



## Working Paper No. 664

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### Can Portugal Escape Stagnation without Opting Out from the Eurozone?

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**March 2011**

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\* This paper was presented at the conference on “The Greek and Euro Crisis,” University of the Basque Country, Bilbao, Spain, December 17, 2010. The authors would like to thank Philip Arestis for kindly inviting them to participate in the conference. They also wish to thank the participants in the session in which the paper was presented for their comments.

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## **ABSTRACT**

The creation of the Economic and Monetary Union (EMU) has not brought significant gains to the Portuguese economy in terms of real convergence with wealthier eurozone countries. We analyze the causes of the underperformance of the Portuguese economy in the last decade, discuss its growth prospects within the EMU, and make two proposals for urgent institutional reform of the EMU. We argue that, under the prevailing institutional framework, Portugal faces a long period of stagnation, high unemployment, and painful structural reform, and conclude that, in the absence of institutional reform of the EMU, getting out of the eurozone represents a serious political option for Portugal.

**Keywords:** Nominal Wage Cuts; Eurozone; Relative Unit Labor Costs; Zero-sum Game

**JEL Classifications:** E32, E65, F32, F41, J50

## **1. INTRODUCTION**

The sovereign debt crisis of Greece and other peripheral eurozone (hereafter EZ) countries like Portugal in 2010 has brought to the fore the rising heterogeneity observed within the EZ and the macroeconomic imbalances that such heterogeneity has led to. As several scholars have emphasized, 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 (Lapavitsas et al. 2010). According to Lapavitsas et al. (2010), this is largely the result of a “race to the bottom” led (and won) by Germany encouraging flexibility, wage restraint, and part-time work even more than peripheral EZ countries. However, financial integration between the North and the South may have also contributed to the emergence of macroeconomic imbalances within the EZ by boosting demand, particularly private consumption, in the countries of the South. Be that as it may, this situation has translated into large current account deficits being exhibited by Greece, Portugal, and Spain (and Ireland) against Germany as well as high levels of indebtedness by both the private and public sector. Remarkably, this dim state of affairs was predicted by Kregel (1999) who prophetically wrote:

Germany might be said to be exporting its unemployment to the rest of the EU member countries. The other member countries can only allow their nominal wage levels to evolve independently of Germany to the extent they can rely on productivity growth in excess of that of Germany... The result will be that beggar-thy-neighbor nominal exchange rate depreciations are replaced by beggar-thy-neighbor reductions in wage costs and prices. (Kregel 1999: 40).

Despite Frankel and Rose’s (1998: 1011) proposition that “the suitability of European countries for EMU [Economic and Monetary Union] cannot be judged on the basis of historical data since the structure of these economies is likely to change dramatically as a result of EMU,” the evidence so far suggests that, except in the case of financial integration which has proceeded apace, there is no clear pattern of economic integration among EZ countries (Santos Silva and Tenreyro 2010; Lane 2006). In the last decade, growth in Mediterranean EZ countries and Ireland has mainly come from expansion of consumption financed by rising private sector indebtedness (as in Greece and Portugal) or vigorous investment linked to real state bubbles (as in Ireland and

Spain). Therefore, the integration of peripheral countries in the EZ has so far been one-sided in the sense that it has largely consisted of a rapid process of financial integration whereby these countries have financed their large current account deficits by way of increasing their indebtedness vis-à-vis core EZ countries, predominantly Germany. In turn, this scenario made them particularly vulnerable to the crisis of 2007–09 that subsequently led to the European sovereign debt crisis that erupted violently in the spring of 2010. Having now embarked upon ambitious fiscal consolidation and unpopular structural reforms, countries like Greece, Portugal, and Spain face a decade 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 political problem in the coming years.<sup>1</sup>

The purpose of this study is to evaluate the growth prospects for Portugal in order to gauge, from a economic point of view, the convenience of its remaining inside the EMU under the current institutional framework. For that purpose, we use a blend of theoretical and data analysis. Our main conclusion is that, in the absence of institutional reform of the EMU, Portugal faces a long period of economic stagnation and that leaving the EZ currently represents the best way forward for Portugal.

The study is organized as follows. Next section reviews the literature on the intra-eurozone current account imbalances with special attention to the Portuguese case. Section 3 analyses the recent evolution of the Portuguese economy. Section 4 discusses various economic policy strategies currently available to Portugal. Section 5 contains two proposals for institutional change in the EZ that, according to us, may help correct the current macroeconomic imbalances and resume economic growth in the EZ. Finally, section 6 summarizes and concludes.

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<sup>1</sup> We should remind the reader at this juncture that membership in EMU is a concomitant of membership in the European Union (EU). Notwithstanding it, as suggested in Kenen (1999: 114), “it is entirely conceivable, moreover, that an EU member might be allowed to depart peaceably from EMU without being ejected from the EU.”

## **2. A REVIEW OF THE LITERATURE ABOUT INTRA-EMU MACROECONOMIC IMBALANCES**

As we mentioned above, a key dimension of the rising heterogeneity within the EMU is the emergence of large current account deficits in the peripheral economies coupled with large trade surpluses in the core countries, especially Germany. Although the dominant view is that these macroeconomic imbalances reflect a rising divergence in relative competitiveness within the EZ, some scholars have suggested instead that the former are closely related to differences in GDP per capita. In this latter case, the policy implication is that such imbalances will tend to disappear over time provided there is real convergence among EZ countries. The purpose of this section is thus to review the literature that has discussed the causes of such macroeconomic imbalances.

An early study to address this topic is in Blanchard and Giavazzi (2002). They use an open-economy model to show how, for poorer countries, goods and financial market integration are likely to lead to both a decrease in the saving rate and an increase in investment, and so to a larger current account deficit. They document that the changes in the current account balances of Portugal and Greece are part of a more general trend: the dispersion of current account positions among OECD countries has steadily increased since the early 1990s, and current account positions have become increasingly related to countries' per capita GDP. They show that this trend is visible within the OECD as a whole but is stronger within the EZ. They go on to argue that the channel through which this occurs appears to be a decrease in private saving in the countries with widening current account deficits, rather than an increase in investment. Focusing on the cases of Portugal and Greece, they conclude that lower private saving, especially household saving—due both to internal and external financial liberalization but also to better growth prospects—and, to a much lesser extent, higher investment appear to be the main drivers of the current account deficits. They add that financial liberalization led to substantial decreases in nominal and real interest rates because the adoption of the euro eliminated country risk, thus opening the euro interbank market to Portuguese and Greek banks.

Ahearne, Schmitz, and von Hagen (2008) examine whether capital tends to flow from rich to poor EZ countries and whether the creation of the euro has affected such flows. They run simple OLS regressions to examine the determinants of trade balances in individual European countries and any possible relationship between trade balances

and per capita income. They find that trade surpluses in the EU are a *positive* function of relative per capita GDP and that the relationship is strongly significant, i.e., countries with a larger per capita GDP have larger intra-EU trade surpluses. According to the authors, these results suggest that the EMU has increased capital market integration in Europe, with the result that capital flows are now more in line with what neoclassical theory predicts, thus indicating that the monetary union works well. They predict that, as capital flows from high- to low-per-capita GDP countries, these flows will promote economic convergence among EZ countries.

Holinski, Kool, and Muysken (2010) disagree to some extent with the previous argument that imbalances can be attributed to intertemporal maximization and thus to the existence of a European convergence process. According to proponents of this argument, countries with lower per capita GDP and productivity will attract foreign capital investment and, in the adjustment process, relative inflation will rise, thereby leading to real exchange rate appreciation and loss of relative international competitiveness. As a result, during the convergence process, current account deficits arise that match the surpluses on the capital accounts in surplus countries. Their disagreement with the so-called “economic convergence” hypothesis runs as follows. First, they find that the gap in terms of GDP per capita between northern and southern countries within the EZ has not narrowed over the period 1992–2007 so there has been little real convergence. In their view, the main reason for this is diverging *total factor productivity* between the two country groups over the period 1992 through 2007.<sup>2</sup> Second, they argue that a better measure to determine the external price competitiveness of a country is its “terms of trade,” that is, the ratio of export over import prices that excludes the nontradable sector. By looking at the evolution of the terms of trade of countries, they show that the relative loss of competitiveness of southern countries is far *less* pronounced than inflation rate differentials suggest. Finally, they conclude that a more plausible explanation for the macroeconomic imbalances is that relatively higher inflation in the southern countries lowered ex ante real interest rates in these countries and induced *higher* consumption and investment.

A thorough discussion of the causes of the underperformance of the Portuguese economy is in Blanchard (2007), who blames to an unfortunate combination of very

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<sup>2</sup> See, in particular, their figure 11 (Holinski, Kool, and Muysken 2010: 14) which is reproduced here as figure 10.

slow productivity growth and fast nominal wage growth for the loss of international competitiveness and the systematic current account deficits exhibited by Portugal since the launch of the euro in 1999. He notes that, with low unemployment, nominal wage growth was substantially higher than labor productivity growth in the last decade, thereby leading to growth in unit labor costs *higher* than in the rest of the EZ which accounts for over 70 percent of Portuguese foreign trade. According to Blanchard (2007), the effects of real overvaluation were compounded by “composition” effects in exports associated to direct competition from China and other Asian countries (see also Ahearne and Pisany-Ferry 2006). He points out that 60 percent of Portuguese exports are in “low-tech” goods compared to an average of 30 percent for the EZ and concludes that, even in the absence of overvaluation, the current account balance would have deteriorated due to these “composition” effects. According to him, in the absence of draconian policy measures, the most likely scenario is one of *competitive disinflation*, that is, an extended period of sustained high unemployment until competitiveness has been reestablished. The economic policy measures to be adopted include ambitious structural reforms aimed at increasing productivity as well as an “across-the-board” cut in nominal wages.

Ahearne and Pisany-Ferry (2006) also claim that above-average inflation led to a marked deterioration in Portugal’s competitiveness, which has depressed exports. They note that Portugal enjoyed a spurt in growth in domestic demand and in the construction sector by the time of EMU entry, as real interest rates declined by more than 6 percentage points. Notwithstanding, the loss of competitiveness eventually began to dominate. According to them, slow productivity growth and the composition of its exports left Portugal vulnerable to competition from low-cost producers, especially China. In addition, membership in the EMU exacerbated the loss of competitiveness and narrowed the policy options to offset the external shocks. They claim that, for countries like Portugal, there is “no solution other than the long, hard slog of structural adjustment” (Ahearne and Pisany-Ferry 2006: 6). They recommend wage restraint and increased competition in goods and services markets to keep inflation below the EZ average.

Finally, Zemanek, Belke, and Schnabl (2009) also find that, ever since the creation of the EMU, the competitiveness of EZ countries has diverged steadily. They analyze the behavior of unit labor costs from 1999 to 2007 and find that, while Germany and Austria have kept the level of 1999, in Ireland, Portugal, Spain, Greece,

and Italy unit labor costs have increased significantly up to 30 percent compared to 1999. They list several reasons for the divergence in inflation rates: (i) differences in inflation traditions and expectations; (ii) the Balassa-Samuelson effect; (iii) idiosyncratic business cycles, which lead to persistent differences in real interest rates; and (iv) differences in the rates of wage and productivity growth. However, they concede that, besides unit labor cost divergences, nonprice competitiveness may also help explain intra-EZ current account imbalances. The former covers variables such as sectoral and geographical specialization of the export sector, production and technology structure, and the quality of products. For instance, they argue that “a country with (without) a sectoral specialization in difficult-to-imitate goods has an advantage (disadvantage) which allows (does not allow) higher relative wage growth” (Zemanek, Belke, and Schnabl 2009: 8). Further, low-technology and low-skill (labor-intensive) industries mostly compete by prices so that “wage growth is more harmful in these industries because competition with low labour costs countries such as the new EU members or East Asian countries is fiercer” (Zemanek, Belke, and Schnabl 2009: 9). They claim that rapid wage growth in countries with labor-intensive production (like Portugal) probably fuelled the loss of international competitiveness relative to countries with capital-intensive production like Germany. Finally, they argue that the only way out of the current dilemma is to implement structural reforms and deny that the former will lead to a “race to the bottom” with respect to wage cuts. Instead, they predict that “intra-euro area current account imbalances would diminish and the international competitiveness of Europe as a whole” would rise (Zemanek, Belke, and Schnabl 2009: 31).

### **3. RISING HETEROGENEITY WITHIN THE EUROZONE: THE CASE OF PORTUGAL**

As explained in the previous two sections, 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 on the case of Portugal.

### 3.1. 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 table 1). Concomitantly, as shown in table 1, 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 overappreciated real exchange rate.<sup>3</sup> 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, which included a deficit in the *energy* account of 1.8 percent of GDP (see table 2). The trade deficit was partially offset by surpluses in both the balance of services and the net remittances of emigrants over immigrants. More specifically:

$$\begin{aligned} \text{Current account} &\approx \text{trade balance} + \text{balance of services} + \text{net remittances} \\ - 8.5\% \text{ GDP} &\approx - 11.9\% \text{ GDP} + 1.6\% \text{ GDP} + 2.6\% \text{ GDP} \end{aligned}$$

What about Portugal's international investment position (IIP) in 1999?<sup>4</sup> From 1985 through 1995, the Portuguese current account was roughly in equilibrium. The first significant deficits started only in 1996. As a result, in 1999 the Portuguese net external debt only amounted to 12 percent of GDP. Likewise, the *net* stock of both foreign direct investment and foreign investment in stocks was also relatively small. Therefore, as shown in figure 1, the IIP of the Portuguese economy solely represented -36 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).

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<sup>3</sup> 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, we cannot say *a priori* whether the REER is at or out of equilibrium since, for instance, a current account surplus may reflect a deficient domestic demand. If so, an increase in domestic demand up to full employment will raise imports and thus make the current account balance worsen at an unchanged REER.

<sup>4</sup> 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).

### **3.2. What Happened after 1999?**

Domestic demand had increased at a rapid pace between 1995 and 1999. In 2000–01 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 (with 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 2005–09, 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, at least since 2005, 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 2005–09?

### **3.3. The Trade Balance without Energy: 2005–09 versus 1999**

A look at the evolution of the various items of the current account in table 2 helps shed some light on this issue. On one side, two factors favorably affected the evolution of the current account between 1999 and 2005–09. A first factor was a decline in the trade deficit excluding energy. The second factor was an improvement in the surplus of the balance of services. The trade deficit excluding energy declined from about 10 percent in 1999 to about 7.3 percent of GDP in 2005–09.<sup>5</sup> This was due to a combination of a stagnant domestic demand in Portugal, which exhibited 0.4 percent annual growth, *and* a strong growth of imports of the main Portuguese trading partners amounting to 5.2 percent average annual growth. In fact, the stagnant demand prevented a rapid growth of imports of goods in 2002–08 (3 percent average annual growth). In turn, the strong

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<sup>5</sup> These values were obtained by adding the values of the good and services balances shown in table 2 and subtracting for each year the corresponding value of the energy balance depicted in figure 2.

growth of goods imports of Portugal's main trading partners led to a more rapid growth of goods exports in 2002–08 (3.7 percent average annual growth).<sup>6</sup>

However, if demand growth in Portugal had not remained below the growth of imports of Portugal's main trading partners the trade deficit without energy would have increased for two reasons. First, according to the IMF (see 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).<sup>7</sup> 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. The loss of international competitiveness of Portugal can also be ascertained by looking at figure 4 which shows the evolution of the inflation rate in Portugal and the EZ. Second, over the same period Portugal was subject to a marked increase in competition from China and central and east European (CEE) countries (see Ahearne and Pisany-Ferry 2006). 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.<sup>8</sup> Between 2003 and 2008 imports grew at an annual average rate of 3.9 percent, more than twice the rate of total demand. In addition, 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 substantially over that period (Constâncio 2010).

The new international environment faced by the Portuguese economy since the beginning of the twenty-first 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

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<sup>6</sup> The key contributors to the growth of Portuguese exports were Angola and Spain. In 2002–08, goods exports to Spain and Angola grew at annual average rates of 10.1 and 21 percent, respectively.

<sup>7</sup> HIPC: 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 HIPC 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.

<sup>8</sup> 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.

sharply at the expense of several southern European countries, mainly Portugal and Italy. In 2000–08, 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: 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: 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 from a combination of lower wages and a more skilled labor force (Bank of Portugal 2010: 144–5). In this respect, we may note that 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.<sup>9</sup> In addition, as noted in Constâncio (2010), the qualification of the Portuguese workforce lagged—and still lags—far behind that of these countries. As a result, over the last decade the CEE countries have attracted large flows of FDI into medium-to-high tech sectors, which formerly had headed towards southern Europe, including Portugal.

As we note above, the market share of Portuguese exports in the EU15 declined by 33 percent between 2003 and 2009. Nonetheless, over the same period the market share of goods exports in its main 34 trading partners declined by only 12 percent (see figure 5).<sup>10</sup> This was the result of a 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.

### **3.4. Improvement in the Balance of Services between 1999 and 2005–09**

The surplus in the balance of services rose from 1.6 percent in 1999 to an average of 3.6 percent of GDP in 2005–09. This was mainly the result of an excellent behavior of services exports, especially since 2006. 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: 148, table 5.4). These rates exceeded the growth rates of nominal imports of

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<sup>9</sup> By 2008 however, the hourly wage in these countries had risen to almost the Portuguese level, \$12.23 (see Bureau of Labor Statistics, International Labor Comparisons homepage).

<sup>10</sup> These partners account for 85 percent of Portuguese exports and include, besides the EU15 countries, Angola and the United States.

services in the same years, which were 15.9, 8.4, and 5.1 percent, respectively (Bank of Portugal 2010: 149, table 5.5) and thus led to an increase in the weight of services in total exports from 27 percent in 2005 to 33 percent in 2009 (see figure 6). 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 2007–09 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—that account for the traditional major Portuguese export sectors.

Finally, the high growth of service exports in the last decade or so did not reflect the behavior of its main sector—tourism.<sup>11</sup> Instead, the high growth of service exports was associated with the behavior of transport and “professional” services. These two types of services grew at double digit rates in 2006–08, and accounted for 26.5 and 30 percent of total service exports in 2008, respectively (Bank of Portugal 2010: 148).

### **3.5. The Current Account: 2005–09 versus 1999**

As we have seen, between 1999 and 2005–09 the trade deficit without energy fell by 2.4 percent of GDP while the surplus in the balance of services increased by 2 percent. As a result, the deficit in the balance of goods and services without energy improved by 4.4 percent of GDP between the two periods (see table 4). By contrast, in the same period the current account deficit increased by 1.7 percent of GDP. What accounted for this large difference between the behavior of the balance of goods and services and the behavior of the current account? Firstly, net remittances shrunk by 1.5 percent of GDP between 1999 and 2005–09. Secondly, the increase in the oil price since 1999 enlarged the energy deficit by 2 percent of GDP. Finally, as shown in table 5, the accumulation of current account deficits culminated in a large net external debt, thus leading to an

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<sup>11</sup> Tourism has accounted for about 40 percent of total Portuguese services exports in the last decade.

increase of 2.7 percent of GDP in the net income payments (mainly interest payments) to the rest of the world.

### **3.6. Summary**

In 1999, the REER of the Portuguese economy was well-above its equilibrium value. The current account deficit was equal to -8.5 percent of GDP at full employment. Since then, the economy has been subjected to four adverse trends: (i) a decline in the surplus of remittances; (ii) an increase in the energy deficit; (iii) a growing external debt service and; (iv) fiercer direct competition by both China and the EEC. The combined effect of the first three adverse trends was to increase the current account deficit by 6.2 percent of GDP and, hence, to push the REER even farther above its initial equilibrium level. In addition, the fourth trend tended to lower the equilibrium REER.

Meanwhile, two factors partially offset these negative trends thus lessening the net *increase* in the current account deficit to only 1.7 percent of GDP by 2009. The first factor was the excellent performance of service exports. The second factor was the stagnation of domestic demand coupled with strong growth in some of the main Portuguese trading partners. This more than offset the effect of the decline in the market share of Portuguese exports and the increase in the penetration of imports in Portugal.

## **4. CAN ECONOMIC GROWTH IN PORTUGAL BE RESTORED?**

A lesson from the first eleven years of EMU is that potential costs to members have been underestimated. Persistent divergences in growth and inflation have not been given sufficient attention by national and European policymakers. The damaging effects of divergences now call for painful corrective policies in member economies that have been marred by a loss of competitiveness within EMU. In particular, real exchange rate adjustment can only be brought about through changes in domestic prices but the latter will predictably require a long period of economic stagnation. This section discusses the economic policy alternatives available to Portugal and their likely consequences.

### **4.1. An Increase in the Private Saving Rate**

As illustrated in figure 7, investment in Portugal fell from 27.8 percent in 1999 to an average of 22.5 percent of GDP in 2005–08, 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.<sup>12</sup> To be sure, an increase in the savings rate would reduce consumption, trim down imports, and lead to a smaller current account deficit. However, an increase in the private saving rate would also have some adverse effects. First, by depressing sales, the ensuing cutback in consumption would have a negative impact on investment, which after almost uninterrupted declines in the last eight years, is already well-below its 2001 level. Second, it would also slash the demand faced by Portuguese firms thus bringing about further increases in unemployment.

#### **4.2. 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 a fiscal program aimed at cutting the budget deficit from 9.4 percent of GDP in 2009 down to 3 percent in 2012. What are the predictable effects? Besides a smaller budget deficit, the effects will be equivalent to an increase in the private saving rate, i.e., a smaller current account deficit coupled with lower output and higher unemployment.

#### **4.3. A Boost to Net Exports**

In a sense, one could argue that the Portuguese private and public sector deficits are mere symptoms of a deeper problem: the large external deficit. For this reason, the former can only be addressed—without depressing employment—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

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<sup>12</sup> This suggestion has been recently made by many Portuguese economists including President Aníbal Cavaco Silva, a retired economics professor.

economy. So, the crucial question for the Portuguese economy in the years ahead is this: how can a boost in net exports be engendered?

Figure 8 below depicts the Portuguese tradable sector. The horizontal price line results from the fact that the market price in a standard 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.<sup>13</sup> 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 net exports can only be achieved through cutbacks in its unit production costs.

Now, unit production costs can be reduced by increasing productivity and/or trimming down the prices of inputs. Blanchard (2007) recognizes the urgent need to enhance Portuguese productivity growth but he nevertheless notices that “productivity growth is unlikely however to increase overnight” (Blanchard 2007: 8). Hence, the only way to boost net exports in Portugal in the short to medium run is to slash the price of its inputs. This, in turn, can be done either through a long and painful “competitive disinflation” or through an “across-the-board” cut in nominal wages. The rest of the section discusses the likely consequences of these two policies.

#### *4.3.1. 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 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. 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

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<sup>13</sup> The height of the supply curve reflects the level of unit production costs—including the normal profit margin—of the successive firms.

Portuguese tradable sector is the same as in the EZ;<sup>14</sup> then, zero wage growth in Portugal would lead to an improvement of competitiveness of only 2.4 percent a year. As a result, Portugal would have to endure about a decade of high unemployment until competitiveness improves, the current account deficit decreases, and vigorous output growth resumes.

#### 4.3.2. An “across-the-board” reduction in nominal wages

Blanchard (2007) proposes an alternative way to regain competitiveness quickly by convincing workers to accept an “across-the-board” reduction in nominal wages—say, of 30 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 nontradable prices are set by a markup on wage cost” (Blanchard 2007: 16). Then, a decrease in nominal wages of 30 percent leads to a decrease in the price of nontradables 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 *nontradables* are the sole inputs used in the production of tradables. Then, a decline of 30 percent in both nominal wages and nontradable prices would reduce unit costs in the tradable sector by roughly 30 percent, thereby substantially increasing Portugal’s relative competitiveness. 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 8, where the nominal wage cut makes the upward-sloping unit cost curve ( $UC_T$ ) shift to the right, thus letting output in the tradable sector increase.

Arguably, a large cut in nominal wages and, hence, in nontradable goods prices could adversely affect domestic consumption and investment. This is because the Portuguese government and many Portuguese firms and households are heavily

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<sup>14</sup> From 1999 to 2008, productivity growth in Portugal and the EZ was similar, slightly less than 1 percent a year.

indebted and, as result of it, are committed to debt payments fixed in *nominal* terms.<sup>15</sup> Hence, a 30 percent decline in nominal wages and the resulting fall in prices in the non-tradable sector would make many indebted households and firms unable to honor their fixed debt payments. In turn, this could (at least partially) offset the demand stimulus coming from the expansion of the tradable sector.

Next, let us assume that the euro freely floats vis-à-vis other currencies so as to keep the EZ current account with the rest of the world in balance.<sup>16</sup> The crucial issue is that any improvement in relative competitiveness in an individual EZ country that is not achieved through an increase in productivity will—in the absence of real depreciation of the euro—be exactly offset by a worsening in the relative competitiveness of other EZ countries. In other words, changes in relative competitiveness not achieved through increases in productivity do *not* represent Pareto-improving changes for the EZ as a whole but constitute “zero-sum” games.<sup>17</sup> Another way of putting this is that changes in relative competitiveness within the EZ achieved by means of wage deflation entail a “fallacy of composition” whereby what holds for an individual country—that it can increase its net exports and expand employment in the tradable goods sector by cutting nominal wages—does not hold for the EZ as a whole. The reason is straightforward: if the nominal exchange rate of the euro floats freely to keep the EZ (global) current account roughly in balance, then an increase in net exports in any EZ country will be exactly matched by a decrease in net exports in other EZ countries. The adjustment of the exchange rate occurs since, as argued in Kregel (1999), any decrease in *average* unit labor costs in the EZ will lead to a nominal appreciation of the euro against other major

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<sup>15</sup> At the end of 2009, the total debt of households had reached 99.1 percent of GDP, the total debt of nonfinancial 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 one-third of the total debt is owned by nonresidents. The rest comprises domestic savings in bonds and deposit accounts as counterparts.

<sup>16</sup> 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.

<sup>17</sup> By contrast, improvements in relative competitiveness in an (small) individual EZ economy that are achieved by virtue of an increase in productivity *do* represent Pareto-improving changes for the EZ as a whole. In that case, real (consumption) wages in the tradable goods sector would remain roughly constant, employment would expand due to the increase in net exports, and output in the EZ as a whole would increase. If the increase in relative competitiveness in an individual EZ economy is instead the result of nominal wage cuts, then real (consumption) wages in the export sector will decrease whereas, as before, employment in that sector will expand. As for the nontradable goods sector, an increase in productivity will bring about increases in real (consumption) wages (for workers in both the tradable and nontradable sector) whereas the impact on the level of employment in that sector is *a priori* uncertain. Finally, a cut in wages in the nontradable goods sector will lead to a decrease and an increase in real (consumption) wages in the nontradable and the tradable goods sector, respectively, the effect on employment in the nontradable goods sector being also uncertain.

currencies so that the real effective exchange rate remains roughly *constant*. Finally, if EZ countries set about increasing their competitiveness by cutting wages then the benefit to any individual country is likely to be meager since other EZ countries will predictably replicate this policy. Whether such policy would be beneficial for the EZ as a whole is discussed below.

From the previous discussion it follows that the crucial issue when gauging the viability of an (export-led) growth strategy for the EZ as a whole based on nominal wage deflation is whether or not nominal appreciations of the euro will *offset* decreases in unit labor costs (measured in euros) so as to maintain the real effective exchange rate constant. If so, decreases in nominal wages either in individual countries or across the EZ will not lead to increases in net exports for the EZ as a whole. Here, we can only conjecture. For instance, Zemanek, Belke, and Schnabl (2009: 31) argue that wage deflation in EZ deficit countries will increase the international competitiveness of Europe as a whole. Thus, they implicitly assume that decreases in unit labor costs in EZ countries will *not* be offset by nominal appreciations of the euro. By contrast, it has been argued that the ECB has an ideological objection to building stores of US dollars and that the outcome is that the “euro is overvalued and exporters cannot achieve the necessary growth that is required to boost the domestic economies” (Mitchell and Muysken 2006: 6). These authors propose that the ECB should acquire large quantities of US dollars reserves to support the EZ export sector. In other words, to them, the viability of an “export-oriented” growth strategy hinges on whether or not the ECB is willing to engineer a real depreciation of the euro.<sup>18</sup>

A formal analysis of this issue is addressed in Godley and Lavoie (2007) who perform a simulation exercise in a stock-flow consistent model with three economies (two EZ countries and the United States) and two currencies (the US dollar and the euro) where output is demand-determined. Their results suggest that decreases in unit labor costs in individual EZ economies will tend to be offset by nominal appreciations of the euro, thus leaving the real exchange rate roughly constant. In particular, they simulate the impact on the relative income levels of the three economies (the US economy and two EZ economies) of an increase in the import propensity in one of the EZ economies. They find that, after an initial and temporary increase, the US GDP

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<sup>18</sup> However, as Arestis and Sawyer (2006) point out, targeting the exchange rate would require *direct* intervention by the ECB in the exchange markets and, therefore, this would require a broadening of its mandate to allow it to pursue an exchange rate target that is conducive to employment growth in the EZ.

settles at the initial level in the new stationary-state owing to the relative appreciation of the US dollar vis-à-vis the euro. Crucially, they find that, owing to the relative depreciation of the euro, the GDP of the EZ economy whose import propensity initially increased settles at a *lower* level whereas the GDP of the other EZ economy settles at a higher level. Importantly, this exercise suggests that, were the import propensity of an individual EZ economy to decline due, for instance, to a decline in its nominal wage costs, there would be a relative (nominal) appreciation of the euro vis-à-vis the US dollar so that, in the new stationary state, the GDP of the EZ economy whose import propensity initially decreased would settle at a higher level, whereas the GDP of the other EZ economy would settle at a *lower* level. In other words, the decline in nominal wages in an individual EZ economy does not lead to an increase in the GDP of the EZ as a whole but only redistributes a given level of output between the two EZ economies.

## 5. INSTITUTIONAL REFORM OF THE EMU

As illustrated in figure 9 below, by participating in the process of financial and monetary integration in Europe, southern EZ countries were led into increasing current account deficits with *no* mechanism guaranteeing their subsequent correction. In the mid-1990s, these countries were much poorer and had much lower capital per worker than northern EZ countries. As a result, the expected returns on investment were higher in the south and led to an expansion in investment financed by northern savings. To a greater extent, the south stepped up consumption, financed by northern savings, in anticipation of higher income growth. Thus, southern EZ countries ran large current account deficits whereas northern EZ countries ran large current account surpluses (Blanchard and Giavazzi 2002: 148).

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 paid the accumulated debts.<sup>19</sup> 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, relative nominal wages would fall so as to

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<sup>19</sup> In a similar vein, Stockhammer (2011) argues that the peripheral EZ countries can only solve their public debt problems in the coming years if there is a change in German current account surpluses.

improve competitiveness further and generate the net exports needed to pay the accumulated debts.

In practice, however, these mechanisms have not operated. To begin with, the current account deficits of the south reflected mainly increases in private consumption in anticipation of higher future incomes and not the upsurges in investment which were supposed to generate the needed increase in relative competitiveness. Hence, instead of catching-up, productivity in the south drifted below that of the north (see figure 10). Secondly, most of the increase in investment in the south went into *nontradable* sectors and thus hardly led to a significant increase in either productivity or productive capacity in the tradable goods sectors. Finally, at least in some countries, the financial inflows during the *supposed* convergence process boosted domestic demand and output in the south above full employment. As a result, inflation in the south rose relative to the north and, thus, competitiveness in the south declined relative to the north (in the case of Portugal, see figure 4).

If southern countries had not joined the EZ their big current account deficits would have by now led to the large exchange rate depreciation needed to boost their competitiveness and switch their current accounts into surpluses. In theory, the same could be achieved through equivalent declines in wages. Yet, wages 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. What can be done? In what follows, we make two suggestions: imposing a ceiling on current account imbalances—either deficits or surplus—of individual EZ countries and raising the inflation target of the ECB.

### **5.1. Imposing Ceilings on Current Account Imbalances of Individual Countries**

As we have just seen, the process of financial and monetary integration led to increasing current account imbalances in Europe with *no* mechanism guaranteeing their subsequent correction. This has caused a tremendous disturbance in the southern economies of the EZ, which now face a long period of stagnation. We believe that a simple rule, had it been adopted ten or fifteen years ago, could have prevented the developments that have led to the situation southern EZ countries (and Ireland) are now locked in. Specifically, instead of imposing strict limits on budget deficits as the “Stability and Growth Pact” (S&GP hereafter) currently does, we believe that a more sensible policy would have been to impose legally-binding ceilings on *current account* imbalances—deficits or

*surplus*—of individual EZ countries.<sup>20</sup> We may even argue that if this rule were implemented *now*, the current imbalances in the EZ would probably be corrected without any significant economic distress—either in the north or in the south of Europe. The rest of this section explains why.

Pressured by the steep increases in the spreads on their sovereign debt, southern EZ countries are currently implementing fiscal programs aimed at cutting their budget and, implicitly, their external deficits. As explained above, fiscal consolidation will help reduce their current account deficits at the expense of raising unemployment even further. However, and importantly, 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. Is there an alternative? At the moment, expansionary fiscal policy in the south is clearly *not* a viable option since compliance with the S&GP precludes it. By contrast, expansionary fiscal policy in the north (at least in some countries) is a viable option. Such policy would boost demand and output in the north but this, in turn, would increase imports of the north from the south, and thus reduce the northern current account 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, diminish its current account deficit. In sum, restrictive fiscal policy in the south coupled with expansionary fiscal policy in the north could curb the present current account imbalances without depressing output and employment across it. Hence the question: What could lead the north to implement expansionary fiscal policies? If they faced an upper limit for their current account surplus of (say) 2 percent, they would have no alternative.<sup>21</sup>

Unfortunately, this solution is unlikely to be adopted in the foreseeable future. In addition to the constraints imposed by the S&GP, Germany has recently adopted the so-called “debt brake” whereby the nation is limited to federal government budget deficits of no more than 0.35 percent of GDP from 2016 (Proissl 2010). According to this law, the German government can only violate the deficit threshold in case of deep recessions

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<sup>20</sup> To the best of our knowledge, a similar proposal has been suggested in Brecht et al. (2010).

<sup>21</sup> It could be objected that, if surplus countries adopt an expansionary fiscal policy stance as proposed above, they might reach full employment before their current account balances exhibit a deficit thus jeopardizing the intra-EMU imbalances correcting mechanism proposed above. However, if that were the case, the emergence of wage inflation in surplus countries would tend to make their relative competitiveness worsen and this would eventually lead to an improvement in deficit countries’ relative competitiveness.

and natural disasters and always provided there is a two-thirds majority in Parliament. Thus, the “debt brake” severely restricts the German government ability’s to run deficits and will predictably prevent this proposal from even being considered.

### **5.2. Raising the Inflation Target of the ECB**

As is well-known, real wages tend to grow in line with productivity in the long run. Productivity growth in the EZ has been close to 1 percent since 1999. If this growth rate continues over the next decade, real wages in the EZ will probably also grow at an annual rate of 1 percent. With average inflation in the EZ remaining at the current 2 percent, this means that nominal wages in the EZ will tend to grow on average at 3 percent per year. But the high unemployment rates may *halt* nominal wage growth in southern EZ countries. Hence, if the required relative nominal wage reduction in these countries is equal to about 30 percent, then the necessary period of high unemployment in the south will be about 10 years.

What would happen if the ECB decided to raise its inflation target up to (say) 5 percent? Average nominal wage growth in the EZ would now increase from 3 to 6 percent per year. Again, if nominal wage growth in the south were equal to zero, then the reduction of relative nominal wages in the south would now accelerate from 3 to 6 percent a year and, consequently, the required period of high unemployment in the south would decrease from 10 to 5 years.<sup>22</sup> Sadly enough, as in the case of the ceilings on current account imbalances, this proposal faces a serious obstacle. Article 127 of the Treaty of Lisbon states that the primary objective of the ECB shall be to maintain price stability and that one of the basic tasks of the ECB is to define and implement the monetary policy of the Union. In turn, the Governing Council of the ECB clarified in 2003 that it aims to maintain inflation rates below but close to 2 percent over the medium term (ECB 2004: 51). Thus, under the current institutional setting, the ECB *independently* decides the quantitative definition of price stability as enshrined in the Treaty. It is unlikely that the ECB will accept to revise its inflation target upward to help “grease the wheels” of labor markets in troubled EZ countries.

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<sup>22</sup> Palley (2006) provides a formal analysis of the impact of increases in the target inflation rate of the central bank in a non-optimum currency area such as the EZ. He shows that the formation of a non-optimal currency area shifts the Phillips curve to the right and worsens the inflation-unemployment trade-off. He concludes that optimal monetary policy requires, in this setting, a *higher* target inflation rate.

## **6. SUMMARY AND CONCLUSION**

The dramatic sovereign debt crisis currently afflicting the Mediterranean EZ countries and Ireland has brought to the fore the rising heterogeneity observed within the EZ. As some studies emphasize, there has been a persistent loss in international competitiveness for the Mediterranean EZ countries (Greece, Italy, Portugal, and Spain) vis-à-vis Germany since the launch of the euro in 1999. In turn, this situation has translated into large current account deficits being exhibited by these countries along with high levels of indebtedness by both the private and public sector. Furthermore, the integration of these countries into the EZ has so far consisted essentially of an intense process of financial integration whereby they have financed their current account deficits by increasing their indebtedness vis-à-vis core EZ countries like Germany. Having embarked upon ambitious fiscal consolidation and unpopular structural reforms these countries currently face a painful decade of stagnation and high unemployment. The purpose of this study was to evaluate the growth prospects within the EMU for Portugal. In the process, we made two proposals for institutional reform of the EMU with a view to restoring economic growth across the EZ. Our main conclusion is that, in the absence of deep institutional reform in the EMU, growth prospects for Portugal are dim and so leaving the EZ currently represents a serious political option for Portugal.

## REFERENCES

- Ahearne, A., and J. Pisani-Ferry. 2006. "The Euro: Only for the Agile." *Bruegel Policy Brief*, Issue 2006/01, February.
- Ahearne, A., B. Schmitz, and J. von Hagen. 2008. "Current Account Imbalances in the Euro Area." in A. Aslund and M. Dabrowski (eds.), *Challenges of Globalization*. Washington, DC: Peterson Institute for International Economics, Center for Social and Economic Research.
- Arrestis, P., and M. Sawyer. 2006. "Alternatives for the Policy Framework of the Euro." in W. Mitchell, J. Muysken, and Tom van Veen (eds.), *Growth and Cohesion in the European Union*. Cheltenham, UK: Edward Elgar.
- Bank of Portugal. 1997. *1996 Annual Report*. Lisbon: Bank of Portugal.
- Bank of Portugal. 2005. *2004 Annual Report*. Lisbon: Bank of Portugal.
- Bank of Portugal. 2007. *2006 Annual Report*. Lisbon: Bank of Portugal.
- Bank of Portugal. 2009a. *2008 Annual Report*. Lisbon: Bank of Portugal.
- Bank of Portugal. 2009b. *A Economia Portuguesa no Contexto da Integração Económica, Monetária e Financeira*. Lisbon: Departamento de Estudos Económicos.
- Bank of Portugal. 2010. *2009 Annual Report*. Lisbon: Bank of Portugal.
- Blanchard, O. 2007. "Adjustment within the euro. The difficult case of Portugal." *Portuguese Economic Journal* 6: 1–21.
- Blanchard, O., and F. Giavazzi. 2002. "Current Account Deficits in the Euro Area: The End of the Feldstein-Horioka Puzzle?" *Brookings Papers on Economic Activity* 2: 147–209.
- Brecht, M., T. Slike, T. van Treeck, and A. Truger. 2010. "Squaring the circle in Euroland? Some remarks on the Stability and Convergence Programmes 2010–2013." Working Paper 3. Düsseldorf: Macroeconomic Policy Institute at the Hans Boeckler Foundation.
- Bureau of Labor Statistics, International Labor Comparisons homepage. Available at: <http://www.bls.gov/web/ichcc.supp.toc.htm>
- Cabral, M. 2010. "Portugal exporta cada vez mais services." *Jornal de Negócios*, April 22.
- Constâncio, V. 2010. "Perspectivas sobre a Economia Portuguesa." Slides presented at the Fifth Conference of the Bank of Portugal—Desenvolvimento Económico Português no Espaço Europeu, May 14.

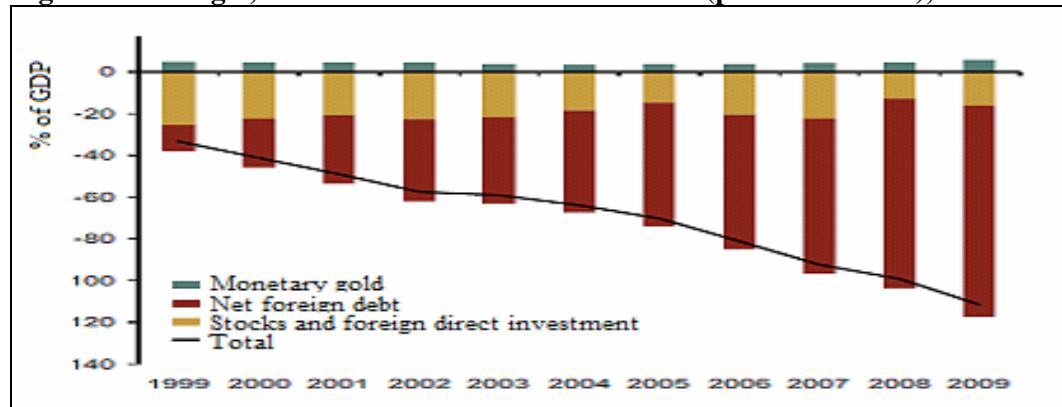
- European Central Bank (ECB). 2004. *The Monetary Policy of the ECB*. Frankfurt: ECB.
- Frankel, J.A., and A.K. Rose. 1998. "The Endogeneity of the Optimum Currency Area Criteria." *Economic Journal* 108(449): 1009–25.
- Godley, W., and M. Lavoie. 2007. "A simple model of three economies with two currencies: the eurozone and the USA." *Cambridge Journal of Economics* 31(1): 1–23.
- Holinski, N., C. Kool, and J. Muysken. 2010. "Origins of persistent macroeconomic imbalances in the euro area." RM/10/026. Maastricht: Maastricht University School of Business and Economics.
- International Monetary Fund. 2010. "Portugal." Staff Report for the 2009 Article IV Consultation, December. Washington, DC: International Monetary Fund.
- Kenen, P.B. 1999. "The Outlook for EMU." *Eastern Economic Journal* 25(1): 109–15.
- Kregel, J.A. 1999. "Currency Stabilization through Full Employment: Can EMU Combine Price Stability With Employment and Income Growth?" *Eastern Economic Journal* 25(1): 35–47.
- Lane, P.R. 2006. "The Real Effects of European Monetary Union." *Journal of Economic Perspectives* 20(4): 47–66.
- Lapavitsas, C., A. Kaltenbrunner, D. Lindo, J. Michell, J.P. Painceira, E. Pires, J. Powell, A. Stenfors, and N. Teles. 2010. "Eurozone Crisis: Beggar Thysself and Thy Neighbour." Research on Money and Finance *Occasional Report*, March. Available at: [www.researchonmoneyandfinance.org](http://www.researchonmoneyandfinance.org).
- Mitchell, W., and J. Muysken. 2006. "The Brussels-Frankfurt Consensus: An Answer to the Wrong Question." in W. Mitchell, J. Muysken, and T. van Veen (eds.), *Growth and Cohesion in the European Union*. Cheltenham, UK: Edward Elgar.
- Palley, T.I. 2006. "Currency Unions, the Phillips Curve, and Stabilization Policy: Some Suggestions for Europe." *Intervention: Journal of Economics* 3(2): 351–69.
- Proissl, W. 2010. "Why Germany Fell Out of Love with Europe." *Bruegel Essay and Lecture Series*, July.
- Santos Silva, J.M.C., and S. Tenreyro. 2010. "Currency Unions in Prospect and Retrospect." Discussion Paper 986. London: Centre for Economic Performance, London School of Economics and Political Science.
- 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* 29. Available at: [www.researchonmoneyandfinance.org](http://www.researchonmoneyandfinance.org).

Zemanek, H., A. Belke, and G. Schnabl. 2009. "Current Account Imbalances and Structural Adjustment in the Euro Area: How to Rebalance Competitiveness." *CESifo Working Paper* 2639. Available at: [www.CESifo-group.org/wp](http://www.CESifo-group.org/wp)

## FIGURES AND TABLES

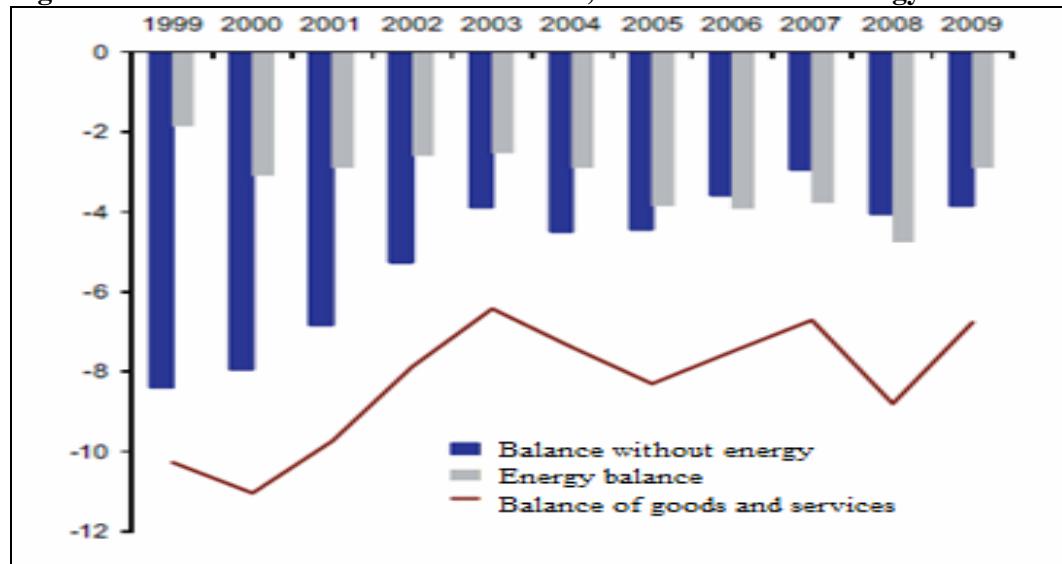
### Figures

Figure 1: Portugal, International Investment Position (percent of GDP), 1999–2009



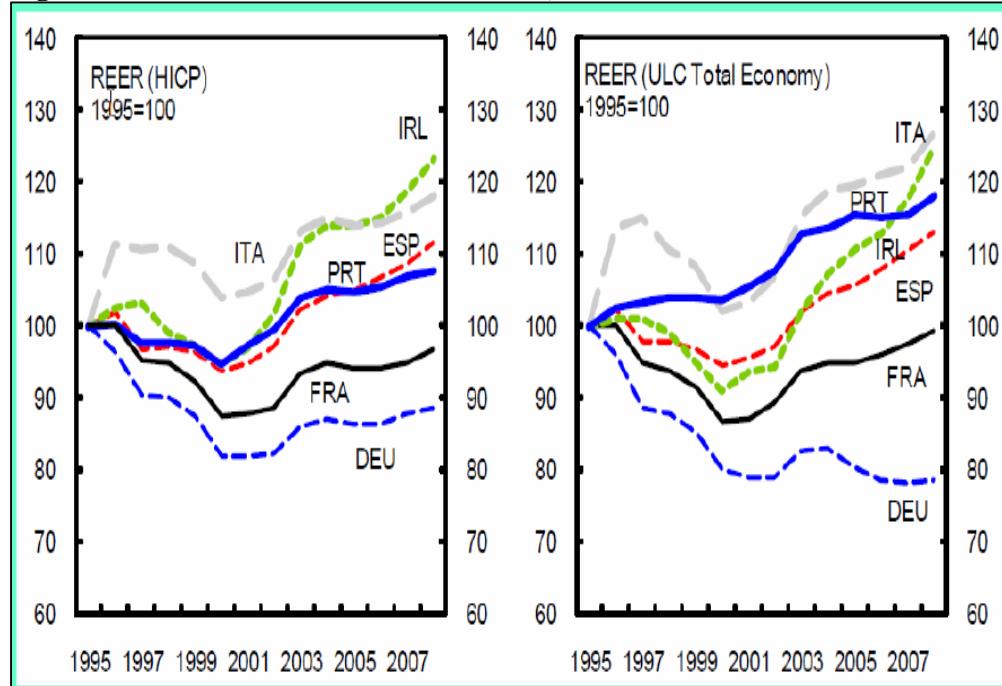
Source: Bank of Portugal (2010: 181)

Figure 2: The Balance of Goods and Services, with and without Energy



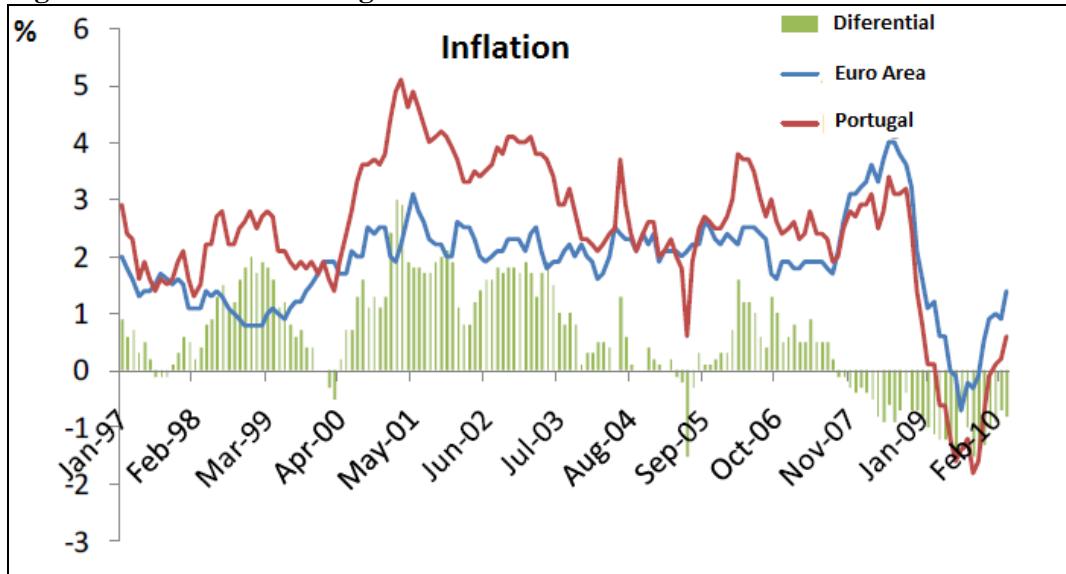
Source: Bank of Portugal (2010: 176)

**Figure 3: REER based on HIPC and ULC, 1995–2008**



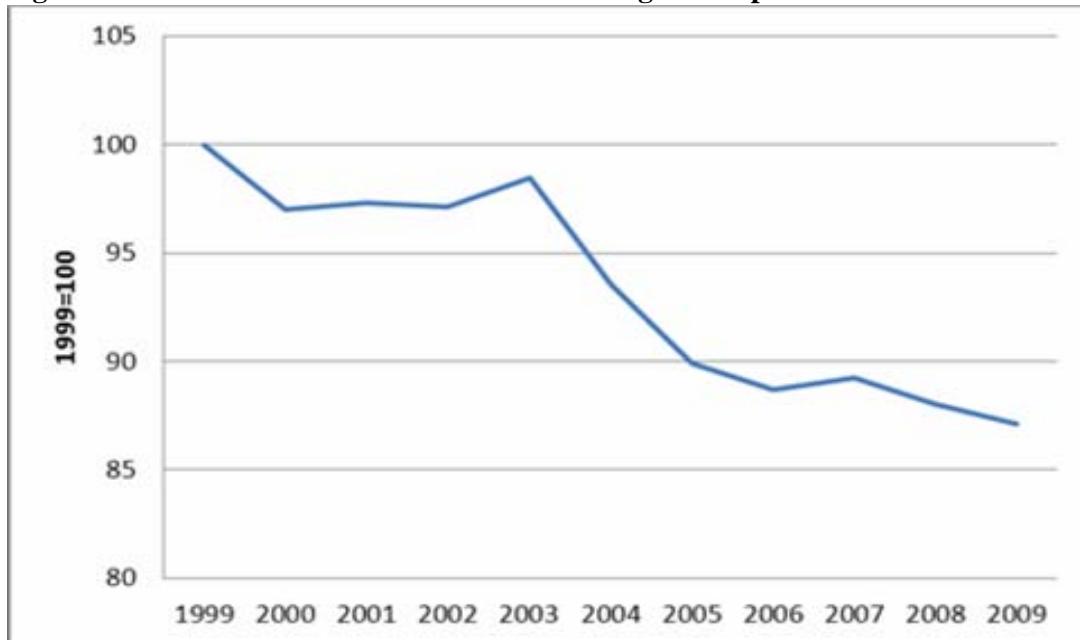
Source: IMF (2010)

**Figure 4: Inflation in Portugal and in the Eurozone**



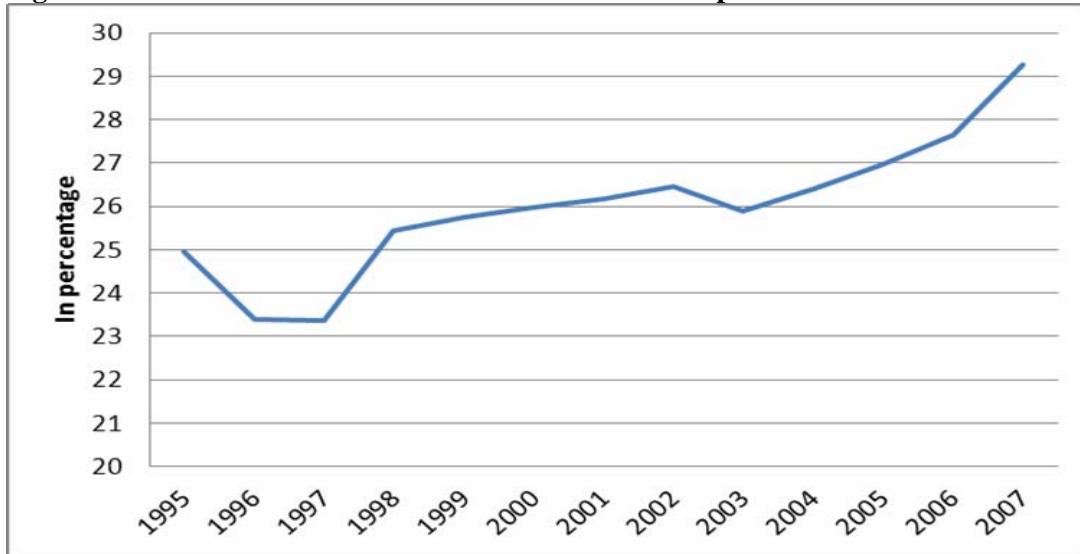
Source: Constâncio (2010)

**Figure 5: Evolution of the Market Share of Portuguese Exports of Goods**



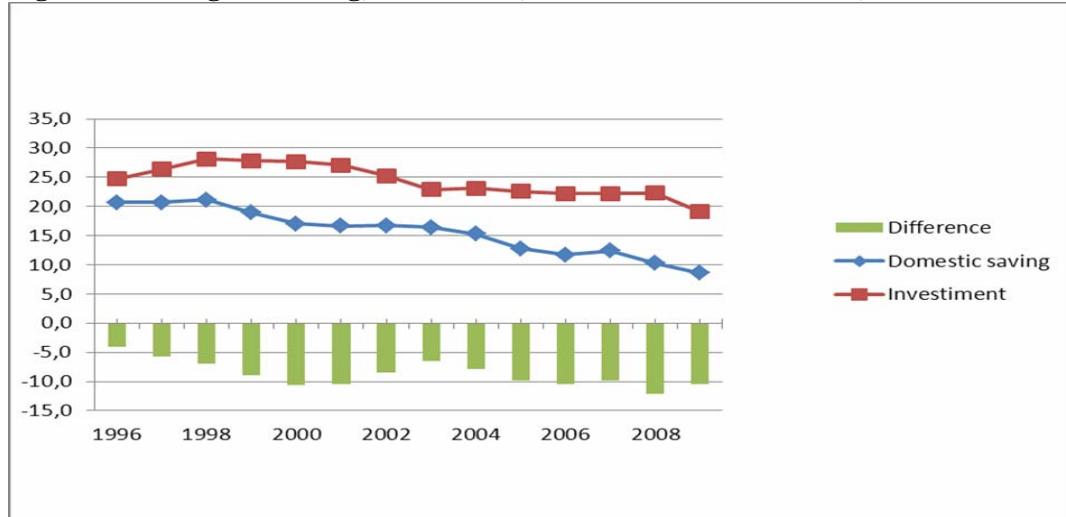
Source: Bank of Portugal (2010)

**Figure 6: Evolution of the Share of Services in Total Exports**



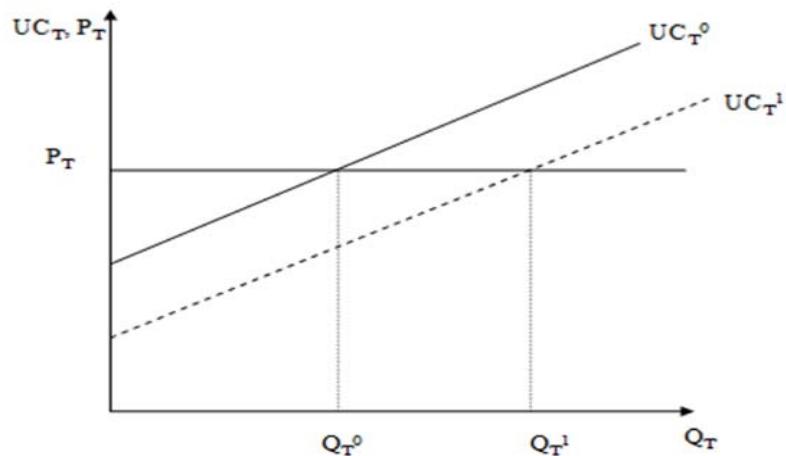
Source: Eurostat

**Figure 7: Portugal—Saving, Investment, and the Current Account, 1996–2009**

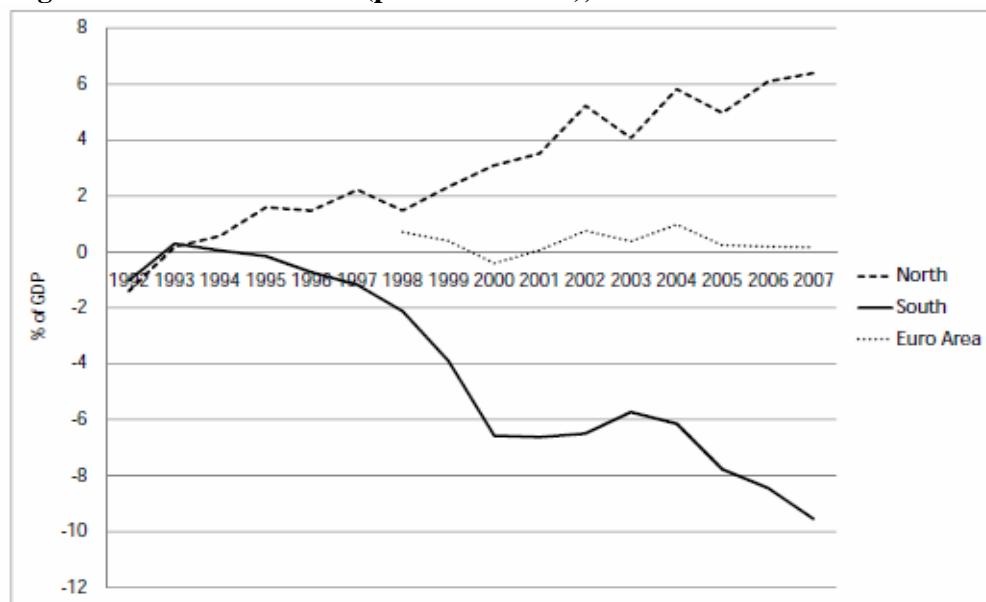


Source: Bank of Portugal (1997, 2005, 2009a, and 2010)

**Figure 8: The Situation of the Typical Portuguese Tradable Sector**



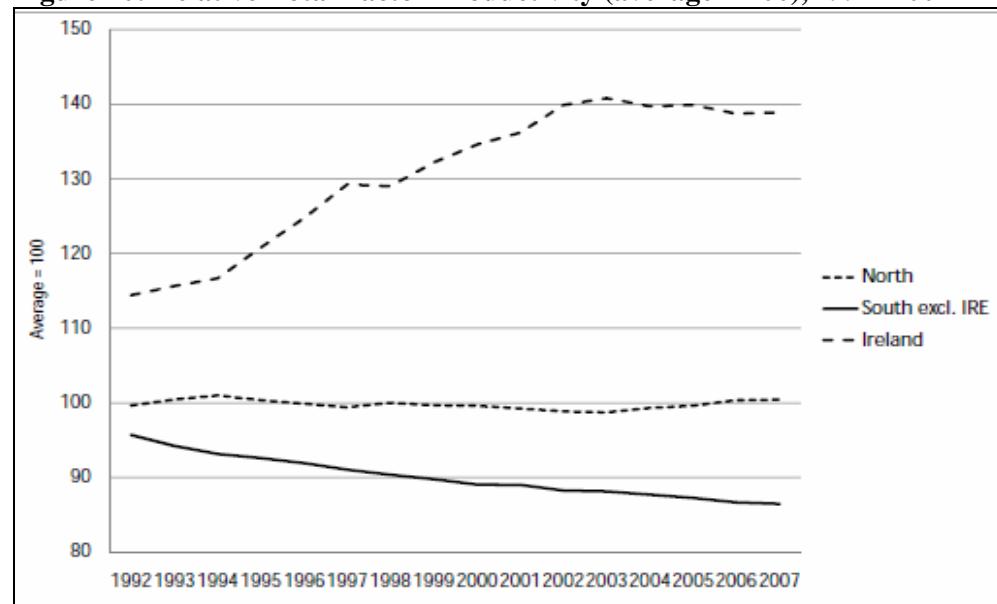
**Figure 9: Current Account (percent of GDP), 1992–2007**



**Note:** The north includes Austria, Finland, Germany, and the Netherlands whereas the south includes Greece, Ireland, Portugal, and Spain

**Source:** Holinski, Kool, and Muysken (2010: 3)

**Figure 10: Relative Total Factor Productivity (average = 100), 1992–2007**



**Source:** Holinski, Kool, and Muysken (2010: 14)

## Tables

**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)

**Table 3: Portugal—Domestic Demand Growth, Current Account, and Unemployment**

Domestic demand growth 2002–9: 0.4%	1999	2005–9
Current account	-8.5% GDP	-10.2% GDP
Unemployment	4.4%	8.1%

Source: Bank of Portugal (2010) and authors' calculations

**Table 4: Portugal—Balance of Goods and Services without Energy, percent of GDP**

Balances (percent of GDP)	1999	2005–09	Δ
Goods without energy	-10%	-7.6%	+2.4%
Services	1.6%	3.6%	+2%
Goods and service without energy	-8.4%	-4%	+4.4%

Source: Bank of Portugal (2010) and authors' calculations

**Table 5: Portugal, Current Account, percent of GDP**

Balances (percent of GDP)	1999	2005–09	Δ
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: 173, 176) and authors' calculations