direct and portfolio investment representing 25% each. More recently however, portfolio investment took over as the most important mean of financing, covering about 75% of the needs. This reflects 3 things: 1) increasing government borrowing needs (usually through the form of portfolio investment); 2) decreasing corporate borrowing needs given the deleveraging that has been occurring, and; 3) A netting out of direct investment, but at higher values than the ones registered in 2006, reflecting a higher outflow of direct investment.

Unlike Ireland, the banking sector in Portugal has gotten through the crisis relatively unaffected. The low exposure to toxic assets and non-existence of a property bubble like the one we have seen bursting in Ireland, allowed banks to get through the first stage of the crisis well, without major losses or asset value corrections. Coverage ratio has been decreasing but is still above 100%, whilst the Capital adequacy ratio remained relatively stable. Non-performing loans grew, but at a sustainable pace and do not pose any immediate danger. The national banking authority demanded banks to increase their Tier 1 capital ratio to 8% as a precautionary measure, which was met by private shareholders without requiring government intervention (only exception being the Caixa Geral de Depósitos, but in this case the government acted as shareholder). Consequently, loans started growing at a slower pace but that did not affect the bank's ability to remain profitable. Contrasting with this general situation, there are two banks that were interventioned (Banco Português de Negócios and Banco Privado Português), but according to the national authorities, the motives behind these interventions are not entirely related to the international crisis, but rather to mismanagement and some illicit practices.

Problems started to arise later. High loan to deposit ratios, hovering around 160%, meant Portuguese banks would need to rollover a substantial amount of debt (nearly €30 billion) in the following years, which when coupled with a higher risk, lower confidence from the markets and an high leverage ratio left banks in a difficult situation where markets demanded an high premia to finance them.

However, the problems with the Portuguese economy are not exclusive to the private sector. The public sector, especially the government, shows some severe imbalances as well.

Government deficit has always been one of the greatest problems of Portugal. In fact, in the past years, rare have been the situations the government did not have to use one off measures to correct substantial target deviations, and even then, it is hard to find any year the general government deficit was below the 3% limit.

Therefore, and given the low GDP growth rate, it comes as no surprise that the external government debt has also been in an upwards trend, and grew dramatically in the last decade, especially during the second half of that period. This generated, of course, doubts, amongst the investors, about the government's capability to repay the debt when it reaches its maturity and, as consequence, bond yields started rising and foreign investors started to invest less on Portuguese debt.

These imbalances have been especially high in the last few years, after the burst of the international crisis in 2008. Lower fiscal revenue, coupled with anti-cyclical policy made the public deficit skyrocket. Additionally, some one-off expenses were registered in 2008 and 2010 accounting for about 1.3% and 0.6% of the GDP respectively that further brought up the deficit in those years. The recovery registered after 2009, when the deficit hit a maximum of 10.2% was mostly achieved through an increase on tax, especially VAT and through a one off revenue accounting to 1.6% of the GDP, but still not anywhere near the target of 7.3% set for that year. The successive revisions of the value of the deficit for that year further dented the market confidence and also had a huge impact on the external debt on that year, increasing it by about 10pp.

The problems with the public sector, however, stretch far beyond unbalanced public finances. Despite all the support they receive, state owned enterprises have been accumulating an exorbitant amount of debt, which sooner or later, the government will have to take over. Furthermore, working like regular private companies, these state owned enterprises are absorbing critical resources, such as bank loans and skilled labour, which could be used by private companies that, in many cases, are much more efficient.

Lastly, we also have the public-private partnerships, which have been an instrument often used by the government to finance many projects, but mainly transportation infrastructures such as motorways. They have been an attractive instrument mostly because it allowed the government to spread the costs of the projects throughout several years and, therefore, go around some budget limits. However, due to some lack of negotiation, these left little flexibility to the government. Payments regarding the public-private partnerships are going to remain high until 2016, when they are expected to start decreasing. A careful renegotiation of these contracts is needed, especially the renegotiation of the rents paid by the government, in order to provide some leeway given the current budgetary constraints.

At a structural level, some problems have also been spotted. Some of them are not new, and have been also spotted in Ireland and Greece. The low flexibility of the labour market is one of those problems, and needs to be tackled in order for the economy to regain competitiveness. The labour market in Portugal is characterized by a high degree of job protectionism and a high level of benefits for those that are unemployed. This translates in an extremely low labour rotation and few incentives for those that are employed to look for new opportunities (unemployment trap). Low skilled labour is also an issue. Even though the number of graduates in Portugal has been increasing, a large share of those are absorbed by either state owned enterprises or by other companies operating in sheltered sectors, usually on the non tradable one, where they are able to pay higher wages. This leaves the tradable sector with mostly low skilled labour, which severely hampers the flexibility of these companies. Labour legislation, especially concerning total working times is also very strict, giving companies little room to adapt their output to demand conditions. Wages have also been a determinant factor. Raises constantly outpacing productivity growth, coupled with wages downward rigidity further contributed to hampering external competitiveness, leading the unemployment rate to rise. Concerning the minimum wage, it will not go down, unlike it did in Greece or Ireland. On the one hand, this is due to the fact Portugal already has one of the lowest minimum wages in the Eurozone. On the other hand, it was noticed that the real exchange rate appreciation was not as steep as it was in Greece or Ireland.

At the corporate sector, some structural debilities were found. First of all, the tradable sector is dominated mostly by small and medium size companies, some of them

with a large exporting share. Big sized companies are usually in the non tradable and sheltered sectors, where competition is limited. Bureaucracy and a complex tax system also further obstruct competition and stimulate inefficiency. Having an agile bureaucratic and tax system is essential to attract investment and consequently, competition. State owned companies, who are remarkably inefficient in some cases, also have an over presence in some sectors.

Sorting these problems is essential. It is necessary that the labour market becomes more flexible allowing companies to adjust their labour force to market conditions. Additionally, competition should be incentivised in the non-tradable sector and the sheltered sectors should be opened. This will correct the differences between tradable and non-tradable sectors, allowing the tradable to benefit from the high skilled labour and become more competitive. Only then the economy will be able to generate employment and grow sustainably.

As we can see, the problems Portugal is facing are not new, with some of them dating from the 90ies. These debilities have been building up throughout the decade, and whilst favourable external conditions helped sustaining them, the 2008 crisis and the consequences that derived from it, ended up not only exposing them but also worsening them. Public finances, for instance, have never been in a healthy shape after joining the Euro, but the burst of the 2008 crisis and the consequence that derived from it, forced the government to take some measures that further deteriorated them.

The government has, of course, tried, by all means, avoiding the request of external intervention by the authorities, with the adoption of several stability packages that also included some austerity. Three packages were approved in 2010, but, as it can be seen, they did little to correct the problems. A fourth package was presented to parliament in March 2011, but was rejected by the opposition parties. As a consequence, the government resigned, which added political instability to the already delicate situation, further denting market confidence. As a consequence, roughly two weeks later, the external intervention became inevitable, and the government (at that moment only caretaker) made the requested that culminated with the approval of a €78 billion bailout programme. These €78 billion will be financed in 1/3 (€26 billion) by the IMF, whilst the other 2/3 will come from the European partners and rescue funds.

It comes as no surprise that this programme, similarly to the other two, is also based on three pillars. 1) Correcting debilities and strengthening the banking sector; 2) Rebalancing public finances; 3) Enhancing the competitiveness of the economy through the adoption of structural reforms. Additionally, and similarly to the other two programmes, this one is also remarkably front loaded, with many of the reforms being put into practice during the first year of the programme. As a consequence, the impact of the programme on the economy during the first year is expected to be negative, but will improve over time, as the foundations for solid and sustainable growth are built. The main goal of the programme will be to improve the external competitiveness that Portugal has lost during the last decade, and that it cannot recover through currency devaluation. That will require the authorities to act on the three pillars mentioned above. Ensuring a strong banking sector capable of financing the private sector, that in turn requires a flexible labour market which allows them to have the flexibility needed to adapt to the ever-changing market conditions. Lastly, balanced public finances are necessary to provide confidence to the markets, which will not only allow the institutions to finance themselves at lower costs, but will also attract foreign investment.

Concerning the general design of the programme, we can see that it aims to put Portugal back on the track of growth through exports. The main objective of the programme, besides fiscal consolidation, is an improvement on external competitiveness, which will allow the exports to grow. However, some risks still persist: On the one hand, the evolution of the main growth catalyst (i.e. exports) is dependent on the economic evolution of Portugal's main trading partners, which are mostly the European Union countries. The modest developments that are expected to those countries might pose a risk. On the other hand, the reforms that will aim at enhancing the competitiveness of the economy are of structural nature, and therefore their effect might take some time to be observed. This delay, coupled with the austerity needed to achieve the fiscal consolidation, will have a negative impact on the economy, for the first years.

As we mentioned before, the banking sector performed fairly well during the crisis. Apart from two institutions that were nationalised (and even then, it was due to

factors other than the international banking crisis), the rest of the banking system resisted well against the external shocks, and the new capital requirements, demanded by the national authorities, were met by the private shareholders. The deleveraging process has to continue though. As noted before, the problems the banking system started facing later were related to their high leverage. In this context, the programme foresees two measures. First, the banks will be able to issue up to €35 billion worth of bonds, guaranteed by the government, which will help them strengthening their capital buffers. Secondly, the programme foresees up to €12 billion, in loans, to help banks meet the new Core Tier 1 ratios (9% and 10% in 2011 and 2012 respectively), should the capital increase through shareholders or market operations fail. However, these loans have some conditions attached. Banks that utilise these loans will have tighter supervision and will have to undergo a restructuring process.

The deleveraging process will have some impact on the economy. Lowering the leverage will require the banks to tighten credit creation which will then affect not only private consumption by the households, but also the investment by companies. In this respect, the government has received authorization to reallocate structural funds from the European authorities, with the objective of supporting and financing business accessing export markets.

Regarding the public bank, Caixa Geral de Depósitos (CGD), it will undergo a substantial reform to improve efficiency. Activities that are not a part of its core business (such as insurance) will be sold/privatized. Capital will also be increased, in order to meet the new capital ratios and to make the bank more solid.

To avoid the development of future problems, supervision will be tightened, and banks will be required to have contingency plans ready in case problems arise. In addition, nonperforming loans will be monitored more closely, and measures will be taken in order to lower the ratio, before it becomes a sizeable problem.

BPN, one of the nationalised banks, will be re-privatised as soon as possible, as it constitutes a burden to the public Bank (CGD). In order to make it more attractive to private investors, it will first undergo a deep restructuring process that aims at reducing operating costs. This includes, amongst other measures, closing down some branches and a sizeable reduction of staff. Additionally, the privatisation process foresees that the government will be responsible for the costs that result from such reforms, including the

severances that must be paid to dismissed workers. Lastly, the programme also includes funds to repay CGD the support it had to provide to BPN.

Legislation also needs to be changed. The 2008 banking crisis has revealed that neither the institutions or authorities were flexible enough to react or intervene in a timely manner, nor information was communicated efficiently between those. In this respect, legislation will be created with the objective of promoting better communication between the banks and the authorities and an early reporting of potential problems. This will allow the authorities to intervene in a more swiftly manner and with new tools especially designed for a quick intervention and safeguarding of the whole system.

Legislation will also be changed on what household and company credit is concerned. Even though nonperforming credit does not constitute a major problem at the moment, this ratio has been climbing steadily, which can place a sizeable problem in the future. Therefore, it is necessary to develop legislation that facilitates the renegotiation of current contracts to avoid insolvencies. At the government level, it is necessary to keep a closer look at private indebtedness, and clear any obstacles that hinder a debt restructuring. Insolvency procedure also needs an overhaul, permitting the rehabilitation of individuals.

Fiscal sustainability is another of the three pillars this programme is based on.

As we have seen, public finances were never in a good shape, but the crisis coupled with anti cyclical policy had a huge impact. Therefore, the government must follow an austerity policy that will help rebalancing these imbalances.

The main fiscal targets of the programme regard the public deficit. The programme aims at a target of 5.9% in 2011, 4.5% in 2012 and finally achieving the 3% deficit by 2013. This will require consolidation measures accounting for roughly 5.7% of the GDP during the first year, 3% in 2012 and 1.9% in 2013. In 2014 and 2015 there will be no consolidation measures, but the deficit will keep on declining naturally (2.3% and 1.9% in 2014 and 2015 respectively).

Regarding the external public debt, it will keep climbing until peaking at 108.6% of the GDP (2013), starting to decline slowly thereafter. Obviously, these projections are based on a set of conditions that are extremely volatile. Higher interest rates than

expected might make the debt reduction even slower or change the dynamics completely, making debt rise even higher. 1pp difference on the interest rate (higher) or the economy growing at 1pp less will make the debt stabilize at around 105% of the GDP. A variation in the opposite direction will make the debt reduction faster. Additional consolidation would also have a huge effect on the debt dynamics. According to the authorities, consolidation achieving a structural balance of 0.5% of the GDP (which would require an additional 2% of consolidation), would allow the debt to decline, even with a negative shock on growth or interest rates paid.

The impact on growth, as we have mentioned before, will start by being negative. The austerity measures that will be put in place will have a recessive impact on the economy of -2.2% in 2011 and -1.8% in 2012, before returning to growth in 2013 with a modest growth rate of 1.2%. The austerity will also affect other macroeconomic variables. Higher taxes will mean less consumption and fewer imports. Investment will also go down as a consequence, as a contracting economy is not an attractive investment destination. On the other side, the government will also have to cut on expenditure, which will mean less public consumption and less public investment. It is, therefore, not hard to expect a correction of the external imbalances. Current account will improve as the balance of trade improves.

Inflation is expected to stay high during 2011, as a consequence of tax rising, especially the VAT, but is then expected to drop to 2% in 2012 and 1.5% in 2013 and the following years.

But how will this consolidation be achieved? In 2011, and given the already ongoing budget execution, all the efforts will be focused on a correct budget execution, without slips. The 2011 budget already included some austerity measures with the objective of correcting the fiscal imbalances, both from expenditure side and revenue side. On the revenue side, the main measures are the raise on taxes. These include the raise on the nominal VAT rate, from 21% to 23% and a one-off measure that cut roughly 50% of the Christmas bonus of both public and private workers. On the expenditure side, some measures are also projected. The key measures aim at reducing operational costs (cuts on government wages, payroll reductions) and social transfers (cuts on unemployment benefits and allowances). Other sectors, such as health and education, will also suffer some cuts. Some assets will also be sold, which will have a

onetime only impact on the public deficit, and public investment will also suffer some cuts.

In the subsequent years, the consolidation will follow the patterns we have already seen in the other two programmes. Expenditure cut will represent 2/3 of the total consolidation, whilst revenue increases will account for 1/3.

On the expenditure reduction side we find some measures that are not new. In fact, the government had already, in previous years, put up some policies and measures of the same nature. These include a further reduction of social benefits, and a tighter control of who benefits from them; pension freeze and special taxation on pensions above €1.500 will translate into savings of roughly 0.3% of the GDP in 2012. Additionally, transfers to local and regional administrations will be tightened, and local administrations will be reformed and simplified with a reduction of the number of municipalities and parishes. These reforms are projected to save the equivalent of 0.1% of the GDP in both 2012 and 2013. Transfers to state owned enterprises will also be slashed, saving the state 0.3% and 0.1% of the GDP in 2012 and 2013 respectively. Public services, such as education (0.1% in both years) will also suffer further cuts. Regarding staff, it will be gradually lowered and both wages and promotions will be frozen. This will translate into savings of 0.3% and 0.2% of the GDP in 2012 and 2013. Efficiency gains in public administrations, with the reduction of bureaucracy and elimination of redundant organs will contribute with an additional 0.3% in both years. Additionally, it is expected that the wage freezes (and the reductions already put in place in the previous year) will have a spill over effect on the private sector, further helping on the competitiveness gains. Finally, public investment will also suffer heavy cuts accounting for 0.3% and 0.2% of the GDP in 2012 and 2013. In total, the expenditure cuts will amount to roughly 2.1% and 1.4% of the GDP in 2012 and 2013.

To increase the revenue, tax hikes must focus on consumption rather than production. Raising taxes that focus on production, such as corporate tax, would have a negative impact on the competitiveness of the economy, and therefore would affect the growth of the exports that is, as we said, the main catalyst of the growth. Thus, the tax hikes will focus mainly on VAT and other taxes that do not directly affect production costs. The normal VAT rate is not expected to increase further, but some products and services currently taxed at the minimum and intermediate rate will be taxed at the

maximum VAT rate of 23%. This will net the government the equivalent of 0.2% of the GDP in revenue in 2012. Special consumption taxes, such as tax on tobacco will also go up, netting an additional 0.1% each year. Property taxation raises will wield a double purpose. On one hand, it will allow the government to collect an extra 0.1% in revenue ,each year, and on the other hand, it will make the costs of owning a house higher and therefore making renting more attractive, essential for a higher labour mobility.

Regarding income taxation, the rates will remain pretty much unchanged, but deductions will be slashed, which will raise the income tax revenue. The slash on deductions will be in diverse areas, but we can highlight the cut on mortgages deduction, which besides raising the government's revenues, will also work as discouragement for families to buy a house, and rely on renting instead. The impact of these changes will account to roughly 0.1% in each year, with changes on corporate taxation wielding a similar impact.

As we can see, the fiscal consolidation conducted by the government will not be just a slash on transfers (whether they are to State owned enterprises, local and regional administrations or social transfers) or a tax rising. Instead, these changes aim further. They also aim to improve the efficiency of the State services, to control costs and to provide a closer monitoring and risk management (especially from the State owned enterprises).

Similarly to the other two programmes, this one also projects a better planning capacity by the government. Finance Minister will see his powers increased, and will be responsible for projecting fiscal targets for all State organs. This will require the creation of multi-year budget plans for the diverse organs with clearly defined budgetary limits, allowing a better tracking of slips.

Worth a special mention, is the reform expected for the health system. The reform will yield significant savings for the State, but without compromising the quality of services provided. In fact, the fragmentation of the health system in Portugal is an issue. Lack of communication between structures, lack of organization between hospitals for purchases and an inefficient use of communication systems have originated elevated costs in the past. A better organization of the services will yield massive

savings accounting for over 1% of the GDP in 2012 and 1% in 2013 and will also originate a better service quality to the taxpayers.

Another source of revenue, will be the privatisation of some of the State owned enterprises and public services. As we mentioned before, many of the State owned enterprises have been so far bottomless holes that accumulate high debts and forcing the government to inject millions of Euros. Thus, it makes sense to privatise some of these companies, freeing the government from this burden. In the transport sector, the Portuguese airliner TAP and the company that is responsible for the maintenance of the Portuguese airports Aeroportos de Portugal will be privatised. Part of the railway company CP, will also be privatised. Passenger transportation will remain public, given the public nature of the service. In the banking system, and as we have mentioned before, the insurance branch of the public bank CGD and the nationalised bank BPN will also be privatised. In the communications sector there are also plans for the privatisation of the postal service, CTT. Lastly, in the energy sector, the government still has a large presence in companies such as GALP, EDP and REN, which will be sold. The sale of these shares will be also accompanied by the opening of these sectors, allowing external competition, and promoting a better efficiency. The consequences of these privatisation processes will be, more competition on sheltered sectors that will be opened, attraction of foreign investment, and above all, it will net the government roughly €5 billion that will be used to reduce debt. Further privatisations might occur as they are identified by the government throughout 2012. The state owned enterprises that are not subject to privatisation, will be subject to a streamlining process. Some will be merged with others, to create synergies, reduce costs and hopefully reduce debt. This will make these companies more attractive for privatisation in the future.

Lastly, we also have the public-private partnerships. These will go through a review process with the objective of assessing the real costs and risks involved. A renegotiation of some of these partnerships is also expected, and will yield the government some substantial savings, especially if we take in account that the annual costs associated with the public-private partnerships account to more than 0.5% of the GDP, value that will peak at over 1% in 2017. New contracts will be avoided until these assessments are completed, and will only be made under special circumstances.

We will now turn our attention to the third pillar of the programme. This pillar focus on structural reforms, with effects that are not observable on the short run, but that are essential to correct the deep structural problems of the economy, improving its competitiveness and, ultimately, contributing to a steady and sustainable growth.

One of the most important structural reforms will occur in the labour market. As we have noted before, the Portuguese labour market is characterized by an extremely high degree of job protectionism and low flexibility, which not only affects the adaption capacity of companies, but also affects the labour costs. Additionally, unemployment benefits are extremely generous, which can promote the inactivity, unemployment trap and raise the natural unemployment rate of the economy.

It is, thus, urgent to improve the conditions of the labour market. First of all, to tackle the unemployment trap problem, and stimulate job search, the unemployment benefits will be reduced. They will now last a maximum of 18 months, and the amount of the benefit will be gradually reduced throughout the duration. In addition, the programme also aims at making the system fairer, by covering a larger number of people (such as self-employed workers highly dependent of a single company) and reducing the minimum contributory period needed to benefit from the entitlement (now 12 months, opposed to 18 before).

Secondly, it is necessary to tackle the high degree of job protectionism. In fact, many companies lack the flexibility needed to adjust their operations because of the high severances that must be paid to dismiss workers. In order to go around this lack of flexibility, companies in Portugal have preferred fixed-term contracts that leave workers in a very precarious condition. Only by changing open-ended contracts, making them more flexible and with benefits that increase with the duration of the contract, authorities will be able to provide companies the flexibility they need, whilst ensuring workers that have been on a long contract do not lose their rights and benefits. On the other hand, severances should go down and fair-dismissal should be made less restrictive, allowing companies to restructure their activity when needed. Lastly, labour mobility also needs to be fomented. Not only geographically, but also from job-to-job (generous unemployment benefits might make workers more reluctant to accept job-to-job mobility and prefer the high severances and generous unemployment benefits). To tackle the first problem, various reforms will be put in place in other sectors, such as the

housing sector, where renting will be incentivised, giving workers more freedom to move geographically. Regarding the second problem, it can be sorted by making part of the severance portable and allowing it to be taken to the new job.

We also mentioned a problem regarding the low flexibility of the working times. Sometimes, companies are required to adapt their output to cyclical demand conditions. A lack of flexibility regarding the working times will leave little flexibility to the companies. Thus, it is necessary to, on the one hand, reduce overtime costs, allowing companies to answer demand peaks at lower costs and, on the other hand, allowing a better flexibility of working time through, for instance an hour bank, allowing companies to transfer working times from low activity periods to peak periods without having to pay overtime.

Another important component that made unit labour costs go high during the last decade were the wages, which have been constantly growing more than productivity. It is therefore necessary to make sure wages developments follow closely the productivity developments. Reducing the power of collective negotiations is a good way to achieve this objective.

Lastly, one of the problems of the labour market needs to be tackled in another sector. Tailoring the education sector to the needs of the labour market will improve the match of labour demand and supply. Additionally, despite of the high investment in this sector, the results have been, in some cases, disappointing. Improving the autonomy of schools, and making their funding dependent on the performance rather than on the number of students will help improving the performance without requiring a larger budget, and thus, improving the skills and formation of workers.

We have mentioned the reforms on the housing market as being essential for, on the one hand, a successful reform on the labour market and, on the other hand, reducing household indebtedness, helping the banking system reducing its exposition to risk. Incentivising renting, instead of acquisition is essential to ensure labour mobility. In order to achieve this, tax benefits on house acquisition need to be discontinued and house renting legislation needs to be changed, providing landlords a higher flexibility. This requires two main changes. First, older contracts with rents that have been frozen and that have been transferred between relatives must be able to be updated, with rents that actually reflect the market value of the house and market conditions, so that owners

are incentivised to invest and restore their old apartments in city centres that, in many cases, have been abandoned. Secondly, administrative procedures, especially the ones regarding evictions must be made less cumbersome and more agile, allowing them to be concluded more swiftly and without major prejudice to the landlords, both in time and money. The benefits of a flexible and stimulated renting market go beyond larger labour mobility. Higher labour mobility will allow the government to organise public transportations systems more efficiently which will be translated into economical and environmental savings.

When we previously addressed the privatisations that will be carried out, we also mentioned the fact that some key sectors were sheltered and ergo needed to be opened up. In this context, the programme foresees, under the structural reforms, the opening of some key sectors of the economy, stimulating investment and competition.

On the energy sector, Portugal had only one electricity provider until recently. Now that the sector is slightly more open and new providers entered (some of them from Spain, with whom Portugal decided to create a unified electricity market), we find that the liberalisation is not yet complete. Prices are still regulated, and competition is not fierce given the protectionism that still persists. It is therefore, necessary to improve the competition by deregulating prices, and removing subsidies (such as the rents associated with the production from renewable sources). To make sure this liberalisation works, the powers of the authorities must be strengthened, in order to be able to intervene should there be collusion.

The transportation sector will also be subject to reforms. Portugal has a privileged location in Europe, from which it is not benefiting from because of the lack of articulation of the different means of transport. It is therefore necessary to make the system more effective, improving cost-efficiency and enhancing the articulation between the different means of transport. The different companies will be also managed in a more private perspective, depending less on state intervention and allowing them to pursue profitability.

In the communications sector, the reforms will aim at decreasing entry barriers and making it easier for consumers to switch operators, incentivising, yet again, competition. A few reforms will also be carried out in the postal sector, bringing its liberalisation further ahead allowing more competition between the different companies.

Lastly, sheltered services such as pharmacists and lawyers, amongst others, will not be completely liberalised, but restriction will eased, allowing an easier access by professionals.

All these reforms, aiming to improve the efficiency and competition in key sectors of the economy will require three things. 1) judicial sector must be able to keep up with the number of processes; 2) competition authorities must be able to enforce competition laws to avoid collusion; 3) Administrative business procedures must be quicker. Regarding the changes in the judicial sector, it should be made more agile, less cumbersome. This will require a better reorganization of assets and staff, and the creation of specialized courts for certain types of disputes, freeing the regular courts and allowing swift resolutions of cases. This will have a positive impact on the Portuguese economy, as it might attract foreign investment. Secondly, it is essential to ensure that competition rules are obeyed. This means strengthening the powers of the authorities and allowing them to intervene. Additionally, it also means that the State should also drop the special right it still detains in some private companies, which can affect the dynamics of competition. Third, the administrative procedures associated with the creation of companies should be made less bureaucratic, more agile, and quicker. This will result in attraction of foreign investment, essential to the recovery of the economy and employment creation.

As we can see, the programme for Portugal, like the other two, aims at improving the competitiveness of the economy, allowing it to get back on the trail of growth, through exports, whilst reducing the weight of the State in the economy. This will be achieved through a set of structural reforms that will promote deep changes in many aspects of the economy and correct many of the distortions that exist. The funding from the international authorities will allow Portugal to finance these reforms, but will not keep the country completely away from the markets, as some short term debt issuing will still occur. Despite this, some risks still exist and might affect the successful implementation of the programme. Additionally, the programme will also promote the correction of the government imbalances that have been building up in the years preceding it and that were creating a major risk for the economic performance of the country.

Regarding these risks, we can highlight the high degree of dependency of external economic developments since the main growth catalyst will be exports. A downside review of the performance of Portugal's main trading partners can have a detrimental impact on the performance and implementation of the programme. Additionally, the austerity measures that will be put in place in order to correct the imbalances will have a negative impact in the performance on the economy. Even though the adjustment programme foresees that impact, a lot of uncertainty still persists. Private consumption can drop more than expected and unemployment rate can rise more than planned. In case any deviations occur, it will have an impact on the consolidation efforts whether it is through lower revenues or higher than expected expenses on social and unemployment benefits and it will also affect the performance of the economy. It is therefore necessary to ensure the programme is implemented in a timely manner, and ensuring that all deviations that occur can be tackled without major costs to the economy.

Regarding the banking system, the programme foresees up to €12 billion to help the recapitalizations efforts. Variations in the real amount needed will, of course, change the debt evolution, and affect both the implementation of the programme and performance of the economy. Additionally, the deleveraging process can also have a worse than expected impact in the economy through lower than expected credit creation.

Lastly, we have other risks, similarly to what we have spotted in the other two programmes. Differences in the interest rates paid for the debt or growth rates can have a detrimental impact on the evolution of debt dynamic. Inflation can also play a major role, as a low inflation would help the competitive adjustment, but would have a negative impact on debt. Market confidence is also an important source of risk. One of the main objectives of the adjustment programme is to regain market confidence so both government and banks can finance themselves at sustainable costs. However, this variable is not directly controlled by the government and, therefore, can present a risk. The programme expects a very gradual regain of confidence by the markets, but a negative evolution on the performance of Portugal, Greece, Ireland or even other European countries whose situation has also been degrading over time can dent the recovery of this confidence and delay the access to the markets even further.

On table 3, we can find the summary of the past performance and forecasts for the Portuguese economy, according to the Economic Adjustment Programme.

Table 3 - Evolution and projections of the main economic indicators for Portugal (values in red are forecasts)

	2009	2010	2011	2012	2013	2014	2015
GDP growth rate (%)	-2.5	1.3	-2.2	-1.8	1.2	2.5	2.2
General Gov. balance (% of GDP)	-10.1	-9.1	-5.9	-4.5	-3.0	-2.3	-1.9
External Public Debt (% of GDP)	83.0	93.0	101.7	107.4	108.6	107.6	105.7
Unit Labour Costs (%)	3.2	0.3	0.7	0.4	-0.4	-0.2	0.0
Unemployment rate (%)	9.6	10.9	12.2	12.9	12.4	11.6	10.6

Source: Memorandum of Understanding

4.4. Programme design comparison

We have now finished analysing each one of the programmes in the conditions they were originally created. As we can see, the three countries share some of the problems which led to the necessity of requesting international aid, as well as the programmes that also share many of the characteristics.

Regarding the factors that led to the request of international assistance, we can conclude that they are in accordance with the findings we made previously. Some of the studies we have analysed, date from the 80ies, and whilst they already show some age, their conclusions are still pretty recent, as the factors they found significant are, in most cases, the factors that are also behind the three adjustment programmes in analysis. The studies also focused on other factors that are not entirely related to the economic aspects of the economies. Whilst these are not directly focused on the programmes themselves, we can find a certain degree of political influence in the programmes. In fact, if we analyse all three programmes as a whole, inside the context they are inserted, we can conclude that what is at stake is much more than just the future of each one of the economies. Rather, it is the future of the European project and the future of the Euro. Thus, it is not at all unexpected, if political pressures from the leaders of the EU were being exerted for the approval of these programmes. A divergence in the performance of its member states, in some key macroeconomic factors, such as growth, labour costs, inflation, amongst other, can create a sizeable gap that will result in some countries growing at steady rates and with balanced external accounts, with another group of countries evidencing a stagnated economy, a progressive loss of external competitiveness and external imbalances that do not stop building up. For a monetary union to work, a certain degree of homogeneity between the economies is needed. Regarding the Euro Area, the criteria for this homogeneity was set back in 1992, with the Maastricht Treaty. This treaty set that, in the year prior to the adhesion, countries wishing to join the Eurozone had to fulfil the following criteria:

1. Inflation rate cannot exceed (average of best three EU countries) + 1.5%.
This aims at ensuring price stability. If a country has a high inflation, it will affect their competitiveness negatively which inside a monetary union cannot be corrected with currency devaluation;

2. Government deficit should not exceed 3% of the GDP, unless under special conditions. A high government deficit needs to be financed. This is usually done by the central banks (through emission of monetary mass, albeit the negative impacts it has in the economy) or through loans on the international markets. A country with a high government deficit inside a monetary union will not be able to print money to offset the deficits, and successive borrowings from the international markets will dent market confidence which will result in extremely high and unsustainable financing costs;
3. Government debt should not exceed the 60% of GDP, unless under special circumstances. The aim of this target is similar to the previous. It is essential to ensure that the government debt stays at sustainable levels. An increasing government debt reflects persistent imbalances in the government accounts that are constantly being financed through external markets which, at some point, will start questioning the real capacity of the government to pay back its debt;
4. Long term interest rates cannot exceed (average of best three EU countries in terms of price stability) + 2%. The interest rate used in this criteria are the yields on 10 years government bonds This aims at ensuring that all countries share the same set of fundamentals, as a change on fundamentals or structural debilities will trigger a negative response by the investors;
5. Stable exchange rate, whose purpose is to ensure countries can stay in a growth path without depending on currency devaluations. Countries with their own currency can use the devaluation to increase competitiveness and correct external imbalances. Inside a monetary union, this is not possible.

It was thought that if countries fulfilled these requisites, they would be apt to join the Euro in a stable manner, without major problems.

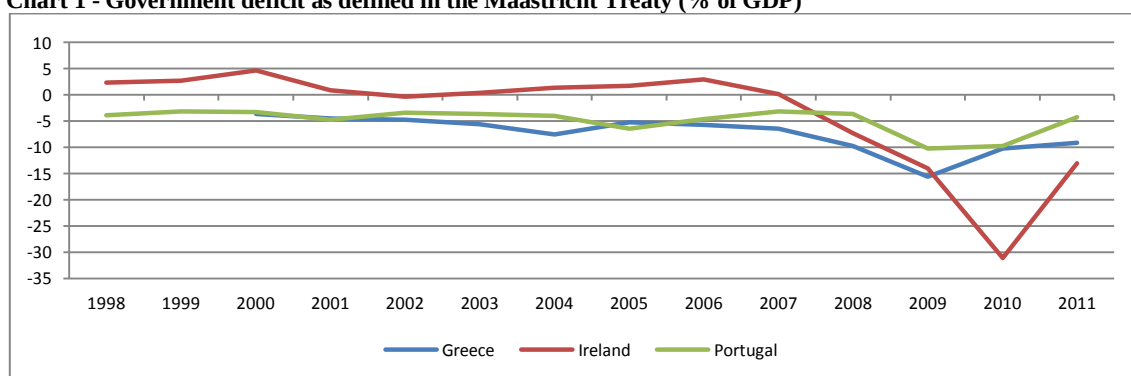
Without going into further details regarding the fulfilment of these criteria (it is not the aim of this study to analyse whether the countries fulfilled or not the criteria or

assess under what conditions did each country enter the Euro), we can say that both Portugal and Ireland managed to adhere in 1999, as they fulfilled the criteria in 1998, whilst Greece only fulfilled the criteria in 2000, and therefore was only accepted in 2001, still before the physical introduction of the Euro.

Even though the countries were able to fulfil the criteria, after the introduction of the Euro, they have been registering persistent violations.

Regarding the government deficit, we can clearly see on Chart 1 that, after 2002, the government deficits have been worsening in all countries, despite some sporadic and slow recoveries. After a period, during the second half of the 90ies, where the countries have been reducing their deficits (and even generating superavits, in the case of Ireland) in order to fulfil the criteria, the deficits started slowly deteriorating. Greece, that registered a deficit of 3.7% in 2000, achieved a deficit of roughly 10% in 2008. In its turn, Portugal, who was admitted in the Euro with a deficit of 3.9%, it saw its deficit deteriorating from 2002 onwards and registered a 10.2% deficit in 2009. Ireland detains the most dramatic deterioration. It was the only of these three countries that managed to achieve superavits during the second half of 1990s and the first half of 2000s. However, from 2007 onwards, the Irish government deficit declined remarkably, hitting a dramatic 31.2% deficit in 2010 (once again, we remember that a large part of the deficit deterioration during the second half of the 2000s was due to intervention in the banking sector).

Chart 1 - Government deficit as defined in the Maastricht Treaty (% of GDP)

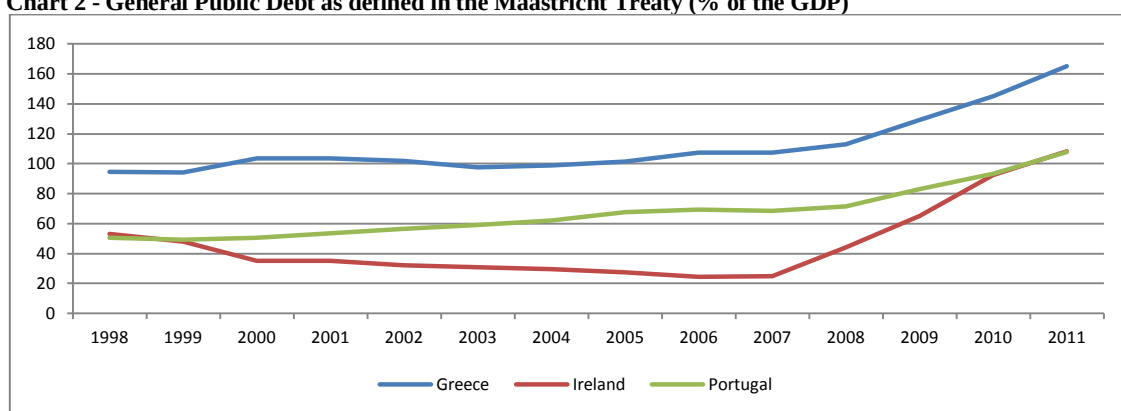


Source: Eurostat

Regarding the public debt, we can find similar conclusions (Chart 2). Greece was the only country, of these three, that was accepted without fully complying with this target. In fact, the Greek public debt always hovered around the 100% of the GDP

with an upwards trend that has intensified in the last five years. Portugal was able to fulfil the target of 60%, but since 2000 it has been climbing steadily and at a reasonable pace. Ireland, who also achieved the target of 60% in 1998, was able to improve it even further achieving an impressive 24.5% in 2006. Since then, and in a large part due to the intervention in the banking system, the debt ratio climbed dramatically, surpassing the 100% barrier in 2011. This is not at all surprising. If we take in account our findings in previous studies, we can clearly see that, the external debt ratio is indeed a good predictor of participation, and the data shows reasonable evidence of that.

Chart 2 - General Public Debt as defined in the Maastricht Treaty (% of the GDP)



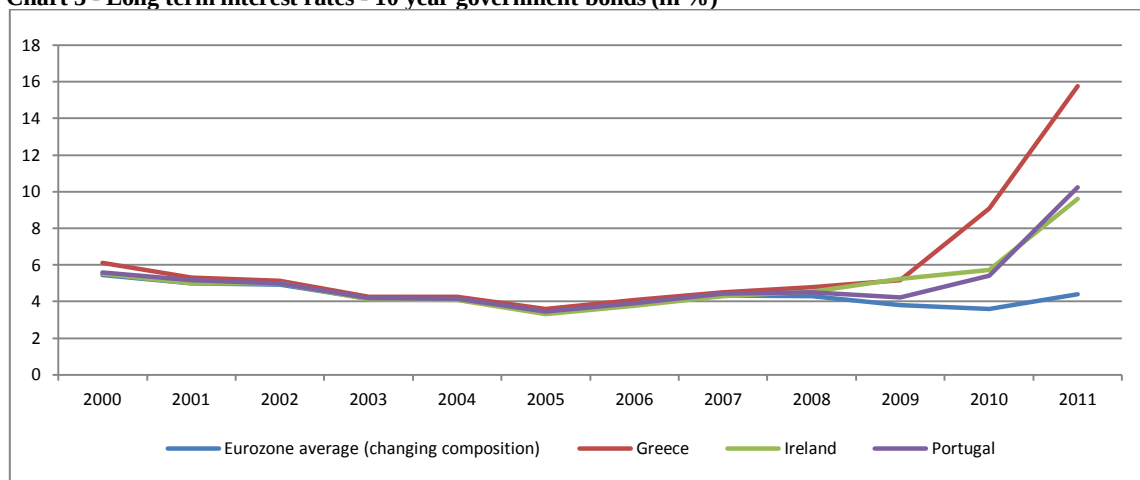
Source: Eurostat

Long term interest rates also show a negative evolution. Since the adhesion to the Euro and consequent adoption of a strong currency, all three countries were able to lower their long term interest rates. However, as the 2008 crisis struck and debilities started revealing, these rates started diverging. As we can see on Chart 3, until 2007, the long term interest rates of all three countries were pretty much the same as the average of all Eurozone members¹. Greece started at a higher rate than any of the other two countries, but quickly caught up. In 2008, as the debilities of the Greek economy started revealing, the long term interest rate started diverging. In Ireland, the rates also started diverging when the Government had to carry out a sizeable intervention in the banking system, which dented market's confidence. Regarding Portugal, it was able to slightly lower its interest rate in 2008, following the natural evolution of the Eurozone average.

¹ We decided to use the average Eurozone long term interest rate instead of the average of the three countries with the lowest inflation, as those countries are sometimes considered assets of refuge, which could bias the real natural evolution of the long term interest rates in the Eurozone.

However, we can already notice some diversion which can be partially attributed to some contagion effect from the other two countries. As the real debilities of the Portuguese economy started revealing, the interest rate skyrocketed, as can be seen from 2010 onwards. Once again, these results are not surprising and point in the same direction as the studies we analysed before. Difficult market access is often one of the causes behind the request for external interventions and the climbing of the interest rates on long term government bonds clearly shows an increasingly difficult in accessing these markets.

Chart 3 - Long term interest rates - 10 year government bonds (in %)

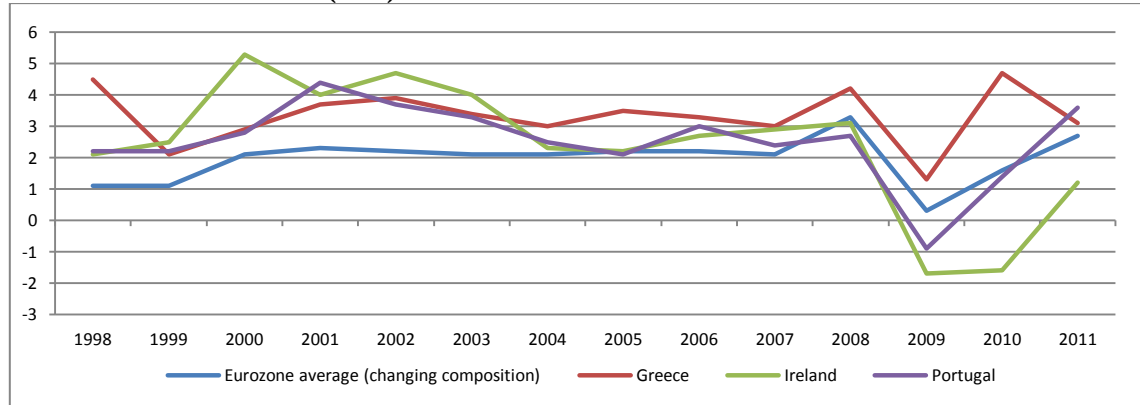


Source: Eurostat

The last of the variables included in the Maastricht Treaty is the inflation rate (Chart 4). As we can notice, during the first half of the decade, all three countries had an inflation rate higher than the Eurozone average. In the Greek and Irish cases, this can be explained by their high growth. As we have noticed before, both Ireland and Greece registered a remarkable growth during the period preceding the 2008 crisis. In Portugal however, we register a somewhat high inflation rate, whilst growth remained low, i.e., we registered an episode of stagflation. In this case, the high inflation registered in the country, promoted a loss of external competitiveness during the decade that had an impact on the growth and stagnated the economy. During the second half of the decade, we notice a sharp drop on the inflation rate that reflects the sharp economic cool down that happened. Nevertheless, it is not easy to take a straightforward conclusion

regarding the impact of inflation on the problems each country was facing, which goes in accordance with our findings on previous literature.

Chart 4 - HICP - Inflation rate (in %)

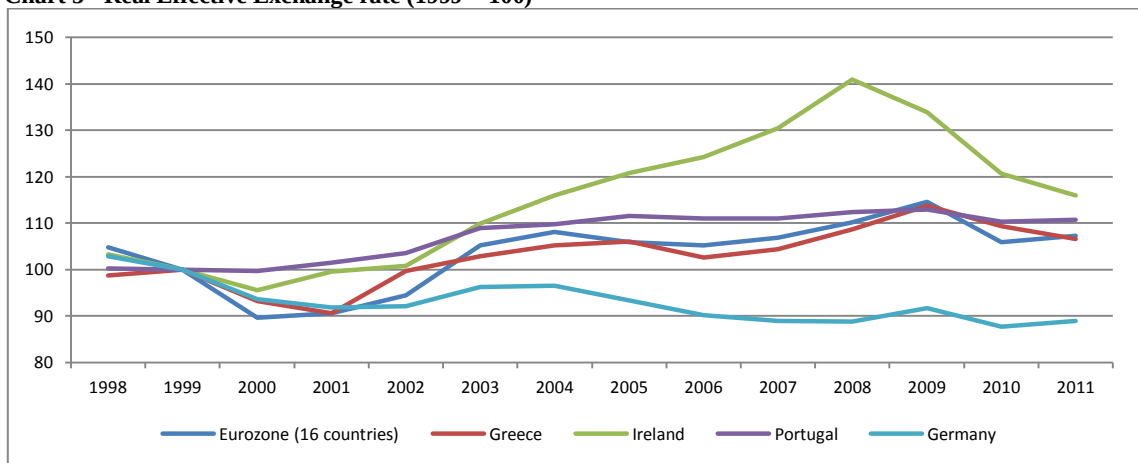


Source: Eurostat

We have now finished analysing the variables included in the Maastricht Treaty. It should, however, be interesting analysing some of the other variables that were found to be important in previous literature.

Regarding the exchange rate, this variable cannot be analysed given the fact these countries are inside a monetary union. We can however analyse the evolution of real effective exchange rate, which translates some of the competitiveness developments that happened in each country. Both Portugal and Ireland show what we have identified earlier, a REER considerably higher than the Eurozone average (Chart 5), which led to a progressive loss of competitiveness. Regarding Greece, even though it was able to follow the developments of the average Eurozone, its REER has still appreciated considerably, especially if we take in account the developments of a competitive Eurozone country such as Germany. When comparing this to the conclusions we identified earlier on previous literature, we once again find a concordance. Countries with a higher REER have a lower competitiveness and a higher likelihood of requesting external aid.

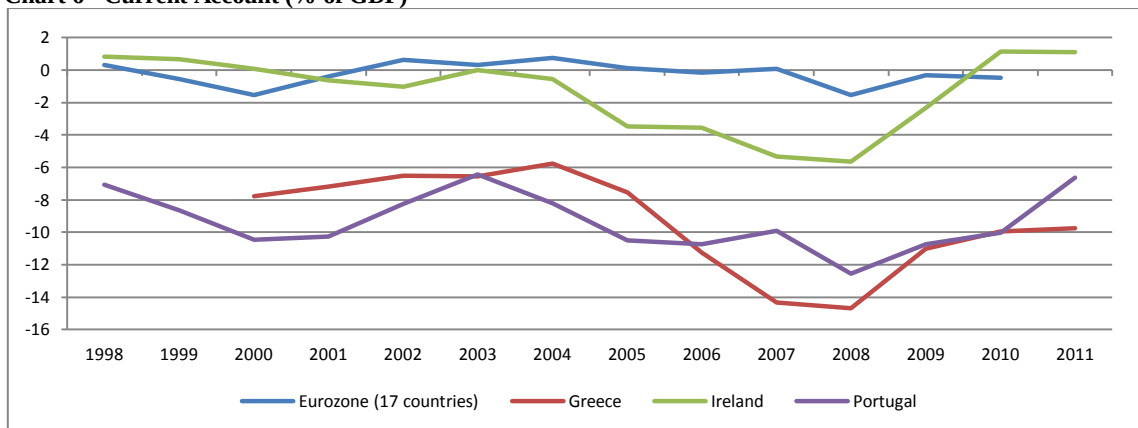
Chart 5 - Real Effective Exchange rate (1999 = 100)



Source: Eurostat

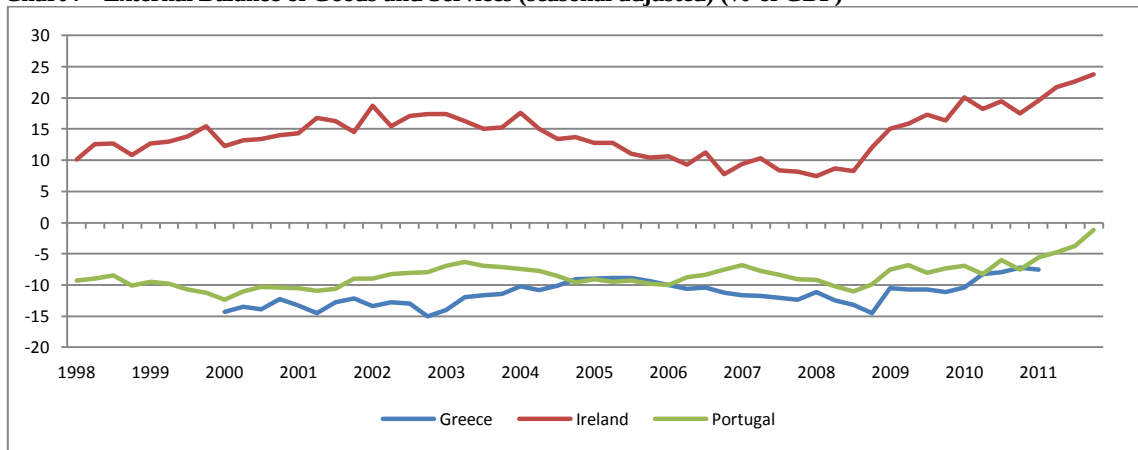
Another important factor worth analysing is the Current Account. As we mentioned before, the conclusions regarding this item are not consensual. Some authors reported that current account deficits are important, whilst other reported them to be insignificant. Chart 6 clearly shows that in the years preceding the intervention request (around 2004), the Current Account of all three countries started deteriorating. After the 2008 crisis burst, we can see a remarkable improvement in all three countries. If we analyse the evolution of the External Balance of Goods and Services (EBGS), we can see that it is in part responsible for this improvement (Chart 7). Ireland improved its EBGS by nearly trebling the values registered in 2008. Greece managed to half its deficit in just two years, whilst Portugal near balanced it, after having a deficit of almost 10%.

Chart 6 - Current Account (% of GDP)



Source: OECD

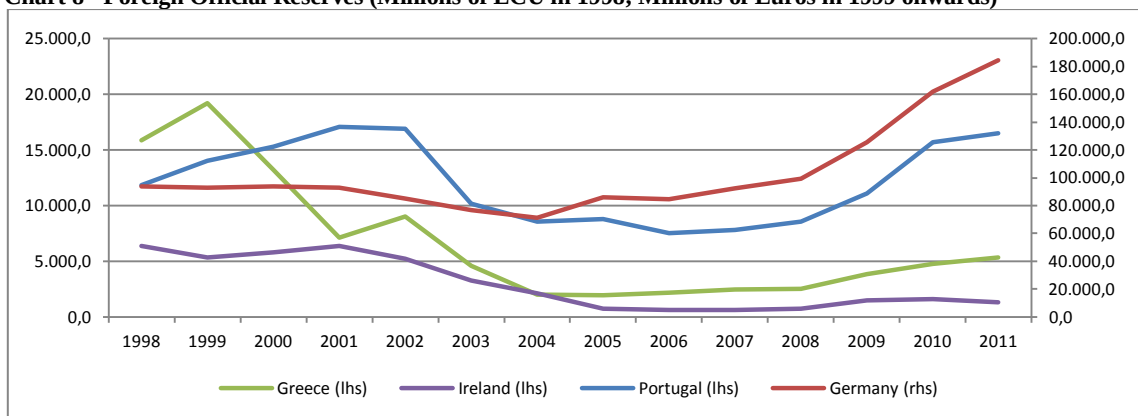
Chart 7 - External Balance of Goods and Services (seasonal adjusted) (% of GDP)



Source: Eurostat

The amount of international reserves, as we have seen in previous literature, is not a consensual factor. Some studies report it to be important, whilst other studies find no relation between this ratio and the likelihood to request an external intervention. In fact, by analysing Chart 8, it does not appear to be any kind of relation between the evolution of the amount of reserves and the occurrence of an adjustment programme. We do notice a slow down on the growth of the reserves in the years preceding the adjustment programmes (Ireland even stabilized and dropped slightly in 2011), but the evidence is not strong enough to suggest the existence of a strong relation between these two events.

Chart 8 - Foreign Official Reserves (Millions of ECU in 1998; Millions of Euros in 1999 onwards)²



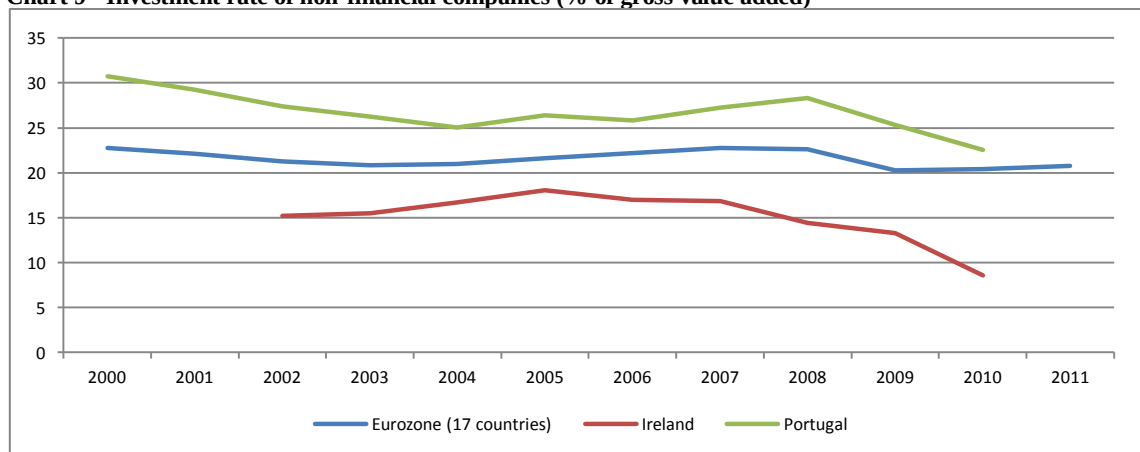
Source: Eurostat

² In this case we opted for using Germany as the control, as using the Eurozone total would bias the total given the changes that occurred in the Eurozone composition throughout the decade.

Regarding Investment, we can clearly see in Chart 9, that in the recent years, the investment rate has been declining in both Portugal and Ireland (data for Greece was not available), contrary to the Eurozone tendency. This comes as no surprise though. As we have identified earlier, the banking system of these countries was subject to a lot of stress, having banks been recently required to increase their capital ratios. Consequently, the credit has been more expensive and credit creation slower, which had a negative impact on investment. As Chart 10 shows, the total amount of loans conceded to non-financial corporations has indeed slowed down. In Greece we can see that since 2010, the level of loans has stabilised, whilst in Portugal it has even declined. In Ireland, it kept growing, but at a slower pace when compared to previous years.

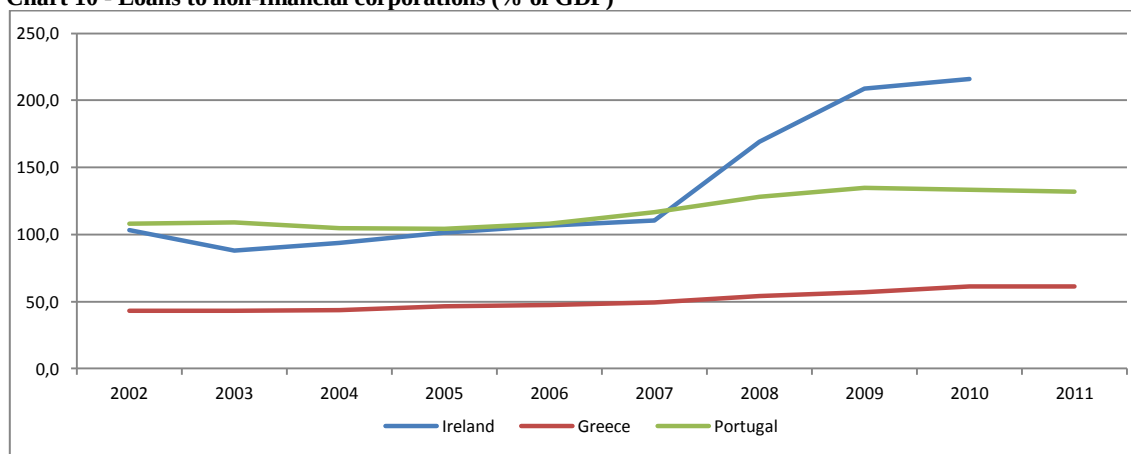
On the other hand, the drop on investment can also be attributed to a substantial drop on domestic demand. In fact, if we look at Chart 11, we can see that in all countries the domestic demand has been retracting since 2008, and is expected to continue retracting at least until 2013. As a consequence, business will review their production plans and adjust investment accordingly.

Chart 9 - Investment rate of non-financial companies (% of gross value added)



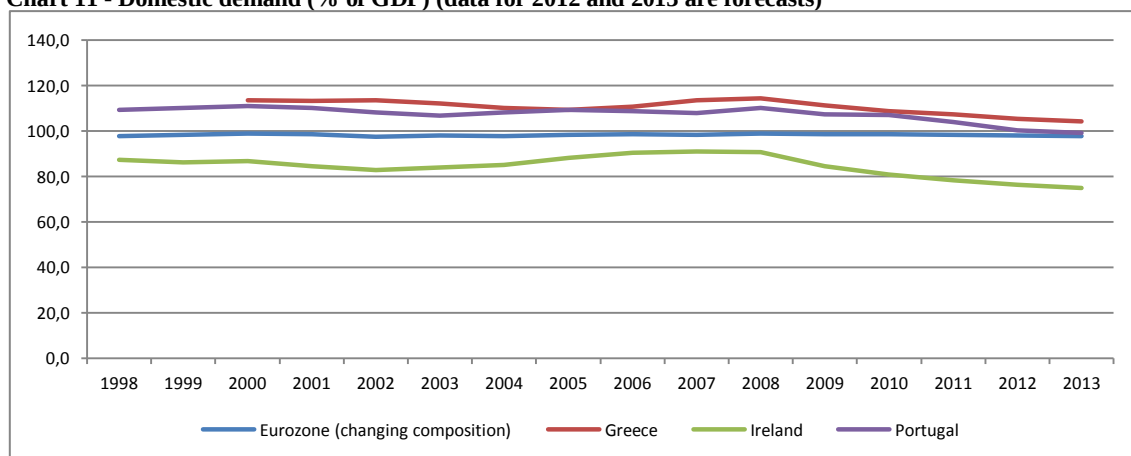
Source: Eurostat

Chart 10 - Loans to non-financial corporations (% of GDP)



Source: Eurostat

Chart 11 - Domestic demand (% of GDP) (data for 2012 and 2013 are forecasts)

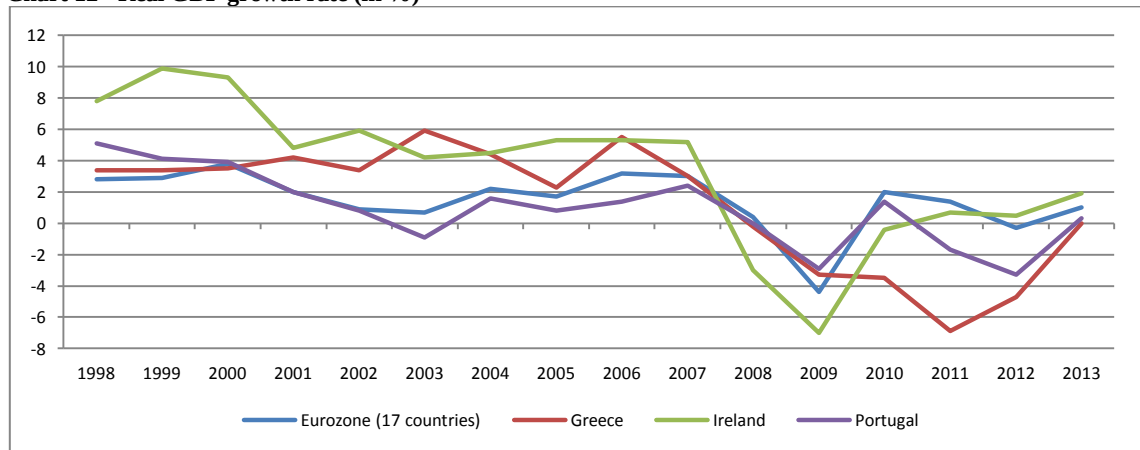


Source: Eurostat

Lastly, we can focus on the growth rate. With only one exception, we found that the growth rate or the level of GDP (depending on the approach of each author) is a relatively good indicator to predict the demand for funds. In our cases however, Chart 12 shows small evidence that growth rate is a good indicator. We can see that both Ireland and Greece, albeit some instability, were experiencing a good growth until 2007. With the 2008 crisis, they entered recession, following the trend of the Eurozone countries average. In the years after, whilst Greece entered a deeper recession, Ireland was able to recover and register a small recession of just 0.4% in 2010 and growth from 2010 onwards. Regarding Portugal, it was able to get out of the 2008/2009 recession relatively well with a growth rate of 1.4%. In 2011 however, it went back into recession, from which it is expected to recover only in 2013. In conclusion, there is little evidence that GDP growth rate is a good predictor of the occurrence of an adjustment

programme. Whilst for Greece, it was indeed a good predictor, the same cannot be said Portugal, and even less for Ireland, who has been registering positive growth, yet low, ever since the crisis.

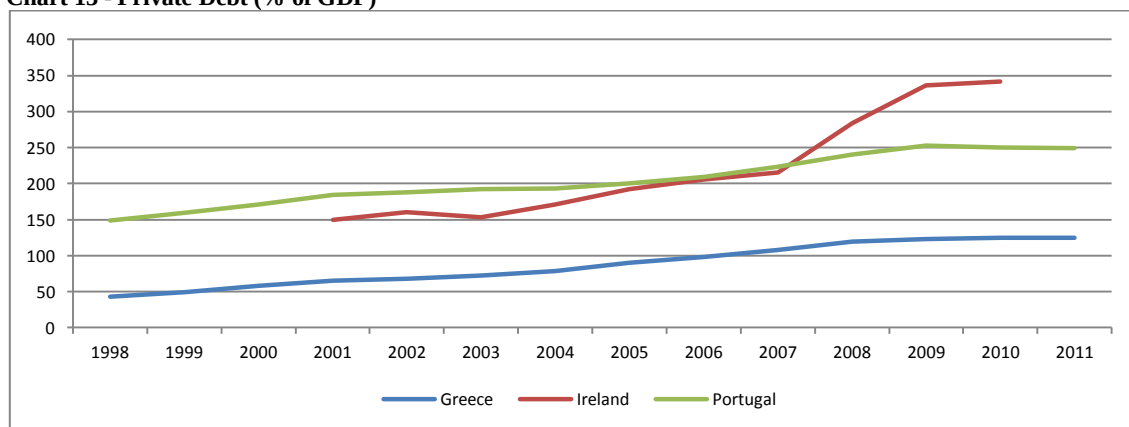
Chart 12 - Real GDP growth rate (in %)



Source: Eurostat

It should be also worth analysis the evolution of Private Debt. This variable is not amongst the ones identified as being important by previous literature; in fact, it has been rarely used at all. However, given the differences between the three cases we are analysing have, the evolution of private debt could give us another differentiating factor. As it can be seen on Chart 13, all three countries perform differently. Greece shows a very solid performance with its private debt starting at just under 50% in 1998 and hitting just 125% in 2011, always much lower than the other 2 countries. Regarding Portugal, it shows an evolution similar to Greece's, with a steady, yet not dramatic, climb of private debt that hit 252% in 2009, which is a somewhat high value. Ireland had the most dramatic evolution. Starting at values lower than Portugal's, it started catching up from 2003 onwards, and from 2007 until 2009, the private debt ratio has skyrocketed, to finally stabilise again at almost 350%, which is an extremely high value, hinting that high private debt is indeed behind the problems of the banking system.

Chart 13 - Private Debt (% of GDP)



Source: Eurostat

As we have seen so far, through the description of the programmes and a statistical data comparison, the problems the three countries are facing are different, despite some common problems. For instance, we have seen that the loss of competitiveness is a common problem amongst all three countries, albeit at different intensities and for different reasons. In Greece, we have witnessed a persistent growth of wages outpacing the growth of productivity due to the high inflexibility of the labour market. In Ireland, the growth of wages was promoted by the remarkably good performance it had before 2008. Good economic performance promoted employment which in turn tends to shoot wages up. In Portugal, we found out the loss of competitiveness is due to the specialization of the economy in labour-intensive sectors where other countries have been emerging, a high degree of job protectionism (which hampers labour rotation) and the existence of sheltered sector, especially in the non-tradable sector, that is able of practicing higher wages and therefore absorbs much of the skilled labour, amongst others.

The fiscal imbalances are also of different natures. Ireland was doing extremely well, until 2008, when the government was forced to intervene to ensure the stability of the banking system which increased public debt dramatically. On the other hand, the private sector is not exempt from guilt. Private debt in Ireland has been climbing dramatically, mainly since 2007, which placed a serious burden on the banking system, especially given the increasing amount of nonperforming loans. The loss of competitiveness also did not help, as it started stagnating the economy, turning the external imbalances unsustainable.

In Greece, the external imbalances came from persistent imbalanced budgets and non sustainable growth. Budgets have always been designed in an overoptimistic manner, considering revenues higher than they actually turn out to be and expenses always underestimated (which goes in accordance with the findings by JOYCE (2004)). Additionally, an overgenerous State and legislation further contributed to the imbalances and drop on competitiveness. High tax evasion and corruption is also a culprit. On the private side, a boom on private consumption after the adhesion to the Euro further deteriorated the external imbalances as it raised imports, however, private debt remained low.

In Portugal, the large external imbalances are a result of persistent unbalanced budgets. Low efficiency on public services, administrations and state owned enterprises, coupled with anti cyclical expansionary policy in the years after the crisis with high capital investments (usually through public private partnerships) and a somewhat generous social benefits system led to deep budget deficits and external imbalances. Private indebtedness is also partially responsible, but not to the extent observed in Ireland.

The banking system problems hit the three countries with different intensities. In Ireland, the problem of the banking system was the main factor that led to this adjustment programme. A high degree of indebtedness by the privates, coupled with the real-estate bubble burst, a slumping economy and an increasing ratio of nonperforming loans, led to serious problems in the banking system that faced severe exposition to risk and toxic assets, suffering heavy losses and, consequently, forcing the government to intervene in order to ensure the stability of the system. In both Greece and Portugal, the banking system did not face major problems. In Greece, the more serious problems encountered were related to a rise on non performing loans, albeit not at a dramatic pace, and exposition to government debt, that affected the banks' credibility on international markets. The raise of capital ratios was met by banks shareholder and some help from the government (public capital injections). In Portugal, despite of the nationalisation of a bank and the insolvency of another one, the banking system performed fairly well, with new capital ratios being met by private shareholders. Indebtedness by the privates is somewhat, yet not absolutely, unsustainable.

Nonperforming loans have been increasing but are still at a sustainable level and do not pose any major concern at the moment.

Regarding the programme design, we can also find some similarities. In fact, if we analyse the general programme design, without taking in account the precise measures for each country, they are pretty much the same programme. All three programmes foresee an adjustment based on three main pillars: 1) Securing the banking system; 2) Fiscal consolidation and correction of imbalances; 3) Structural reforms to enhance competitiveness, especially external competitiveness. This goes in accordance with the findings of BUTKIEWICZ and YANIKKAYA (2004) who also found the IMF programmes to be based on the pillars of fiscal consolidation and structural reforms to improve competitiveness. The pillar regarding banking system sustainability is a consequence of the genesis of the 2008 crisis. Furthermore, all three programmes foresee an economic growth based on exports, confirming the findings of SANTAELLA (1996), who noticed that countries intervened by the IMF are more subject to external shocks than those who fare without intervention. Within each of these pillars we can find similarities as well. For instance, in the banking system all three programmes foresee the deleverage of the banking system and a credit line to help the recapitalisation of the banks, should they fail to carry it out through shareholders or other market instruments. In Greece, this amount is up to €10 billion, up to €35 billion for Ireland (understandable, given the fact the banking sector is in the centre of the Irish crisis). For Portugal, this line is set up to €12 billion. The banking supervision authorities will also play a major role in all three cases and will be responsible for a timely diagnose of potential further problems in the banking system, especially in Ireland. Containing the rise on nonperforming loans in all three countries is also essential. As expected, there are also differences in the measures for the banking system. Regarding liquidity assessment reviews and capital assessment reviews, they will be carried out in a prudent and rigorous manner in Ireland in order to assess the real needs and losses of the banking sector. Additionally, troubled banks will either be dissolved or merged, after assessing their viability. In order to absorb the toxic assets, and help cleaning up the banking system, the entity created with that objective will continue to operate. In the other two countries, the banking system will be able to issue

bonds backed by the government in order to achieve lower financing costs. Stress tests will also be carried out to assess the strength of the banking system and their real capital needs. Lastly, apart from two troubled banks in Portugal (in part due to causes other than the crisis), no banks required special intervention, such as nationalisations.

In the fiscal consolidation pillar there are also some similarities. All three programmes foresee an adjustment mainly through expense cutting, with it representing 66% of the total consolidation efforts. Furthermore, all three programmes are front loaded, with the objective of recovering market confidence as soon as possible. The expense cuts will be mostly achieved through cuts on social benefits (such as bonus, unemployment benefits, amongst others), public servants wages, and an overhaul of the public administration, aiming at reducing ineffectiveness, cutting off redundant services and a better efficiency on regional and local administrations and other public services, such as health and education. Furthermore, multi-year budgets will be made with specific expenditure ceilings and, in all three cases, the finance minister will see his powers reinforced. Additionally, reforms will be promoted on the social security system with the aim of making it more sustainable, by raising retirement ages (Greece and Ireland), and cutting on pensions. Revenue raise will focus mainly on tax raising, especially VAT, either by increasing rates or transferring products from the reduced rates to the normal rates. Other tax rises include income, property taxes and special taxation on certain products (mostly luxury). In all three cases we do not find raises on taxes that directly affect productions costs of companies, as it would affect the efforts made into improving competitiveness. In Portugal, efforts will be made to improve the efficiency of state owned enterprises, allowing them to be less dependent on the State and public-private partnerships, which have been widely used and which will be renegotiated in order to reduce the burden for the State. Privatisations are also present in all three programmes. They will be an important source of revenue and will also help the State reducing its presence on the economy. They will mostly target sectors such as transportation and energy, sectors that are, in some cases, remarkably dependent from the State. In the banking system, the banks that were nationalised and that have proved to be profitable will be returning to the privates as well. In the case of Portugal, we will also witness the privatisation of non-core parts of the public bank CGD.

Lastly, structural reforms will also be carried out in all three countries. They will aim at improving the competitiveness, essential for an export-led recovery. All three countries foresee a wide set of reforms on the labour market in order to improve labour mobility, incentivise active job search and boost productivity. This will require some cuts on job protectionism, making it easier for companies to hire and dismiss workers, allowing them to better adjust to demand conditions. Additionally, it is necessary to foment the improvement of skills, especially in Portugal and Greece which will allow these two countries to diversify their economies to others where they can be competitive. In terms of diversification, Ireland actually has a much diversified economy, mostly in sectors of high added value and a-cyclical demand. Furthermore, the low reliance on domestic banking institutions by the exporting sector is a plus.

The existence of sheltered sectors, where competition and efficiency is low, is also a major problem that needs to be tackled. This will not only provide better services to the consumers, but will also allow the exporting sector (subject to intense competition) to be able to attract skilled workers. These sectors include the energy sector in all three countries, the railroad in Portugal and Greece, and Communications in Portugal. Furthermore, in both Portugal and Greece, measures will be taken to simplify business administrative processes, essential to the recovery. In Portugal, more structural debilities have been found. Judicial system is very cumbersome, and needs to gain some agility to keep up with the processes. Additionally, the renting sector needs to be revived, in order to enhance geographical labour mobility that, despite the small size of the country, is extremely low.

In essence, we can see that, despite some remarkable differences between the problems in the three countries, the programmes appear to have only little differences amongst them. All three rely heavily on fiscal consolidation and structural reforms to enhance competitiveness, characteristics that have been found to be typical in IMF programmes. The existence of a third pillar of adjustment (banking system) is justifiable given the origin of the 2008 crisis, and the fact that all three banking system, to a larger or smaller extent, were affected by it. This goes in accordance to the findings by MELTZER (2000), EASTERLY (2001) and STIGLITZ (2002), who have found IMF programmes to be more of a one-size-fits-all type, not necessarily attending to the needs and problems of each individual case.

Table 4 sum up our findings regarding the differences between the programmes.

Table 4 - Summary of the three programmes

	Greece	Ireland	Portugal
Banking sector	Did fairly well during the crisis and did not require any special kind of intervention. Some exposition to government bonds and some deposits outflow. Increasing dependence from the ECB for financing. Required credit line to aid recapitalisation efforts (€10 billion). Increasing nonperforming loans.	Centre of the crisis. Experienced heavy losses as a consequence of the real estate bubble burst that placed problems of sustainability. Nonperforming loans at a high level. Up to €35 billion to aid recapitalisation efforts.	Pretty solid banking system. Only two banks nationalised, from which one was dissolved. Credit line to aid recapitalisation efforts (€12 billion). Increasing ratio of nonperforming loans
Real-estate bubble exposition	Virtually non-existent	Blown-up and led to massive losses to both banking system and private investors	Virtually non-existent
Public sector	High imbalances throughout the years. Public debt climbing slowly, yet at a steady pace, and faster since 2008. Government deficits always above 3% in the last 10 years. High imbalances on local governments. Unsustainable pension system. Inefficient public administrations stimulate tax evasion and corruption.	Pretty solid performance in the years preceding the crisis. Registered superavits most of the time. Debt decreased steadily, hitting roughly 25% before climbing up dramatically again. Major imbalances in the government accounts due to the intervention in the banking system (Debt and Deficit).	Expansionary policy in the last few years led to high imbalances. Government deficit always above 3% since the adhesion to the Euro. Inefficient public administrations. Inefficient local and regional governments. Heavy burden from Public Private Partnerships and State owned enterprises.
Private indebtedness	Very low when compared to the other two countries. Did not increase much after 2008. It is not a major problem.	Stable until 2003. Increasing ever since. Skyrocketed in 2008. Became a major problem.	Similar to the evolution of the Irish private debt, but without the hikes since 2008. It is a problem.
External competitiveness	Growth based on non sustainable drivers. RER went up during the past decade.	Solid and based on sustainable drivers. RER appreciation, but still a competitive economy.	Specialization on labour intensive sectors where other countries have been emerging with lower labour costs. RER appreciation further led to the loss of competitiveness.
Labour Market	Cuts on public servants payrolls are expected to spill-off to private sector. It is also necessary to enhance the flexibility of labour market.	Measures needed to tackle labour mismatch and avoid inactivity and unemployment traps.	Extremely rigid. Does not promote labour mobility and does not provide companies with the needed flexibility. Labour protection is high and hinders job rotation.
Business environment and competition on sheltered sectors	Energy and Transport sectors must be unsheltered, as well as knocking down entry barriers in some sectors, to bolster competition. Easing the process of creating new businesses. Privatisation of many state owned enterprises.	Energy sector must be unsheltered, and many closed professions should have their entry barriers knocked down, allowing more competition. Review of the state owned assets in order to determine potential privatisations	Energy, transport, services and telecommunications sectors need to be unsheltered. Easing administrative bureaucracies regarding the creations and administration of businesses. Knocking down of entry barriers in some sheltered professions. Ambitious privatisation programme. Renting market revival and disincentive to house acquisition to promote labour mobility. Reform judicial system.
Other reforms			

4.5. Programme implementation

It is also worth analysing how the programmes fared initially. It is impossible to analyse the results, as they are still occurring at the time we write this. We can however, analyse their implementation, in the light of the conclusions we took from previous literature studies.

Regarding Greece, their programme started pretty well. In their first review, the authorities concluded that Greece had achieved pretty much all targets that were set. Despite a slightly higher inflation than expected, which is due to the general higher taxes, the programme was being implemented with remarkable success. Government bonds yields started decreasing. But some risks still persisted, especially on the public sector. Tax revenue has a risk of being lower than projected, which can compromise the fiscal consolidation. Other risks also persist in the public enterprises and local governments that can slip their budgets.

Reforms on the pension system had already started and are on a good way to turn the pension system into a sustainable one. Public administrations and services also started the needed reforms in order to increase efficiency and provide savings.

In the banking system, situation was still tight, and banks were still heavily dependent on the European Central Bank for financing. In this respect, the credit line to help the recapitalisation of banks was put in place, and legislation was passed with the objective of easing the position of the lenders in face of an increasing ratio of nonperforming loans.

In the product markets, reforms were also on track, with the reforms aiming at improving competition in sheltered sectors such as energy, transportation and services, already in place. Additionally, reforms will be carried out with the objective of improving cost efficiency in these sectors.

Concerning the labour markets, the reforms were advancing well before time. The bill that passed on the parliament eased dismissal conditions and reduced overtime compensations, whilst still maintaining a certain level of protectionism for older workers.

Regarding business environment, reforms are also on the way, and are expected to start producing effects soon, which will foster investment, competition and employment. In order to ensure competition, the Hellenic competition commission has

seen its powers reinforced. Furthermore, bureaucracy will be eased in regard of the absorption of structural and cohesion funds, which will allow a better use of these by companies.

Lastly, the privatisation plan has also been announced, however, it is still unknown the feasibility of all the proposed privatisations.

We will now take a quick look at the third review of the Greek programme that occurred six months after the first one.

In regard to the surprises observed during the first review, some still persisted. Inflation remained high and forced authorities to review their forecasts. Additionally, the situation in the banking sector still remained tight and international investor's still showed some reluctance regarding the future. Bond yields, which have decreased after the introduction of the programme, have started rising again.

Regarding the budget execution, some slips occurred, which led to a government budget deficit of €22 billion, above the €18.5 billion projection. Even though, most quantitative targets were met, but by a thin margin, hinting that budget execution for 2011 will be challenging and will require some additional measures to ensure the targets are met. Budget execution in 2010 was mostly hit by a higher than expected expenditure (especially in pensions, interests and other social benefits) and a lower than expected revenue, caused partially by a non-successful fight against tax evasion and a lower revenue due to the recession of the economy.

Structural reforms in the public sector are still undergoing, but some delays have been found, hindering a further progress. These delays are in part related to a very poor (yet slightly improved) fiscal information, especially on local administrations.

Regarding the privatisations, the programme has been expanded, and now hopes to raise roughly €50 billion. Whilst privatisations revenues do not replace structural policies at the fiscal system, the debt reduction they will allow, and consequent reduction of interest burden, will have some impact at the structural level.

At other public services, reforms with the aim of improving efficiency are also being carried out. At the health system, it is the objective to keep expense at below 6% of the GDP, whilst maintaining universal access and quality. In education, it is also necessary to promote efficiency, by improving the output, whilst promoting savings.

At the labour market level, reforms fell short on the expectations, which might require additional measures to achieve the objectives. The liberalisation of the labour market did not have the expected impact on employment. This, in turn, leads to other consequences, especially at the fiscal sector, generating the effects we already mentioned (higher than expected expenditure and lower than expected revenue).

The closed professions are another issue that will test the government and will require attention. It is necessary to liberalize these professions to promote competition and efficiency.

The reforms to improve business environment will continue, and are expected to translate into a more investment friendly environment. Regarding the exporters, the government has yet to reduce bureaucratic barriers that hinder these companies to access export markets.

As we can see, in the third review of the programme, a few slips have already occurred and, in some cases, reforms are behind scheduled. Nevertheless, the programme execution is considered somewhat successful.

The first Greek programme is, nowadays, seen as a tremendous failure that led to the approval of a second bailout. It is not our aim to analyse the second bailout programme. However, we can proceed to the analysis of a subsequent revision of the first programme, in order to understand what went wrong, and trying to relate it with our previous findings in literature.

The fifth review of the Greek programme that occurred in October 2011 notices some serious problems regarding the implementation. Macroeconomic projections had to be reviewed, as the adjustment was occurring much slower than expected. Economic activity cooled down more than expected, translating into higher unemployment, less private consumption, less fiscal revenue and higher fiscal expenditure. This has, of course, led a further denting of international market confidence, which is reflected into higher bond market premiums, which led to a delay on the return of Greece to the markets, at the 12 month period. The banking sector remained in a tight situation, with nonperforming loans still increasing, despite the efforts carried out before. Deleverage is still being carried out.

At the fiscal level, we can find several problems. Quantitative targets have been missed, and deficit targets are no longer achievable. Part of these problems is associated with a deficient implementation of the measures by the government. Either they were implemented too late, which reduced their effect, or have not been implemented at all. Additionally, the higher than expected contraction of the economy also had a negative impact on the fulfilment of the objectives. Despite all the efforts so far, further efforts will be needed in order to achieve the objectives traced.

Privatisations have yet to take off. Even though progresses have been made, no privatisations have occurred yet.

At the structural level, we also spot some problems. Reforms to increase efficiency on public administrations are not going as expected. Lack of political will by the government is affecting the implementation. In what concerns the pension system, one of the most important reforms that need to be carried, is still short on actions. Progresses existed in order to make it more sustainable, but further actions are needed to fight against fraud.

Labour market reforms are also falling short on objectives. It was expected that the liberalisation and wage cuts on public sector would spill off to the private sector, making wages go down. However, that has not happened because of the extremely rigid downward rigidities.

In the business environment and competition area, further efforts are needed. The liberalisation of some professions has taken off, but adjustments are needed. Regarding energy sector, delays have occurred and require immediate actions by the government. The plan to ease the administrative procedures and improve business environment, has yet to take off. The judicial sector has undergone a reform that is expected to help improving business environment.

Despite a clear non-compliance of the objectives by the government, in a large part due to a lack of political will and delays in the implementation of the reforms, some of them extremely important, the authorities have decided to disburse the next tranche of money. According to our previous findings in the literature, it would be expected that the non-compliance with objectives, would hinder the approval of the next tranche. Therefore, it might not be inaccurate to think of some political pressures and interests that biased the decision to approve it. Given the context of the crisis, and the

consequences to the Euro of a Greek default, we can, perhaps, consider this influence legitimate, but it still biases the natural decision according to the normal procedures.

In Ireland, we find a whole different situation.

During the first revision, some projections fell short. Recession in 2010 was stronger than expected and growth projections for 2011 had to be revised downwards. Unemployment was also higher than initially projected. This however, does not place major risks for budget execution, as exports can also have a positive surprise.

Regarding labour costs, they have been improving in line with the plan, albeit fuelled mostly by public sector cuts.

Regarding fiscal execution, it has been going as expected, without major slips, and therefore the quantitative targets remain achievable. The Q1 2011 targets were all met.

In the financial market, reluctance to invest in Irish bonds still persists, partially fuelled by concerns regarding other periphery countries. Credit to the economy remains low, but it was expected given the severe state of the banks. The recapitalisation of the banks does not face any major delays, however given the approaching of general elections, the government decided to postpone these measures.

At the level of structural reforms, there has been some remarkable progress, with some reforms being implemented ahead of scheduled.

Regarding the future, the government has further actions planned in order to achieve the quantitative targets for the upcoming periods and tackle some of the negative effects of the austerity measures. In general, the authorities have considered the Irish programme a success so far. Apart from the small deviations in growth and unemployment, no major slips were found, and the programme is being implemented as planned.

Regarding the third review, news are even better.

Reforms are being put in place in a timely manner and are having the expected results. Economic recovery fared much better and even lead to an upward revision of the growth forecasts for 2011. Fiscal targets will certainly be met and with a margin, and forecasts hint that targets for subsequent years are achievable as well. Regarding

competitiveness, we witnessed a recovery on labour costs that have fallen considerably (3.5%), and inflation remained lower than Eurozone's average.

In the banking system, the core of the Irish crisis, remarkable progresses have been achieved. Recapitalization is going well and at a lower than expected costs, with deleveraging going at a good pace as well and the disposal of toxic assets going as planned.

In the labour market, reforms are being implemented and will allow a better flexibility and the reallocation of workers, as well as activate the unemployed people. Measures to allow a better wage flexibility and avoid wage growths above inflation are being studied, as well as the review of some sectoral agreements.

Concerning the sheltered sectors, legislation have been passed that will ease the restriction on the medical and legal sectors and stimulate competition. Additionally, an assessment on electricity and gas sector is on the way and the power of competition authorities will be reinforced.

In budget execution, the authorities have noted a stronger than expected fall on domestic demand that affected tax revenues. Still, savings obtained on interest payments were enough to offset the difference.

Privatisations are also going according to the plan. An agency has been created with the purpose of identifying the state owned assets to be disposed or privatised.

Regarding the future, it is expected that Ireland will be able to achieve all targets with a margin, and further measures are being prepared to achieve the necessary savings at a structural level.

As a consequence of this remarkable success so far, international bond markets have rewarded Ireland with more confidence and lower financing costs, allowing it to stay on track to return to the markets in the middle of 2012.

In conclusion, we can clearly see that Irish programme is being a remarkable success, unlike the Greek one. Reforms are being implemented either in a timely manner, or ahead of schedule. The results are being mostly as expected, with some better than expected results on growth and expenditure. Part of this success can be attributed to the political will of the government, a characteristic that lacked in the implementation of the Greek programme.

Even though the programme has been a success so far, some risks still persist internally and externally. Internally, the banking sector is still the most problematic sector. Externally, the risk lies with Ireland's trading partners. In case they fall into a recession, Irish consolidation could be affected.

In Portugal, the implementation has been going as planned.

The first revision, that occurred three months after the approval of the programme, noted that Portugal is on the right track and the projections regarding economic performance are broadly in accordance with reality, apart from inflation that was driven up by increasing energy prices.

Budget execution had some slips, and further measures are required to correct it. This slip is mostly due to underperforming non-tax revenue, one-off expenditures and expenditures over-run. In order to tackle the slips, the government decided to implement some fiscal measures ahead of time, such as the raise of VAT rates on electricity and gas. Despite these slips, the deficit is declining, yet, at a slower than expected pace, and no revisions of the quantitative targets seem to be needed.

At the financial markets, the credibility of Portugal has been falling, partially because of the general feeling towards the whole Eurozone crisis, and not solely because of the Portuguese crisis.

The banking sector is still facing a tight situation that led to a sharp raise on deposits interest rates, which has been compressing bank's intermediation margins, and therefore, profitability. The results of the stress tests have not been completely positive either. Even though the banking system is strong, two of the four major banks have registered some debilities and are currently negotiating, with their shareholders and Banco de Portugal, measures to tackle them. Additionally, banks must work towards meeting their new capital requirements, either through private shareholders, or through the credit line projected in the programme.

At the structural level, reforms are being carried out. Fiscal reforms, with the objective of improving efficiency on public administrations, local and regional governments are being prepared, but some minor delays have been found. Additionally, large arrears have been found and must be contained.

Regarding the Public-Private partnerships, new contracts have been suspended, and some of the others are currently undergoing analysis and renegotiation.

The risks steaming from state owned enterprises are also being contained. Cost reductions have been achieved, but major challenges are still ahead.

Concerning the privatisations, they have been pushed ahead of scheduled.

In the labour market, legislation with the aim of making it more flexible and employment-friendly has been submitted to the parliament, and is expected to enter into force soon.

In the health sector, where most of the arrears have been found, reforms are already being put in place, and should translate into savings.

In regard to the sheltered sectors, progresses have been steady. In the energy sector, tariffs have been liberalized and the sector has been opened, allowing more companies to operate. Some adjustments are needed though. In the communications sector, the reforms are also in progress, and will aim at improving competition and knock down entry barriers. In regard to the sheltered professions, legislation has already been prepared with the objective of liberalising them to some extent, but has been delayed, due to administrative procedures.

In regard to the housing market, legislation is in the process of being prepared, and will aim at stimulating renting over acquisition.

The judicial reform, essential to ensure an investment-friendly environment is also on the way, and is expected to start showing some effects soon.

Lastly, competition and sectorial regulators will also see their powers reinforced, to ensure a healthy competition.

In the third revision of the programme, that occurred six months after the first, the conclusions by the authorities were similar. Portugal is still on track, and generally implementing all measures in a timely manner. Some budget slippages exist, but in a large part they are due to external forces. Despite this, exports managed to register an impressive performance.

The gap in budget execution that has been identified earlier, will be covered up with a one-off revenue resulting from the transfer of the banks' pension fund to the regular social security system.

Budget execution has been suffering some additional slips. The more than expected growth on employment is placing a serious pressure on the expenditure side, whilst revenues, especially tax revenues, fall short on projections as a consequence of the increasing unemployment. Lower interest rates on the loans, will translate into some savings.

Regarding the extremely high arrears that have been found, the authorities noted that they have been contained and are stabilised at the moment. Furthermore, plans will be traced to settle this problem, starting with the most prominent ones (health sector). In regard to the state owned enterprises, similar conclusions were found.

In the financial markets, Portugal has started to regain some of the lost confidence. After a period of being seen as “another Greece”, Portugal has started to demarcate itself from Greece, and was rewarded with decreasing premiums on bond yields.

The banking sector was finally able to breathe again a bit better, after benefiting from a long-term refinancing operation launched by the ECB. Despite this small relief, banks have still experienced heavy losses and are still required to reinforce their capital ratios by 2012 and continue the deleveraging efforts, which can be proven to be challenging. As a consequence, and as expected, credit to the economy shrank.

Budget execution improved slightly over the slips from the first half of the year, and the budget execution targets for the second half were met. Additionally, deficit reduction efforts went better than expected, promoting a faster deficit reduction, which is also reflected in lower external debt forecasts

The targets for 2012 were still considered achievable, but it was recognised that it would require massive efforts by the government.

Structural reforms, albeit some delays, are pretty much all on track.

Fiscal structural reforms are going as planned, with some of them already underway. They will aim at reducing fragmentation, allowing a better control. Revenue side reforms are also underway and are expected to reduce tax evasion and fraud.

Regarding the oversized public sector, some steps have been made, but actions are still short. A better reorganisation of the public services is essential to achieve better cost efficiency ratios.

In regard of the state-owned enterprises, and in order to achieve the targets, personal cost reductions will have to be accompanied by a general increase on prices, especially on transportation sector.

The privatisation programme is going as planned, without major deviations, including the privatisation of part of the public bank CGD, which is expected to occur during H2 of 2012.

Public-private partnerships renegotiations are also going as expected, with the analysis of potential savings.

The reforms on the health sector are another example of timely implementation. Reforms in this domain are underway, and will translate into a better efficiency and lower cost.

In the labour market, reforms are been implemented at a good pace, and social consensus is praised by the international authorities. These reforms will further streamline certain aspects of the labour market, such as working times, dismissals, tackle potential situations of unemployment trap and improve the activation of workers.

Education will also be reformed, with the objective of improving efficiency and reducing costs.

In regard to the housing market reforms, they have also been implemented at a good pace, without slips.

To improve competition and stimulate investment, the reforms in the judicial system have taken further steps, and administrative and bureaucratic procedures have been eased. In regard of competition authorities, some delays have been observed, but should not be problematic.

Concerning the sheltered sectors of the economy, we have also witnessed some progresses. In the electricity sector, further steps are still needed, but improvements have been found. In the transportation sector, progresses have been observed in regard to the ports. In the communication sector, very few improvements have been registered after the initial surge. In the postal sector, legislation is almost complete, whereby major progresses have been registered.

Lastly, we have the sheltered professions. Important steps have been taken before, but further actions are still needed. Unfortunately, some delays have been registered.

In sum, the execution of the Portuguese programme is considered a success. Even though some delays have been registered in some reforms, merit must be given to the government for the commitment and political will they have demonstrated. Regarding the budgetary slips that have been found, they are mostly a consequence of external factors that had a negative effect on the economy. The international markets have been able to recognise the improvements in Portugal and are, at the moment, considering Portugal another case of success, alongside Ireland, and clearly demarcated from Greece.

After analysing these developments, we can conclude that some of our findings in the literature can be applied to these three cases. Political will and commitment do play a major role on the implementation of the programmes. The Irish and Portuguese governments have shown high commitment and were able to implement these programmes without major slips and, thus, be considered two cases of remarkable success. On the other hand, the Greek government delayed many important reforms and, as a consequence, the programme failed to be implemented. Other factors that we find to be important in these three cases are: a) Political cohesion: political cohesion is important to ensure measures are implemented in a timely and swift manner. Even though the party that won the last elections in Portugal does not have the majority of the parliament seats, it was able to ensure the cohesion with a coalition. In Greece, we found an extremely divided parliament that was giving less and less support to the government, forcing Greece into anticipated elections in order to try and form a new government with the majority of parliamentary support; b) Elections: The closer we are to elections, the less likely the implementation will be carried on without major problems. In fact, we have noticed several delays in the implementation of the programme in Greece, especially since the fifth review, when elections were starting to become a likely scenario; c) Political and Social opposition: austerity measures are not easy. They have a recessive effect in the economy, and require many of the rights society gives for granted to be taken away in favour of a better sustainability and competitiveness. This will obviously trigger opposition protests, by both the society, and other political parties. If this opposition is too strong, it will most likely affect the

implementation of the programme. This has been the case in Greece; d) Political instability: a country where a government is constantly changing between parties with different ideologies will not be able to implement a programme successfully, due to the constantly changing policy orientations. Additionally, it is also closely related to b). In an attempt to conquer votes, the party in power will be constantly delaying the reforms in order to promote a better image of itself, and increase the chances of winning the next elections. This has been, the case in Greece, as we have seen in the fifth review of the adjustment programme, and to a lower extent, in Ireland as well.

4. Conclusion

This work achieved four main conclusions:

Firstly, despite being related to the same event (2008 banking crisis), all these three cases have unique problems that are not shared by the other. Whilst in Ireland, the core of the crisis is centred on the banking system, in Greece it is mostly due to excessive and persisting imbalances, whilst in Portugal it is due to a constant fall on external competitiveness, coupled with a somewhat high degree of indebtedness.

Secondly, through the literature analysis we carried initially, we were able to identify a set of economic conditions that are expected to occur before a country resorts to the IMF and alike. A high government deficit, high stock of external public debt, high long-term interest rates constantly above the Eurozone's average, real exchange rate appreciation and declining investment seem to be very good indicators of the crisis these three countries went through. Private debt and growth rates also appear to be good indicators, but in some cases only.

Thirdly, despite all the differences amongst the cases, very few differences have been detected in the programmes. The main design of the programme is the same across all three countries, with fiscal consolidation and structural reforms being the bulk of the programme, besides banking sector stabilisation. Furthermore, inside each of these pillars, many similarities have also been found. Therefore, we are able to conclude that the programmes are of a one-size-fits-all type, which again goes in accordance to our findings in previous literature.

Finally, concerning the implementation of the programmes, we were also able to confirm some of the findings in the literature. Political will & commitment, government cohesion, social & political opposition and political instability were all found to have affected the implementation of these three programmes. Proximity to general elections also seems to have affected the implementation in Greece and, to a lesser extent, in Ireland. Regarding the influence of noneconomic factors on the decisions made by the IMF and alike, we have also found some evidence that there might be some influences regarding the decisions, especially on what is concerned to the approval of loan tranches without the fulfilment of the criteria set.

Despite the limitations that the analysis of an event that is still occurring has, we believe to have shed some light in regard of the planning and execution of IMF adjustment programmes inside a monetary union and in developed countries, contrasting with the bulk of the studies that usually focus on developing countries only. For future investigations, an analysis of the real effects of these programmes is crucial, as well as trying to relate their effects with the degree of adequacy of each programme to the respective country.

Furthermore, as the Eurozone crisis worsened, more countries are on the edge of requiring external intervention, especially Spain and Cyprus. It would be interesting, in a future study, to add those two countries to this comparison, should they end up requiring it.

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