

The Best Way Out of Portuguese Economic Stagnation: Institutional Reform of the Euro-zone

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Abstract: Since the creation of the Economic and Monetary Union (EMU), the Portuguese economy has exhibited real divergence vis-à-vis the wealthier Euro-zone countries. We analyze the causes of the underperformance of the Portuguese economy in the last decade and discuss the different policy options available to the Portuguese government. We conclude that, in the face of the terrible short-term economic difficulties that Portugal would face were it to leave the EZ, the best way forward for Portugal is to push for institutional reform of the EMU along the following lines: replacement of the current limits on budget deficits by (legally-binding) ceilings on CA imbalances of individual EZ countries; increase of the inflation target of the ECB up to (say) 5%; and empowerment of the ECB to buy public debt of EZ countries facing liquidity crises.

JEL Classification: E32, E65, F32, F41, J50

Keywords: Nominal wage cuts, relative unit labour costs, fallacy of composition, Stability and Growth Pact, current account imbalances, ECB inflation target, debt monetization

¹ This paper was presented at the Conference titled ‘The Greek and Euro Crisis’ held at the University of the Basque Country, Bilbao (Spain) on 17th December 2010 and at the 8th Conference on ‘Developments in Economic Theory and Policy’ also held at the University of the Basque Country on 30th June 2011. The authors should like to thank Philip Arestis for kindly inviting them to participate in the Conference. They also wish to thank participants in the sessions where the paper was presented for their useful comments and suggestions as well as the editors of the IPPE for their kind invitation. Of course, the authors are the sole responsible for any remaining errors.

1.- Introduction

The sovereign debt crisis of Greece and other peripheral Euro-zone (hereafter EZ) countries like Portugal in 2010 has brought to the fore the rising macroeconomic imbalances observed within the EZ. First, there has been a persistent loss in international competitiveness (measured by relative unit labour costs) in the four Mediterranean EZ countries (Greece, Italy, Portugal and Spain) vis-à-vis Germany since the launch of the Euro in 1999 – a fact which, according to Lapavitsas et al. (2010), was largely the result of increasing flexibility, wage restraint, and part-time work in Germany. Second, financial integration between the North and the South has boosted demand, particularly private consumption and real estate investment, in the countries of the South. The upshot of these two facts has been the large current account (henceforth CA) deficits exhibited by Greece, Portugal and Spain (and Ireland) as well as their high levels of indebtedness, especially of the private sector, vis-à-vis the Northern countries.

In turn, this vulnerable scenario explains why the crisis of 2007-9 subsequently led to the European sovereign debt crisis that erupted violently in Spring 2010 in the wake of the Greek sovereign debt crisis. Having now embarked upon ambitious fiscal consolidation and very unpopular structural reforms, countries like Greece, Portugal, Ireland and Spain face a long period of economic stagnation and high unemployment. Predictably, social unrest and domestic pressure on governments to ‘escape’ from the EZ with the aim of easing adjustment through devaluation may become a serious possibility in the coming years.

The main purpose of this study is to evaluate the root causes of the economic malaise that afflicts Portugal in order to assess the different policy options available to the Portuguese government. In addition, we identify several key shortcomings of the institutional design of the EMU and make several proposals for its reform that, in our

opinion, would go a long way towards fixing them. Our main conclusion is that, in the absence of deep reform of the governance structure of the EMU, Portugal (as well as the other Mediterranean members of the EZ) faces a long period of economic stagnation. However, in view of the tremendous economic costs that any single country would have to overcome were it to leave the EZ, we conclude that pushing for reform of the EMU at the political level currently represents the best way forward for Portugal.

The study is organized as follows. Next section analyses the causes of the emergence of the different macroeconomic imbalances currently exhibited by the Portuguese economy. Section 3 discusses various economic policy strategies currently available to Portugal. Section 4 contains several proposals for institutional reform of the EMU that, according to us, would help correct the current macroeconomic imbalances and resume healthy economic growth in the EZ as a whole. Finally, Section 5 summarizes and concludes.

2.- Rising heterogeneity within the Euro-zone: the case of Portugal

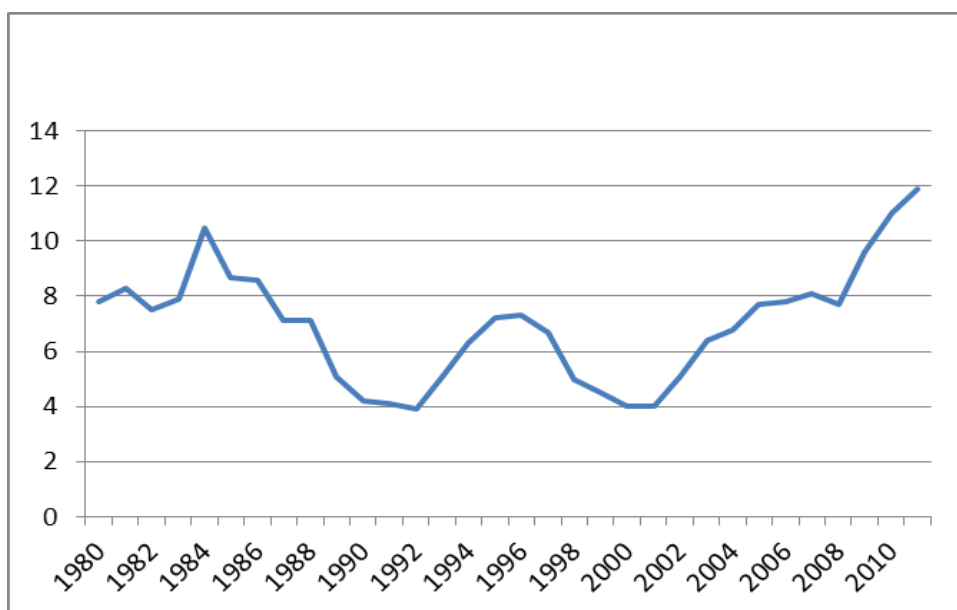
There has been a steady divergence in terms of relative competitiveness, inflation, and current account balances among EZ countries ever since the launch of the Euro in 1999. The purpose of this section is to analyze the causes behind this phenomenon by focusing in the case of Portugal.

2.1.- The Portuguese economy in 1999

After a strong economic expansion driven by a boom in domestic demand in the run-up to the creation of the Euro, the Portuguese economy eventually reached full

employment in 1999 (see Figure 1). Concomitantly, as shown in Figure 2, the current account deficit reached 8.5 percent of GDP in 1999. Therefore, there can be no doubt that in 1999 the Portuguese real effective exchange rate (hereafter REER) was well above its equilibrium value and that Portugal entered the EZ with an over-appreciated real exchange rate.²

Figure 1: Portugal, Unemployment rate, 1980-2011

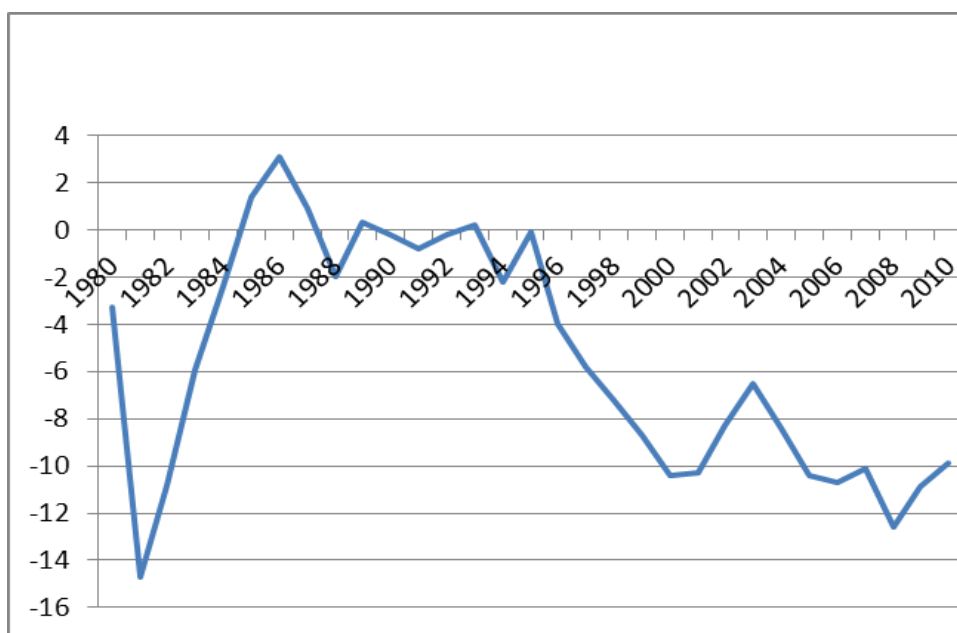


Source: IMF

² When an economy is at full employment, the value of its current account provides an indication of the deviation of the REER from its equilibrium level. More specifically, a current account deficit signals a REER above its equilibrium value, a surplus indicates a REER below it, and a current account balance suggests that the REER is at its equilibrium value. The same does *not* hold if an economy is below full employment. In this case a current account balance (for instance) reflects a deficient domestic demand, not an equilibrium REER. Indeed, an increase in domestic demand up to full employment will raise imports and thus lead to a current account deficit at an unchanged REER.

According to Garcimartín et al. (2010-11, p. 295), between 1991 and 1999, the Portuguese escudo depreciated by 16.3 percent while its purchasing power parity (PPP) equilibrium value dropped by 27.4 percent which implies a 11.1 percent appreciation against its PPP value. By contrast, they estimate that the Spanish peseta was only appreciated around 6 percent against the Deutsche mark when Spain joined the euro in 1999 which, according to them, explains the much better performance of the Spanish economy until 2007.

Figure 2: Portugal, Current Account, 1980-2011



Source of the data: IMF

The current account deficit of 8.5 percent of GDP in 1999 was associated with a deficit in the trade balance of about 12 percent of GDP, partially offset by surpluses in both the balance of services and the net remittances of emigrants over immigrants (see Table 2). More specifically:

Current account \approx trade balance + balance of services + net remittances

$$- 8.5\% \text{ GDP} \approx - 11.9\% \text{ GDP} + 1.6\% \text{ GDP} + 2.6\% \text{ GDP}$$

What about Portugal's International Investment Position (IIP) in 1999? ³ From 1985 through 1995, the Portuguese current account was roughly in equilibrium. The first significant deficits started only in 1996 and thus the Portuguese net external debt amounted to only 12 percent of GDP in 1999. Likewise, the *net* stock of both foreign

³ IIP = external reserves of the Portuguese monetary system - (net external debt + net stock of foreign direct investment in Portugal + net foreign holdings of Portuguese stocks).

direct investment and foreign investment in stocks was also relatively small. Thus, as we show in Table 1, the IIP of the Portuguese economy solely represented -33.1 percent of GDP in 1999. In turn, this small negative IIP led to net factor payments (interest and profits) to foreigners of only 1.4 percent of GDP (see Table 2).

Table 1: Portugal, main macroeconomic indicators, 1999-2009

	99	00	01	02	03	04	05	06	07	08	09
Private consumption	5.3	3.7	1.3	1.3	-0.2	2.5	1.9	1.9	1.7	1.7	-0.8
Public consumption	4.1	3.6	3.3	2.6	0.2	2.6	3.2	-1.4	0.0	1.1	3.5
Investment	7.8	3.5	1.0	-3.5	-7.4	0.2	-0.9	-0.7	3.1	-0.7	-11.1
Domestic demand*	6.2	3.6	1.8	0.1	-2.2	2.7	1,6	0.9	1.9	1.3	-2.8
Total exports	3.0	8.4	1.8	1.4	3.9	4.0	2.1	8.7	7.8	-0.5	-11.6
Service exports	2.8	9.0	2.3	0.4	-2.8	5.8	2.1	11.7	12.9	1.5	-6.5
Imports	8.6	5.3	0.9	-0.7	-0.9	6.7	3.5	5.2	6.1	2.7	-9.2
Net Exports*	-2.4	0.3	0.2	0.7	1.4	-1.2	-0.7	0.5	0.0	-1.2	0.1
Unemployment	4.4	3.9	4.0	5.0	6.3	6.7	7.6	7.7	8.0	7.6	9.5
GDP	3.8	3.9	2.0	0.8	-0.8	1.5	0.9	1.4	1.9	0.0	-2.7
Current account	-8.5	-10.2	-9.8	-8.0	-6.0	-7.5	-9.4	-9.9	-9.4	-12.0	-10.3
Int. Inv. Position	-33.1	-41.1	-48.6	-57.1	-59.0	-63.8	-70.0	-81.1	-92.4	-99.2	-111.5

* Contribution to GDP growth in percentage points

Source: Bank of Portugal (2009a and 2010)

Table 2: Portugal, Current Account, percent of GDP, 1996-2009

	96	97	98	99	00	01	02	03	04	05	06	07	08	09
Current Account	-4,2	-5,9	-7,0	-8,5	-10,2	-9,8	-8,0	-6,0	-7,5	-9,4	-9,9	-9,4	-12,0	-10,3
Goods	-8,4	-9,4	-10,8	-11,9	-12,9	-12,0	-10,4	-9,1	-10,3	-11,0	-10,8	-10,8	-12,8	-10,5
Services	1,2	1,3	1,6	1,6	1,8	2,3	2,5	2,7	2,9	2,7	3,3	4,0	4,0	3,7
Factor Incomes	-0,8	-1,2	-1,3	-1,4	-2,1	-3,0	-2,3	-1,7	-2,1	-2,6	-4,0	-4,2	-4,7	-4,8
Remitt.	2,9	2,9	2,7	2,6	2,7	2,6	1,8	1,4	1,4	1,2	1,2	1,2	1,1	1,1

Source: Bank of Portugal (2007, 2009a, and 2010)

2.2.- What happened after 1999?

Domestic demand had increased at a rapid pace between 1995 and 1999. In 2000-1 it continued to grow, albeit at a lower rate. As a result of it, the current account deficit continued to increase, to 10 percent of GDP, unemployment continued to fall, to 4 percent, and inflation shot up to 4.4 percent in 2001. In the next eight years, from 2002 to 2009, domestic demand growth virtually disappeared (annual growth of only 0.4 percent). This was one of the two factors — the other was the adverse behavior of net external demand — that led to stagnation in the eight years up to 2009 (annual GDP growth of 0.35 percent), and to a steady increase in unemployment (to more than 10 percent by the end of 2009).

As is well known, a stagnant domestic demand often translates into low growth of imports and an improvement in the current account balance. However, instead of improving, the Portuguese current account deficit actually worsened from 1999 through 2005-9, from 8.5 percent of GDP to 10.2 percent of GDP (see Table 3). This larger current account deficit in spite of a stagnant domestic demand is a clear indication that the Portuguese REER strayed even farther from its equilibrium level than it was back in 1999. What led to this *increase* in the deviation of the REER from its equilibrium level between 1999 and 2005-9?

Table 3: Portugal, Current Account, percent of GDP, 2005-9 vs. 1999

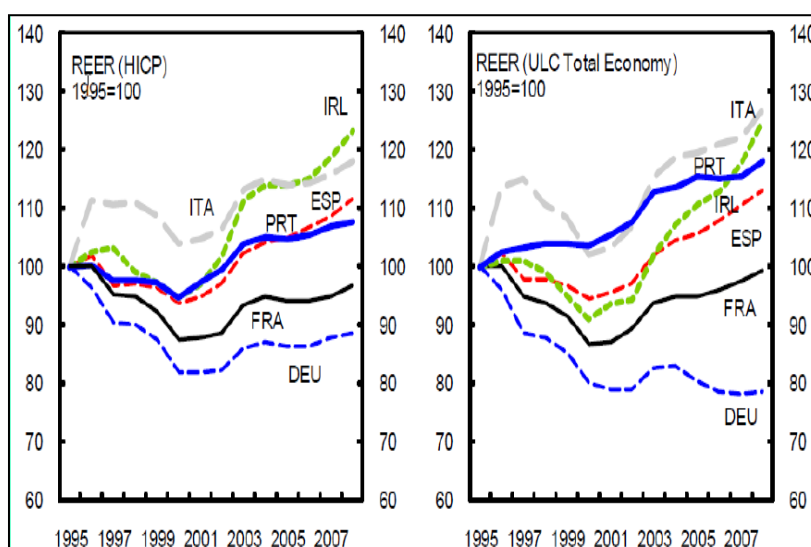
Balances (percent of GDP)	1999	2005-9	Δ
Goods without energy	-10%	-7.6%	+2.4%
Services	1.6%	3.6%	+2%
Goods and services without energy	-8.4%	-4%	+4.4%
Remittances	2.6%	1.1%	- 1.5%
Energy	1.8%	3.8%	- 2%
Net income payments	-1.4%	-4.1%	- 2.7%
Current account	-8.5%	-10.2%	-1.7%

Source: Bank of Portugal (2010, p. 173 and p. 176); authors' calculations.

2.3.- Five adverse trends affecting the current account ...

To begin with, since 1999 the international competitive position of the Portuguese economy, and thus the balance of goods with the rest of the world, has been profoundly affected by two adverse trends. On the one hand, as illustrated by Figure 3 the Portuguese REER rose by about 13 percent between 1999 and 2008, measured both in HICP and in unit labor costs (most of the increase occurred between 1999 and 2003).⁴ On the other hand, over the same period Portugal has been subject to a marked increase in competition from China and Central and East European (CEE) countries.

Figure 3: REER based on HICP and ULC, 1995-2008

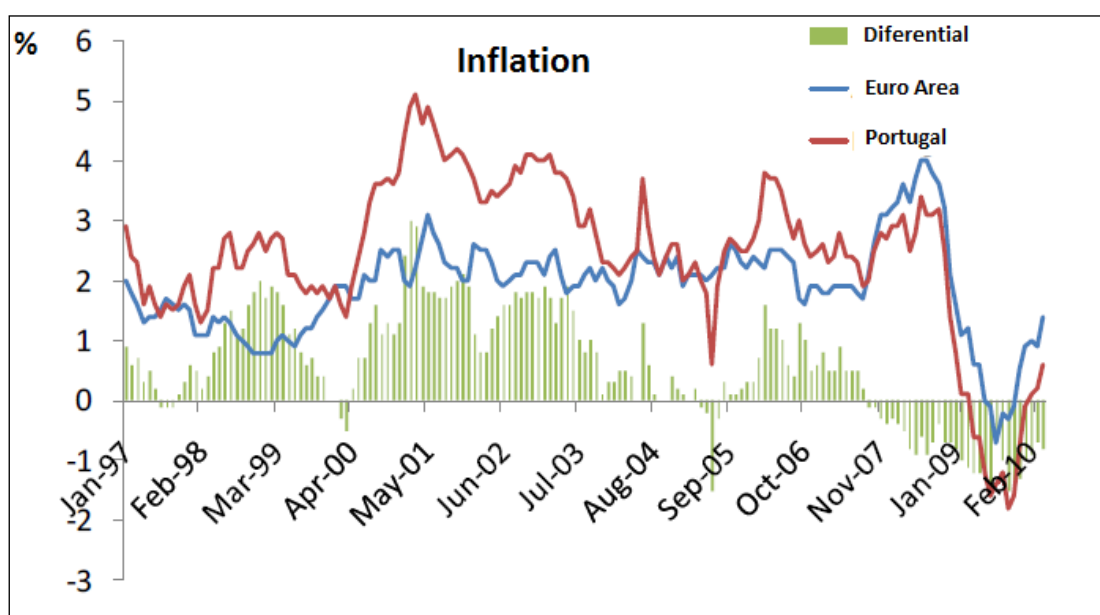


Source: IMF (2010)

⁴ The reason was that relative prices and unit costs in Portugal increased in this period due to an especially high excess of nominal wage growth over labor productivity that was equal to 2.7 percentage points per year compared to only 1.7 percentage points in the EZ (Felipe and Kumar, 2011). Portugal's loss of international competitiveness can also be ascertained by looking at Figure 4 which shows the evolution of the inflation rate in Portugal and the EZ.

HICP: harmonized consumer price index; ULC – unit labor cost. The REER based on ULC indicates the relation between ULCs in Portugal and in its main trading partners when expressed in the same currency. An increase in this indicator thus reveals that the ULC has risen by more in Portugal than in its trading partners, i.e., that Portuguese competitiveness has deteriorated. The REER based on HICP indicates the relation between consumer prices in Portugal and its main trading partners. An increase in this indicator therefore implies that consumer prices have grown by more in Portugal than in its trading partners.

Figure 4: Inflation in Portugal and in the Euro-zone, 1997-2010



Source: Constâncio (2010)

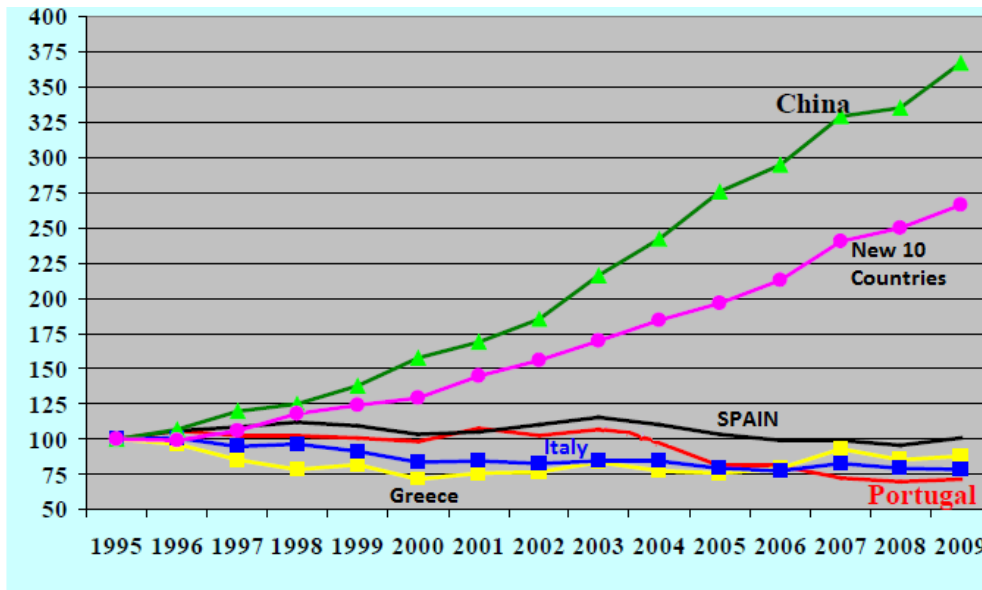
These two facts led to an increase in the penetration of imports in the Portuguese market and, at the same time, to a sharp decline in the market share of Portuguese exports in the EU15.⁵ As a matter of fact, between 2003 and 2008 imports grew at an annual average rate of 3.9 percent, more than twice the rate of total demand. On the other hand, the market share of Portuguese exports in the EU15 declined by 33 percent between 2003 and 2009, mainly in favor of China and of the CEE countries. The market shares of these two regions exports to the EU15 increased by 72 percent and 55 percent respectively over that period (See Figure 5).⁶

⁵ The EU15 is the main destination of Portuguese goods exports, having accounted for 71 percent of the total in 2008. It includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

⁶ The new international environment faced by the Portuguese economy since the beginning of the 21st century deserves a brief comment. In 1993, a Uruguay Round agreement established a progressive elimination of export quotas of textiles, clothing and footwear from less developed to developed countries over a 10 year period (1995-2005). As a result, the market share of China in the EU15 increased sharply at the expense of several Southern European countries, mainly Portugal and Italy. In 2000-2008, Portuguese exports of textiles, clothing and footwear suffered steep declines: average annual declines of 6.1, 21.2 and 4.5 percent, respectively (Bank of Portugal, 2010, p. 211, table A.5.11). Consequently, the share of these three goods in total goods exports fell from 25 percent in 1999 (40 percent in 1993) to only 14 percent in 2008 (Bank of Portugal, 2009b, p. 294).

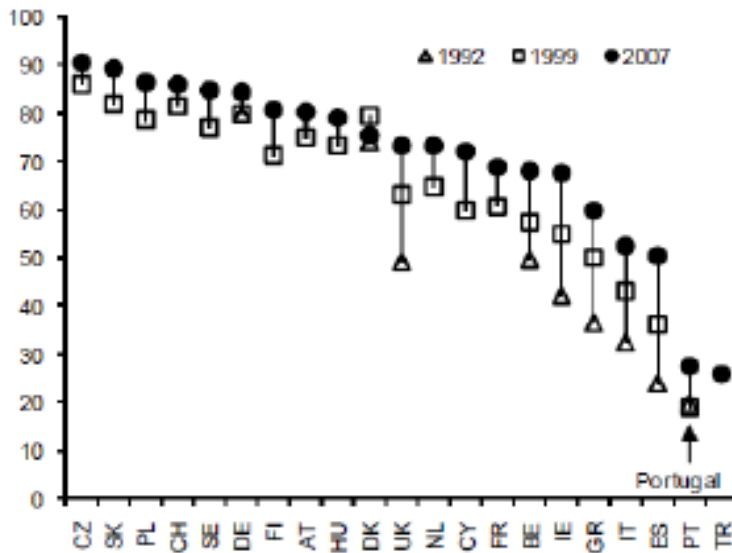
Likewise, Portuguese exports of medium-to-high tech products like vehicles and electrical machines also lost market share over the last decade, especially to CEE countries which have benefited

Figure 5: The evolution of market shares in the EU15, 1995-2009



Source: Constâncio (2010). 1995 = 100

Figure 6: Percentage of the population (25-64 years) with a high-school or a university degree



from a combination of lower wages and a more skilled labour force (Bank of Portugal, 2010, pp. 144-5). On the one hand, in 2000 the average hourly wage in Portugal in manufacturing was equal to \$5.67, roughly twice that in Poland, the Czech Republic, Slovakia and Hungary. On the other hand, as shown in Figure 6, the qualification of the Portuguese workforce lagged – and still lags – far behind that of these countries. The combined result of these two facts was that, over the last decade, the CEE countries attracted large flows of FDI into medium-to-high tech sectors, which formerly had headed towards Southern Europe, including Portugal.

Above and beyond an increasingly vulnerable competitive position, the current account deficit of the Portuguese economy was further aggravated by three specific developments occurring between 1999 and 2005-9 (see Table 3). Firstly, the surplus of emigrants over immigrants remittances shrunk by 1.5 percent of GDP. Secondly, the sharp increase in the oil price since 1999 enlarged the energy deficit by 2 percent of GDP. Finally, the accumulation of current account deficits culminated in a large net external debt, thus leading to an increase of 2.7 percent of GDP in the net income payments (mainly interest payments) to the rest of the world.

2.4.- ... Partially offset by three factors

Meanwhile, three factors partially offset the negative trends mentioned above, thus lessening the increase in the current account deficit between 1999 and 2005-9 to only 1.7 percent of GDP. The first factor was a combination, from 2002 through 2008, of a stagnant domestic demand in Portugal (0.4 percent annual growth) and a strong growth of imports of the main Portuguese trading partners (5.2 percent annual growth), especially of Spain and Angola. In fact, the stagnant demand prevented a rapid growth of imports of goods 2002-8 (3 percent annual growth). In turn, the strong growth of goods imports of Portugal's main trading partners led to a more rapid growth of goods exports in 2002-8 (3.7 percent annual growth).⁷ This higher growth of goods exports than of goods imports (including energy) means that the strong growth abroad coupled with stagnant domestic demand more than offset the effect of (i) the decline in the market share of Portuguese exports, (ii) the increase in the penetration of imports in Portugal and (iii) the increase in the price of imported oil.

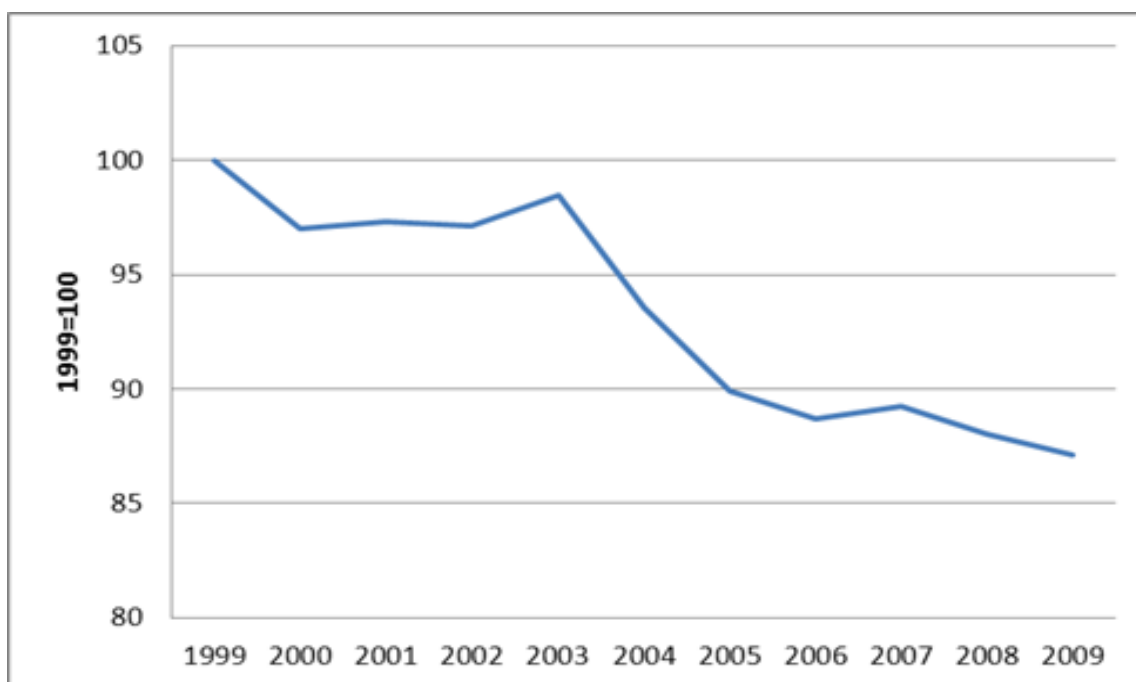
⁷ The key contributors to the growth of Portuguese exports were Angola and Spain. In 2002-8, goods exports to Spain and Angola grew at annual average rates of 10.1 and 21 percent respectively.

The second factor that lessened the increase in the current account deficit was the increase in the surplus of the balance of services, from 1.6 percent in 1999 to an average of 3.6 percent of GDP in 2005-9 (see Table 3). This was mainly the result of an excellent behavior of services exports, especially since 2006, leading to an increase in the weight of services in total exports from 27 percent in 2005 to 33 percent in 2009.⁸ Curiously enough, the high growth of service exports did not reflect the behavior of its main sector – tourism, which has accounted for about 40 percent of total Portuguese services exports in the last decade. Instead, it was associated with the behavior of transport and “professional” services. These two types of services grew at double digit rates in 2006-8, and accounted for 26.5 and 30 percent of total service exports in 2008, respectively (Bank of Portugal, 2010, p. 148).

Finally, the third factor that moderated the increase in the current account deficit was the reorientation of Portuguese exports over the last decade from its traditional markets to new countries outside the EU15. From 1999 to 2008 exports to these new markets grew at an annual average rate of 13.8 percent, compared to only 3.8 percent in the case of EU15 markets. As a result, between 2003 and 2009 the market share of Portugal’s goods exports in its main 34 trading partners – which account for 85 percent of the total - declined by only 12 percent (see Figure 7), far less than the above mentioned 33 percent decline in the EU15.

⁸ In nominal terms, the exports of services grew by 19.9, 15.6 and 5.3 percent in 2006, 2007 and 2008, respectively (Bank of Portugal, 2010, p. 148, table 5.4). These rates exceeded the growth rates of nominal imports of services in the same years, which were 15.9, 8.4, and 5.1 percent respectively (Bank of Portugal, 2010, p.149, table 5.5). It should be noted that this was an acceleration of a trend dating back to 1996, when services made up only 24 percent of total exports. In fact, between 1996 and 2009 services exports grew at twice the annual average rate of goods exports: 7.9 percent compared to 3.9 percent (Cabral, 2010). One consequence of this development is that in 2007-9 the surplus in the balance of services already covered 35 percent of the deficit in the goods balance compared to only 14 percent back in 1996 (see Table 2). In turn, these numbers tell us that — as a result of increasing competition from China in textiles, clothes, and footwear and of the CEE countries in machines and autos — the specialization of Portugal has been switching towards the exports of services. In this respect, it is remarkable to note that by 2008 the weight of services in total exports, 33 percent, was already more than three times the weight of textiles, clothes, and footwear — 9.5 percent — which account for the traditional major Portuguese export sectors.

Figure 7: The evolution of the market share of Portugal's goods exports in its main 34 trading partners



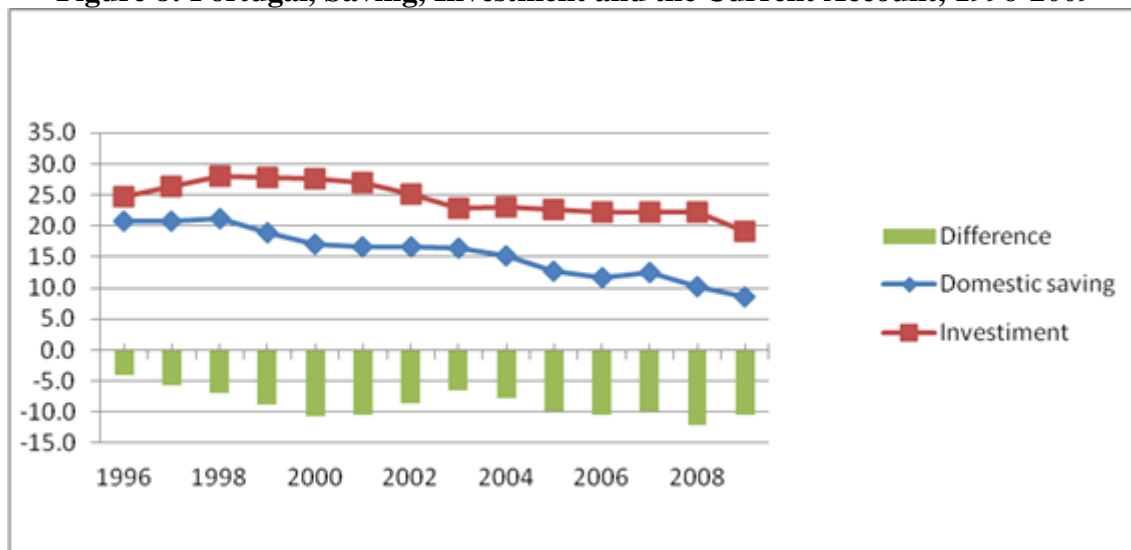
Source: Bank of Portugal, 2010

3.- Can economic growth in Portugal be restored?

What can be done to resolve the problems afflicting the Portuguese economy – the budget and current account deficits, the stagnant output and the high and increasing unemployment rate? This section discusses the economic policy alternatives available to Portugal and their likely consequences.

3.1.- An increase in the private saving rate

Figure 8: Portugal, Saving, Investment and the Current Account, 1996-2009



Source: Bank of Portugal (1997, 2005, 2009a, and 2010).

As illustrated in Figure 8, investment in Portugal fell from 27.8 percent in 1999 to an average of 22.5 percent of GDP in 2005-8, while domestic saving dropped from 19 percent down to 10 percent of GDP over the same period. Therefore, the increase in the Portuguese current account deficit was the expression of a larger decline in saving than in investment: 9 percent versus 5.3 percent of GDP. These facts have led to the suggestion that the current Portuguese malaise can be solved through an increase in the

saving *rate* by the private sector.⁹ To be sure, an increase in the savings rate, by reducing consumption, would trim down imports, and lead to a smaller current account deficit. However, it would also have serious adverse effects. First, the cutback in consumption would reduce not only imports but also the sales of Portuguese firms and, therefore, would have a negative impact on investment – which, after almost uninterrupted declines in the last nine years, is already 30% below its 2001 level. In addition, the retrenchment of consumption and investment expenditures would slash the demand faced by Portuguese business firms thus bringing about further increases in unemployment.

3.2.- An increase in public saving

Up until now, the private sector is yet to respond to the calls for a higher saving rate. Be that as it may, pressured by a sharp increase in the spread of the public debt, the Portuguese government has embarked on successive fiscal programs, the last one – agreed with the European Commission, the ECB and the IMF - aimed at cutting the budget deficit from 9.1 percent of GDP in 2009 down to 3 percent in 2013. What are the predictable effects? In addition to a smaller budget deficit, the same effects of an increase in the private saving rate: a smaller current account deficit coupled with lower output and higher unemployment. It is predicted that between 2010 and 2012 the budget and the current account deficits will be cut by almost half, GDP will fall by 4% and unemployment will rise from 11% to 13% (AMECO).

However, the current circumstances are not “normal” insofar as most, if not all, EZ countries and other important trading partners like the US and the UK are

⁹ This suggestion has been recently made by many Portuguese economists including President Aníbal Cavaco Silva, a retired Economics Professor.

simultaneously applying fiscal consolidation strategies. In such circumstances, a cutting down of public spending in a single country will lead to a fall in aggregate income in that country as well as, albeit less markedly, in all its trading partners. Since all countries are simultaneously implementing the same policy aggregate income is likely to be negatively affected in *all* countries. Thus it is unclear *a priori* whether a sharp decrease in public spending in Portugal and elsewhere in the EZ will successfully translate into an actual increase in public saving in the former. In short, simultaneous attempts by countries belonging to a monetary union to increase public saving may be ‘self-defeating’ and push the economy into a vicious circle characterized by stagnation, high unemployment, reduced revenues and further budget cuts: a collective descent to hell.¹⁰

3.3.- A boost to net exports

The Portuguese private and public sector deficits along the high unemployment rate are mere symptoms of a deeper problem: the large external deficit. For this reason, they can only be addressed if there is a large enough expansion of net exports. In fact, an increase in net exports would help boost domestic output with two consequences. First, even if the saving *rate* is unchanged, aggregate saving would increase thereby leading to a smaller private sector deficit. Second, even if government tax *rates* remain constant, fiscal revenue would grow and bring about a smaller budget deficit. In short, an expansion of net exports would bring unemployment down and, at the same time, slash the various deficits of the Portuguese economy. So, the crucial question for the

¹⁰ As Bohle (2010, p. 7) aptly puts it ‘while so-called responsible governments pretend that they are still living in a “slow sort of country”, where “you’d generally get to somewhere else – if you ran very fast for a long time”, what governments really are suggesting is to move on to a place where “it takes all the running you can do, to keep in the same place’.

Portuguese economy in the years ahead is this: how can a boost in net exports be engendered?

Figure 9: The situation of the typical Portuguese tradable sector

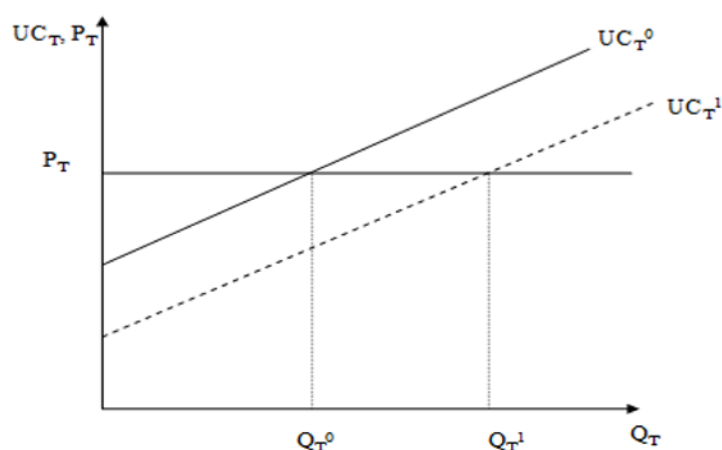


Figure 9 depicts the Portuguese tradable sector. The horizontal price line results from the fact that the market price in a typical Portuguese tradable sector is determined by international competition in the EZ. The upward-sloping supply curve UC_T reflects the fact that in a typical industry there is a spectrum of firms, ranging from the lowest-cost to the highest-cost firms.¹¹ In this setting, the size of the tradable sector is determined by the number of firms whose unit costs happen to be below the market price. This, in turn, has the following implication: an upsurge in the size of the *overall* Portuguese tradable sector – and thus in net exports - can only be achieved through cutbacks in its unit production costs.

¹¹ The height of the supply curve reflects the level of unit production costs — including the normal profit margin — of the successive firms.

Now, there are only two ways of reducing unit production costs: to increase productivity and/or to trim down the prices of inputs. Blanchard (2007) makes a number of suggestions for enhancing Portuguese productivity. But, as he points out, ‘productivity growth is unlikely to increase overnight’ (Blanchard, 2007, p. 8). Hence, the only way to boost net exports in the short to medium run is to slash the price of its inputs. This, in turn, can be done either through a long ‘competitive disinflation’ or an ‘across-the-board’ cut in nominal wages. The rest of the section discusses the likely consequences of these two policies.

3.3.1.- Competitive disinflation

The evidence shows that, even when faced with a prolonged period of high unemployment, Portuguese workers are reluctant to accept lower nominal wages. For example, since 2005 unemployment has stood above 7.5 percent and rising, and yet nominal wage growth has shown no signs of abating. From 2005 to 2009 annual nominal wage growth was equal to 3.3 percent, up from an average of 2.7 percent in the period 2002-04 when unemployment was below 6.8 percent. So, zero nominal wage growth is the most that may realistically be expected in Portugal in the years ahead.

Now, in the current EZ low inflation environment this constraint severely limits the speed at which Portuguese competitiveness can be refloated. Indeed, suppose that over the next years nominal wages in the EZ grow at the trend of the last decade, 2.4 percent, and that productivity growth in the Portuguese tradable sector is the same as in the EZ.¹² Then, zero wage growth in Portugal will improve competitiveness by only 2.4 percent a year. Therefore, Portugal will have to endure about a decade of high

¹² From 1999 to 2008, productivity growth in Portugal and the EZ was similar, slightly less than 1 percent a year.

unemployment until competitiveness improves, the current account deficit decreases, and vigorous output growth resumes.

3.3.2.- An ‘across-the-board’ reduction in nominal wages

Blanchard (2007) proposes an alternative: to regain competitiveness quickly by convincing workers to accept an ‘across-the-board’ reduction in nominal wages – say, of thirty percent. Although reckoning this is almost an impossible task, he presents a sketch of the implications. First, he notes that ‘any decrease in nominal wages implies a smaller decrease in real (consumption) wages. Indeed, assume that tradable prices remain unchanged [determined by competition in the EZ], and that non-tradable prices are set by a markup on wage cost’ (Blanchard, 2007, p. 16). Then, a decrease in nominal wages of 30 percent leads to a decrease in the price of non-tradables of 30 percent as well. Assuming further that the share of tradables is roughly 50 percent, this leads to a decline in the consumer price index of 15 percent, and thus to a reduction of real (consumption) wages of 15 percent: only *half* of the nominal decrease.

What would be the effects on the Portuguese economy? For simplicity, let us assume that *labor* and *non-tradables* are the sole inputs used in the production of tradables. Then, a decline of thirty percent in both nominal wages and non-tradable prices would reduce unit costs in the tradable sector by roughly thirty percent. Since the price of tradable goods is fixed by competition within the EZ, the number of viable firms in the Portuguese tradable sector would increase thereby boosting net exports. This is captured in Figure 9, where the nominal wage cut shifts the upward-sloping unit cost curve (UC_T) to the right thus letting output in the tradable sector increase.

However, a large cut in nominal wages and, hence, in non-tradable goods prices would lead to very serious problems. Both the Portuguese government and many

Portuguese businesses and households are heavily indebted and, as result of it, are committed to debt payments fixed in *nominal* terms.¹³ Hence, a thirty percent decline in nominal wages and the resulting fall in prices in the non-tradable sector would make many indebted households and businesses unable to honour their fixed debt service.

Finally, note that if the Euro freely floats so as to keep the EZ current account with the rest of the world in balance, any improvement in relative competitiveness in an individual EZ country will be exactly offset by a worsening in the relative competitiveness of other EZ countries.¹⁴ The reason is straightforward: an increase in net exports in any EZ country will lead to a nominal appreciation of the Euro until it is exactly matched by a decrease in net exports in other EZ countries (Kregel, 1999). We can therefore say that changes in relative competitiveness within the EZ achieved by means of wage deflation entail a ‘fallacy of composition’ whereby what holds for a single country — that it can increase its net exports and expand employment in the tradable goods sector by cutting down nominal wages — does not hold for the EZ as a whole.

3.4.- Withdrawal from the Euro-zone

A withdrawal from the EMU would predictably lead to a large depreciation (perhaps of 50%) of the old national currency (the escudo) vis-à-vis the Euro. Hence, it would give, after one or two years, the tremendous boost to net exports Portugal needs if it is to resume sustained economic growth. Yet, the large depreciation would also produce three terrible consequences in the short-run.

¹³ At the end of 2009, the total debt of households had reached 99.1 percent of GDP, the total debt of non-financial firms had risen to 151.3 percent of GDP, and government debt represented 76.8 percent of GDP (Bank of Portugal, 2010). These debts add up to 327.2 percent of GDP. Who owns these debts? Slightly less than 1/3 of the total debt is owned by non-residents. The rest comprises domestic savings in bonds and deposit accounts as counterparts.

¹⁴ This assumption is realistic since the current account of the EZ vis-à-vis the rest of the world has been broadly in balance ever since the launch of the EMU in 1999.

Firstly, any hint that a Member State plans to withdraw from the EZ would likely unleash both massive capital outflows and withdrawals of deposits from banks. In the latter case, holders of deposits denominated in euros would try hard to avoid the devaluation implied by the conversion of their deposits into the reintroduced old national currency. To block off this bleeding, the government would need to impose limits to bank deposit withdrawals as well as to introduce capital controls. This scenario resembles the tragic situation Argentina went through in 2002 in the wake of the collapse of the currency board that pegged the exchange rate of the peso to the US \$. In turn, it is very likely that the adoption of such measures would result in a ‘credit crunch’ and the ensuing contraction of aggregate demand, output and employment.

In addition, to the extent that debt contracts set up prior to withdrawal from the EMU would still be denominated in euros, the foreseeable large depreciation of the escudo would raise tremendously the level of indebtedness of households, businesses, and the government. Finally, the large depreciation would increase sharply the price of imported goods and drastically depress real incomes.

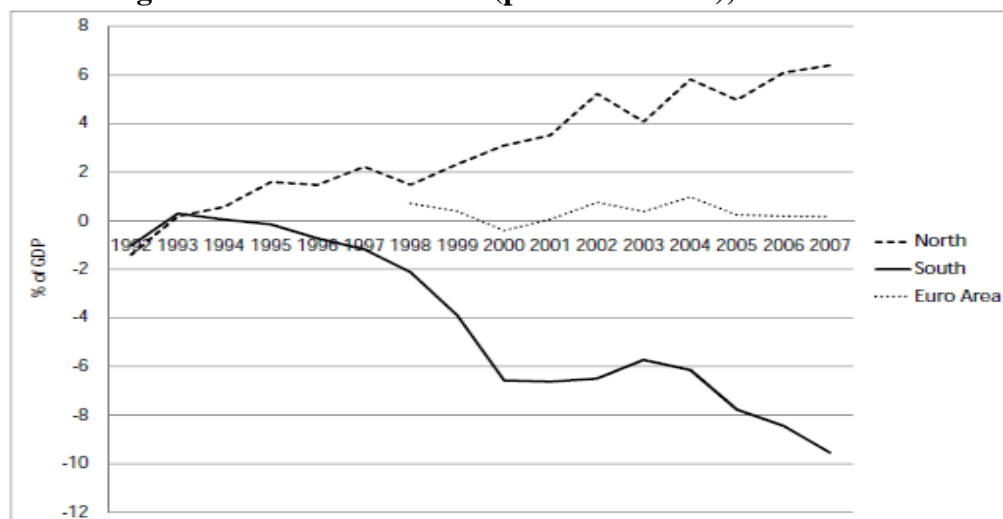
From all this we conclude that a withdrawal from the EMU is not a sensible political option for Portugal and that, instead, efforts should be directed towards institutional reform of the EMU itself.

4.- Some proposals for reform of the EMU

In this section we outline some reforms in the governance structure of the EZ that could solve the two major problems that currently afflict it: the CA imbalances of individual countries and the *sovereign* debt crisis.

4.1.- Intra-EMU CA imbalances

Figure 10: Current account (percent of GDP), 1992-2007



Source: Holinski et al. (2010, p. 3)

Figure 10 depicts the evolution of the CA averages of two distinct European regions between 1992 and 2007: the North, composed by Germany, Austria, Finland and Holland, and the South, consisting of Portugal, Ireland, Greece and Spain. In the first half of the 1990s, the CAs of both groups of countries were close to equilibrium. Afterwards, the CA balance of the South deteriorated dramatically reaching a deficit of

almost 10 percent of GDP in 2007, while at the same time the CA of the North improved continuously into a surplus of more than 6 percent of GDP in 2007.¹⁵

Table 4: Inequality of income distribution – Gini coefficient, 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
North										
<i>Germany</i>	25	25	25	:	:	:	26,1	26,8	30,4	30,2
Netherlands	26	29	27	27	27	:	26,9	26,4	27,6	27,6
Austria	26	24	24	:	27,4	26	26,2	25,3	26,2	26,2
Finland	24	24	27	26	26	26	26	25,9	26,2	26,3
South										
Portugal	36	36	37	:	:	38	38,1	37,7	36,8	35,8
Ireland	32	30	29	:	30,6	32	31,9	31,9	31,3	29,9
Greece	34	33	33	:	34,7	33	33,2	34,3	34,3	33,4
Spain	33	32	33	31	31	31	31,8	31,2	31,3	31,3

Source: Eurostat

In addition, the size of the imbalances since the creation of the Euro has been remarkable: in 1999-2007, the CAs in the South and in the North were on average equal to -6.8 percent and +4.6 percent of GDP, respectively (Holinski et al., 2010, p. 4). Yet, no sign of correction as emerged. By contrast, the CA of the Euro zone as a whole has remained roughly in equilibrium over the same period (see Figure 10). Why this marked disparity?

The automatic adjustment of the exchange rate of the euro has probably contributed to the equilibrium in the CA of the Euro area as a whole. By contrast, the process of financial and monetary integration in Europe led to increasing external deficits in Southern countries. As a matter of fact, beginning in the mid-1990s the decline and subsequent elimination of exchange rate risk provoked a drastic decline in nominal and real interest rates of bank credit in Southern countries towards the levels

¹⁵ The increase in the CA surplus of the North from 1999 through 2007, of 4 percentage points of GDP, was basically associated with an increase of 3 percentage points of GDP in private saving (see Holinski et al., 2010, p. 7, Figure 4). This, in turn, may have reflected the strong wage restraint engendered in Germany over the last decade and the associated increase in income inequality (see Table 4).

observed in the North.¹⁶ As a result, there was an acceleration of investment and consumption in the South, financed by Northern savings and greatly based on imports from the North. The result: Southern countries ran large CA deficits and accumulated foreign debts and, symmetrically, Northern countries ran large CA surpluses and acted as their foreign creditors.¹⁷

Now, the completion of this process ought to involve a subsequent future period in which Southern countries switched from net importers to net exporters and thereby repaid the accumulated debts. Which mechanisms were supposed to bring about this switch? The new invested capital would boost productivity growth – supposedly in the *tradable* sector – and thereby enhance competitiveness and net exports. If that boost in productivity happened to be insufficient, nominal wages would then fall so as to improve competitiveness further and generate the net exports needed to pay back the accumulated debts.

In practice, however, these mechanisms have not operated. To begin with, the CA deficits of the South reflected mainly increases in private consumption (in the case of Portugal) and in housing investment (in the case of Spain and Greece), and not the upsurges in productive investment that were supposed to boost competitiveness.¹⁸ Hence, instead of catching-up, productivity in the South has drifted below that of the North. Secondly, most of the increase in investment in the South went into *non-tradable* sectors and thus hardly led to a significant increase in either productivity or productive capacity in the tradable goods sectors. Finally, the financial inflows during the *supposed*

¹⁶ In Portugal, both rates declined by almost 10 percentage points between 1995 and 1999: the nominal interest rate fell from 15.4% to 6% and the real rate from 13% to slightly more than 3%.

¹⁷ Portugal's foreign debt has already surpassed 100% of GDP, whilst Greek and Spanish debts are still slightly below that figure.

¹⁸ The Portuguese saving rate has continuously declined from 20% in 1995-8 to 9% of GDP in 2009. Housing investment more than doubled in Spain between 1997 and 2007 and doubled in Greece between 1996 and 2006. In marked contrast, housing investment in Portugal increased by only 33% and during a brief period of time (between 1996 and 2000), having subsequently undergone through a sharp contraction. In 2011, it is 40 percent below its 1996 level!

convergence process boosted domestic demand and output in some Southern countries above full employment. As a result, inflation in the South – especially in nominal wages and non-tradable prices - rose relative to the North and, thus, competitiveness in the South declined relative to the North.

Well, if Southern countries had not joined the EZ their large CA deficits would have by now led to the real exchange rate depreciation needed to boost their competitiveness and switch their CAs into surpluses. In theory, the same could be achieved through equivalent declines in nominal factor prices: wages, rents, interest, prices of non-tradable goods (inputs of tradable goods) and profits. Yet, factor prices exhibit downward nominal rigidity and, hence, unit costs have for several years remained too high in the South and too low in the North, preventing the correction of the imbalances between the two regions.

4.2.- Imposing ceilings on CA imbalances and raising the inflation target of the ECB

As we have just seen, the process of financial and monetary integration led to large CA imbalances in Europe with *no* mechanism guaranteeing their subsequent correction. This has caused a tremendous disturbance on the peripheral economies of the EZ which now face a long period of stagnation.

It is therefore surprising that a simple rule, had it been adopted ten or fifteen years ago, could have prevented the developments that have led to the situation the peripheral EZ countries are now locked in. Specifically, instead of imposing limits on budget deficits, the EZ should have imposed (legally-binding) ceilings on CA imbalances – deficits or *surpluses* - of individual EZ countries.

Which instruments could have been used to guarantee the compliance of this rule? The major source of the current Southern CA deficits and of the symmetric Northern surpluses was the credit-driven ballooning of consumption and housing investment in the South. Therefore, the development of those imbalances could have been contained through the use of two instruments: (i) bank reserve requirements ratios and (ii) bank capital/asset ratios. (i) Bank reserve requirements would have worked in the following way. First of all, the ECB would have moved from setting reserve requirements on deposits to fixing reserve requirements *on credit*. Afterwards, it would have raised substantially the reserve requirements *on credit granted in the South* so as to increase the unit cost incurred by banks in that credit. This would have then increased the interest rates charged by banks on credit conceded in the South, and thus led to lower credit growth there and to the containment of CA imbalances in the North and the South alike. (ii) Bank capital/asset ratios would have acted in a similar way. The ECB would have raised the capital required for *credit granted in the South* (ie, it would have raised the *weight* of Southern credit in the calculation of the required bank capital/asset ratios). This would have not only increased the unit costs of Southern credit incurred by banks but, to the extent that their capital is limited, would have also reduced their credit supply in the South. These two developments would have then led to higher interest rates on Southern credit, and thus inhibited credit growth in the South and the consequent CA imbalances in the EZ.

But now that we are trapped in tremendous CA imbalances, what can we do? As already explained, fiscal consolidation in Southern EZ countries will help them reduce their imports and CA deficits only at the expense of even higher unemployment. Moreover, the reduction in imports of the South from the North — *exports of the North*

to the South — will also depress output and employment in the North. Hence, we may say that the ‘Stability and Growth Pact’ (S&GP hereafter) imparts macroeconomic policy in the EZ a *deflationary* bias by making the whole burden of the adjustment effectively fall on the countries running trade deficits (Stockhammer, 2011).

Is there an alternative? At the moment, expansionary fiscal policy in the South is clearly *not* an option: financial investors would simply refuse to advance the required financing. What if the ECB provided direct finance for such a policy? In the short-run, a recession might be avoided in the South. But it would not be a wise solution. It would merely lead the South to resume its unsustainable path of the last decade: high CA deficits and increasing external indebtedness.

A comprehensive solution for the problems of Southern countries – public, private and external deficits, stagnant output and rising unemployment – must necessarily involve a robust growth of net exports. Indeed, besides cutting the external deficits, that would boost output and employment and this, by raising fiscal revenues, would slash the budget deficits as well. So the crucial question is: how can export growth be boosted in the South?

One possible route would be through *expansionary fiscal policy in the North*. Indeed, this would, in a first stage, boost output and employment in the North and afterwards, once full-employment was reached, *increase wage and price inflation there*. And these two developments in the North would correct the various imbalances currently affecting the EZ: not only the CA imbalances, but also unemployment, which is at 10.1% for the EZ as a whole and afflicts the North and the South alike (see Table 5).

Table 5: Unemployment rates and CAs in the Eurozone, 2010

	EZ	Ge	Be	Irl	Gr	Sp	Fra	It	Pt	Esl	Slk	Fin	Au	Ho	Est
Unemployment rates	10.1	7.1	8.3	13.7	12.6	20.1	9.7	8.4	11	7.3	14.4	8.4	4.4	4.5	17
CAs (% of GDP)	-0.35	5.1	2.7	-0.7	-11.8	-4.5	-3.5	-4.2	-9.8	-0.9	-2.9	2.8	3.2	6.8	2.8

Source: AMECO database

How would expansionary fiscal policy in the North lead to the correction of these imbalances? Firstly, the acceleration of demand growth in the North would not only reduce unemployment there but also boost its imports and lessen its CA surplus. Secondly, the increase in wage and price inflation in the North would reduce its competitiveness vis-à-vis the South and thereby *shift demand from the North to the South*, further raising imports of the North from the South and reducing the Northern CA surplus. Finally, the increase in imports of the North from the South — *exports of the South to the North* — would raise output and employment in the South and, at the same time, narrow its budget and CA deficits.

Hence the question: what could force the Northern countries to implement expansionary fiscal policies? If they faced an upper limit for their CA surpluses of (say) 2 percent of GDP, they would have no alternative.¹⁹ More generally, we propose the following policy assignment for EZ governments. Countries with CA surplus above 2 percent of GDP should be forced to adopt expansionary fiscal stances and/or to ease the

¹⁹ This proposal accords with Keynes's position in 1944 at the Bretton Woods Conference based on his (sadly rejected) proposal to create an institutional arrangement compatible with global full employment and vigorous economic growth. As emphasized in Davidson (2009, ch. 8), Keynes concluded that an essential ingredient of an international payments system consisted of transferring the major *onus* of macroeconomic adjustment from debtor to creditor nations by forcing the countries exhibiting favourable CA balances 'to initiate most of the effort necessary to eliminate the trade imbalances, while "maintaining enough discipline in the debtor countries to prevent them from exploiting the new ease allowed them"' (Davidson, 2009, p. 129). This, Keynes explained, would 'substitute an expansionist, in place of a restrictive, pressure on world trade' (Davidson, 2009, p. 129).

reserve and capital requirements on credit given to their economies. Countries with CA deficits above 2 percent of GDP should act in a symmetric way.²⁰

Finally, it is important to unveil the *underlying logic* behind our proposal of expansionary fiscal stances in the North under the current circumstances. There are currently two problems in the EZ: a *lack* of global demand (unemployment is at about 10%) and a *bias* of demand in favour of the North. And both these problems can be solved by raising demand and inflation in the North through expansionary fiscal policies of the respective governments.

Put another way, in a large economic space like the EZ with neither fiscal federalism nor significant labour mobility there must be some mechanism to *change relative prices* and thereby shift demand from surplus to deficit countries. Since prices are, and because debt-payments are fixed in nominal terms should be, downward rigid in the South, that change in relative prices must involve higher inflation in the North. It is for this reason that we must dare thinking the unthinkable: the EZ will only be viable in the long run if the ECB raises its inflation target up to (say) 5% - the second new rule we propose for the EZ.²¹

²⁰ Unfortunately, this solution faces serious obstacles. First, there is the foreseeable tightening of the ‘asymmetric’ S&GP through the introduction of new sanctions and making them semi-automatic for countries which exceed the budget deficit limit (Larch et al, 2010; European Commission, 2010). Second, Germany recently adopted the so-called ‘debt brake’ whereby the nation is limited to federal government cyclically-adjusted budget deficits of no more than 0.35 percent of GDP from 2016 (Proissl, 2010), a limit which may only be violated in case of deep recessions and natural disasters and provided there is a 2/3 majority in Parliament.

Both the reinforcement of the S&GP and the German ‘debt brake’ will predictably enhance the asymmetry of the macroeconomic adjustment within the EZ, with countries exhibiting large public deficits being forced to adopt more restrictive fiscal policy stances whereas countries with low budget deficits or budget surpluses do not come under pressure to adopt more expansionary policies.

²¹ This discussion suggests that the South need not ask the North to forgive part of its debts. Over the last decade, the North has been lending money to the South to buy its goods and services. Now, the South should explain the North that it will only have the money to repay its debts if the North steps up its purchases of Southern goods and services.

4.3.- Empowerment of the ECB to buy public debt of EZ countries facing liquidity crises

Besides large CA imbalances, there is currently a problem in the EZ, related to the *peculiar nature of sovereign debt* in a currency union, which needs to be tackled if future sovereign debt crisis are to be avoided. The euro solved Europe's problem of exchange rate speculation by creating a single currency but, 'in doing so, it replaced the exchange rate speculation problem with a bond market speculation problem' (Palley, 2011, p. 2). As argued in De Grauwe (2011), when investors fear a default by a given EZ country, they sell the bonds issued by the government of that country and thereby raise the interest rate paid on its public debt. As a result, the government experiences a "liquidity" crisis, i.e. it cannot obtain enough funds in capital markets to roll over its debt at *reasonable* interest rates. In turn, the unreasonably high interest rates may force a country into default.²² If so, the initial feared default becomes a *self-fulfilling prophecy*, that is, 'the country has become insolvent because investors fear insolvency' (De Grauwe, 2011, p.5).

By contrast, the possibility of default in a country that issues its own currency is quite remote. Indeed, if investors feared that its government might default on its debt, they would still sell their bonds and drive up interest rates but crucially, were the government unable to roll over its debt at reasonable rates, the country's central bank would buy up that debt. The 'superior force of last resort', the central bank, would thus always prevent investors from generating a liquidity crisis and the ensuing default.

How can the fragility of EZ countries issuing debt in a currency over which they have no control be addressed? In the wake of the Greek sovereign debt crisis, the

²² This is because a necessary condition for solvency is that the primary budget surplus be at least as high as the difference between the real interest rate and the rate of growth of real output times the actual debt-to-GDP ratio.

European Council decided to set up the so-called “European Stability Mechanism” (ESM) that will enter *permanently* into force on 1 January 2013 and whose aim is to provide financial assistance, *under strict conditionality*, to the EZ countries with severe financial problems (European Council, 2011). The ESM will be funded by contributions from EZ countries and will initially have an effective lending capacity – a fire-power - of €500 billion.²³

Unfortunately, the fact that EZ countries applying for financing will have to adopt austerity measures will aggravate their recessions. Moreover, the high interest rate the ESM will charge on loans (two hundred basis points above its funding rate) and the “collective actions clauses” on new government bonds (asking private bondholders to share in the restructuring of the debt) may jeopardize the wanted financial stability (see De Grauwe, 2011). Finally, the limited lending capacity - €500 billion – is clearly insufficient fire-power in the event of liquidity crisis of the Spanish or the Italian governments.

In this setting, we believe financial stability needs to be pursued in a different way. Specifically, the ECB should be willing to buy an *unlimited* amount of the public debt of any EZ country either directly or in secondary markets so as to prevent the emergence of liquidity crisis (unreasonably high interest rates) and the ensuing default.²⁴

²³ Presumably, the strict conditionality represents a device aimed at preventing abuse of the ESM by irresponsible countries. However, as noted in De Grauwe (2010), the only case where it can be maintained that the main cause of the sovereign debt crisis in the EZ is government profligacy is Greece. On the contrary, he argues that the root cause of the debt crisis in other peripheral EZ countries is to be found in the unsustainable debt accumulation of the private sector.

²⁴ Article 123.1 of the Treaty of Lisbon currently prohibits the ECB or any national CB to purchase public debt from EZ countries *directly* albeit it does not expressly prohibits the purchase of sovereign debt in secondary markets.

5.- Summary and conclusion

The purpose of this study was to analyze the causes of the Portuguese malaise, evaluate the different policy options currently available to the Portuguese government and make several proposals for institutional reform of the EMU. Our main conclusion is that, given the terrible short-term economic consequences that Portugal would face were it to leave the EZ, the best way forward for Portugal is to join forces with other peripheral EZ countries in order to push for reform of the EMU along the following lines.

First, the limits on budget deficits imposed by the S&GP should be repealed and replaced by (legally-binding) ceilings on CA imbalances of individual EZ countries. Second, the ECB should raise its inflation target up to (say) 5% so as to create a mechanism that *changes relative prices* in the EZ and thereby shifts demand from surplus to deficit countries. Last, but not least, the ECB should be assigned with a ‘superior force of last resort’ empowering it to buy the public debt of distressed EZ countries and thus protect them from unreasonably high interest rates and the ensuing default.

Countries of the South, unite! You have nothing to lose but your chains!

References

Ahearne, A. and Pisani-Ferry, J. 2006. The Euro: Only for the Agile, *Bruegel Policy Brief*, Issue 2006/01, February.

Ahearne, A., Schmitz, B. and von Hagen, J. 2008. Current Account Imbalances in the Euro Area, in Aslund, A. and Dabrowski, M. (eds.) *Challenges of Globalization*, pp. 41-57, Peterson Institute for International Economics, Center for Social and Economic Research, Washington, DC.

Athanassiou, P. 2009. Withdrawal and expulsion from the EU and EMU. Some Reflections, *European Central Bank Legal Working Paper* no. 10, December.

Bank of Portugal, 1997. *1996 Annual Report*

Bank of Portugal, 1998. *1997 Annual Report*

Bank of Portugal, 2000. *1998 Annual Report*

Bank of Portugal, 2005. *2004 Annual Report*

Bank of Portugal, 2007. *2006 Annual Report*

Bank of Portugal, 2009a. *2008 Annual Report*

Bank of Portugal, 2009b. *A Economia Portuguesa no Contexto da Integração Económica, Monetária e Financeira*, Departamento de Estudos Económicos, Lisbon.

Bank of Portugal, 2010. *2009 Annual Report*

Blanchard, O. 2007. Adjustment within the euro. The difficult case of Portugal, *Portuguese Economic Journal*, 6, pp. 1-21.

Bohle, D. 2010. The Crisis of the Eurozone, *European University Institute*, Working Paper No. 2010/77.

Brecht, M., Slike, T., van Treeck, T. and, Truger, A. 2010. Squaring the circle in Euroland? Some remarks on the Stability and Convergence Programmes 2010-2013, *Macroeconomic Policy Institute*, Working Paper no.3, March.

Bureau of Labour Statistics, International Labour Comparisons homepage.
<http://www.bls.gov/web/ichcc.supptoc.htm>

Cabral, M. 2010. Portugal exporta cada vez mais serviços, *Jornal de Negócios*, 22th of April, p. 34.

Cavaco Silva, A. 2010, *Discurso do dia 10 de Junho*, Cerimónia Comemorativa do Dia de Portugal

Constâncio, V. 2010. Perspectivas sobre a Economia Portuguesa, Slides presented in the 5th Conference of the Bank of Portugal – Desenvolvimento Económico Português no Espaço Europeu.

Davidson, P. 2009. *The Keynes Solution: The path to global economic prosperity*, New York: Palgrave Macmillan.

De Grauwe, P. 2010. A mechanism of self-destruction of the eurozone, *CEPS commentary*, 9 November.

De Grauwe, P. 2011. The Governance of a Fragile Eurozone, *Center for European Policy Studies Working Document No. 346*, May.

European Commission 2010. The EC proposals to reinforce economic governance in Europe, MEMO/10/204, Brussels, 20 May 2010.

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/10/204>

European Council 2011. European Council 24/25 March 2011, Conclusions, <http://europa.eu/rapid/pressReleasesAction.do?reference=DOC/11/3&format=HTML&aged=0&language=EN&guiLanguage=e>

Felipe, J. and Kumar, U. 2011. Unit Labor Costs in the Eurozone: The Competitiveness Debate Again, *Levy Economics Institute Working Paper No. 651*.

Hein, E., Truger, A., and van Treeck, Till 2011. The European Financial and Economic Crisis: Alternative Solutions from a (Post-) Keynesian Perspective, *Macroeconomic Policy Institute (IMK)*, Working paper 9/2011.

Holinski, N., Kool, C. and Muysken, J. 2010. Origins of persistent macroeconomic imbalances in the Euro area, *Maastricht University School of Business and Economics*, RM/10/026.

Lapavistas, C., Kaltenbrunner, A., Lindo, D., Michell, J., Paineira, J.P., Pires, E., Powell, J., Stenfors, A. and Teles, N. 2010. Eurozone Crisis: Beggar Thyself and Thy Neighbour, *Research on Money and Finance occasional report*, March.

Palley, T.I. 2011. Monetary Union Stability: The Need for a Government Banker and the Case for a European Public Finance Authority, *Macroeconomic Policy Institute (IMK) Working Paper No.2*, February.

Proissl, W. 2010. Why Germany Fell Out of Love with Europe, *Bruegel Essay and Lecture Series*, July.

Stockhammer, E. 2011. Peripheral Europe's Debt and German Wages. The Role of Wage Policy in the Euro Area, *Research on Money and Finance Discussion Paper no. 29*, March.

Wyplosz, C. 2010. The Eurozone in the Current Crisis, *Asian Development Bank Institute Working Paper No. 207*, March.