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## Can the Euro Survive After the European Crisis?

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**Abstract:** The 'great recession' has highlighted a range of problems with the 'euro project', but these problems and difficulties are related to some fundamental weaknesses of the euro. The convergence criteria established by the Maastricht Treaty focused on nominal rather than real variables, failed to relate to issues such as current account positions. There are wellknown difficulties of macroeconomic policies under the Stability and Growth Pact including its deflationary nature and the 'one size fits all problem' of imposing common deficit requirements on all countries. Problems with the EMU monetary policy are also discussed before the economic performance of the euro area countries is briefly reviewed with attention paid to the differential inflation rates. Also accounted for are the changes in competitiveness as well as the current account deficits, and their implications for the future of economic performance within the euro area, and the euro itself. The nature of the reforms and their impact on the operations of the euro area are examined. The political limits (including those arising from the nature of the Treaty of Lisbon) and the ideological constraints (associated with the neo-liberal agenda) on serious reforms are discussed from which the general conclusion is that the needed reforms are extremely urgent, but unfortunately they will not be carried through. This discussion also includes consideration of the possible role for a substantial EMU-level fiscal policy and some other aspects of political integration. It is concluded that the deep-seated problems are unlikely to be resolved, casting a dark shadow over the future of the euro.

**Keywords:** Economic and Monetary Union, Euro, Stability and Growth Pact, Fiscal Policy, Monetary Policy, Competitiveness, Current Account Imbalances, Political Integration

**JEL Classification:** O52, E60

#### 1. Introduction

The euro has been operating since 2002 (and since 1999 if the period as a virtual currency is included). Its introduction was technically accepted and the switch over was perceived to have met few problems, though there were some perceptions that prices rose when the euro was introduced (a perception which does not show up in the statistics). Although there have been occasional rumblings against it, there has not until very recently been any concerted effort for a country to withdraw from the euro and revert to a national currency, but the financial and budgetary crises in a number of countries have brought withdrawl of some from the euro as a seriously considered option.

The European Central Bank (ECB) launched the single currency (euro) in 1999 alongside with the foundation of the Economic and Monetary Union (EMU). The euro replaced the national currencies for all transactions at the beginning of 2002 for twelve countries, namely Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain. This meant that three countries, namely Denmark, Sweden and the United Kingdom, of the then 15 members of the European Union did not join the euro. The European Union (hereafter EU) expanded in May 2004 with ten new member countries, eight from Central and Eastern Europe countries (CEEC) (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia, Slovakia) plus Cyprus and Malta. There was a subsequent expansion with Bulgaria and Romania joining in January 2007. Of the new (2004) member states, five have since adopted the euro, namely Slovenia (2007), Cyprus and Malta (2008), Slovakia (2009) and Estonia (2011).

The economic performance of the euro area countries during the decade or more of the euro's existence, as briefly surveyed below has been rather lack lustre even before the financial crisis struck – economic growth has been sluggish, inflation has remained low though often breaking the 2 per cent target, and unemployment has remained high, as indicated below. There have been continuing disparities in economic performance in terms of unemployment and standards of living, which are highly significant as measures of economic well being, and the framework of the euro area has little to address them. But for the future operation and indeed survival of the euro area the differences in inflation, in budget deficits and in current account positions may be much more significant as further discussed below.

The 'great recession' that emerged in August 2007 has highlighted severely many of the economic problems to which we have just alluded for the euro area countries. The sharp increases in budget deficits as the economies slowed and tax revenues plummeted meant that the limits of the Stability and Growth Pact (SGP) were breached. Fortunately, the immediate response was generally to accept those breaches but it was not long before the calls for concerted action in terms of reduction of budget deficits and fiscal consolidation started. The danger now is that attempts by countries to cut their budget deficits will have cumulative negative effects on employment and growth and have little actual effect on budget deficits. The 'Greek tragedy' and the crises in Ireland and Portugal, though, have exposed very obviously a number of these problems, which have also led to the question of the euro's survival. A particular problem related to the 'Greek tragedy', which is even more closely related to the euro, is the attitude of the European Central Bank (ECB) that refuses to consider a restructuring of Greek debt; and it is thought to be the only party involved that rejects outrightly the idea of Greek debt restructuring. Such attitude could easily produce serious problems for the euro and it could result in its collapse. The ECB insists that Greece is given more bailout loans for more austerity measures in Greece. In fact, the ECB is hostile to any form of debt restructuring, threatening to deny Greek banks access to ECB refinance

<sup>&</sup>lt;sup>1</sup> The split referred to in the text relates to a sharp division of views between the ECB and the EMU political leaders. This dispute is over how to solve the Greek sovereign debt crisis, which is a very serious one and as such it threatens the euro existence seriously.

operations; such a threat if implemented would clearly force Greece out of the euro area.<sup>2</sup> Greece cannot pursue austerity measures continuously, especially so in view of the worsening economic situation in the country. The options for sorting out the sovereign debt are seriously constrained. Withdrawal from the euro area could thereby become inevitable. The consequences for such withdrawal for the euro could be serious.

We address these issues in this contribution where we first visit, in section 2, the convergence Maastricht criteria, which were built into the euro project. This is undertaken to illustrate the nature of the 'euro project' and also to indicate how some problems (such as current account deficits in many Mediterranean countries) were left unaddressed at the start of the project and have now come to undermine the edifice of the EMU. Section 3 briefly visits the issues of the EMU fiscal and monetary policies. This latter section highlights some of the policy faults, which lie at the heart of the euro. Section 4 highlights key features of the economic performance of the EMU members since the formation of the euro by concentrating on the twelve initial members of the union. Section 5 deals with adjustment processes and optimal currency area considerations before section 6 turns to the question of whether the euro can be saved, where it is argued that the constraints of the Treaty of Lisbon and the neo-liberal framework, within which most of the countries of the EU operate, are likely to preclude relevant policy changes initiated let alone implemented. This is likely to consign many countries with a choice between remaining members of the euro and economic prosperity. We also review a number of policy considerations, sections 7-10, leading to suggestions for major policy changes, which could enable the euro to function effectively. The latter possibility is discussed further in section 11, before concluding comments are provided in section 12.

#### 2. The Convergence Criteria

The Maastricht Treaty laid down criteria that should be met by those seeking to join the euro, and indeed all the countries that met the criteria were obliged to join, though Denmark and the UK secured opt-outs from that obligation.<sup>3</sup> The 'convergence criteria' were set in nominal terms (relating to inflation and interest rates for example) with no mention of real convergence (in terms of, for example, output per head or unemployment rates) or even of the convergence of business cycles across countries. These 'convergence criteria' are now largely of historic interest, though they are still relevant for those EU countries, which may seek to join the euro in the future. But the 'convergence criteria' do provide some insights into the nature of the 'euro project' and to which elements were deemed significant and important; and by omission those which were not so deemed.

The criteria include a budget deficit and a government debt criterion designed to establish 'fiscal responsibility' in the eyes of the financial markets and had no underlying rationale. The independence of the national central banks on an operational and political level was also on the list of these criteria. In terms of countries meeting the criteria, it must be said that with

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<sup>&</sup>lt;sup>2</sup> The situation in Greece since mid-May 2010, when the Greek rescue was launched, is even worse. The austerity measures introduced at the time have resulted so far and according to the 2010 figures to a debt to GDP ratio of 142.80 per cent and to a deficit to GDP ratio of 10.5 per cent. Both figures are above the equivalent ratio of 2009, when the 'Greek Tragedy' emerged. In the case of debt to GDP it is clearly higher (it was 127 per cent in 2009). In the case of the deficit to GDP although it was admittedly 15.4 per cent in 2009, it was nonetheless targeted to achieve an 8.1 per cent by 2010. Figures are available on: http://en.wikipedia.org/wiki/Economy\_of\_Greece).

<sup>&</sup>lt;sup>3</sup> The convergence criteria applied to each country for membership of the EMU under the Maastricht Treaty are: (1) average exchange rate not to deviate by more than 2.25 per cent from its central rate for the two years prior to membership; (2) inflation rate should not exceed the average rate of inflation of the three community nations with the lowest inflation rate by 1.5 per cent; (3) long-term interest rates not to exceed the average interest rate by 2 per cent of the three countries with the lowest inflation rate; (4) government budget deficit not to exceed 3 per cent of its GDP; (5) overall government debt not to exceed 60 per cent of its GDP.

the exception of the inflation rate and the interest rate, they were not met as comfortably as it might have appeared initially. In fact a great deal of 'fudging' took place (see, for example, Arestis et al., 2001).

The adoption of a national 'independent' Central Bank, as a forerunner for inclusion into the European System of Central Banks with the European Central Bank at its apex, signalled the adoption of a neo-liberal agenda (Arestis and Sawyer, 2006a, 2006c; Lucarelli, 2004). The requirements for budget deficit below 3 percent of GDP and public debt below 60 percent were signals of the fixation with the budgetary position, though in practice the 60 percent limit was not attained by many who joined and the 3 percent limit reached in a number of cases only through the use of creative accounting (Arestis et al., 2001). The requirements for the interest rate and inflation rate in a country to be close to the average achieved in the three countries with lowest inflation had an inherent rationale. It was that after the formation of EMU, a single interest rate regime would apply and a common inflationary experience would be required for the successful continuation of the euro. A stability of a country's exchange rate relative to the other countries of the EMU had a similar intuitive appeal since the exchange rates of the EMU countries were about to be locked together.

# 3. Fiscal and Monetary Policy in the EMU<sup>4</sup>

The key features of the SGP are as follows: the first is the idea that national governments should aim for their budgets to be in balance or small surplus over the course of a business cycle and not to exceed 3 per cent of GDP in any given year; and the second is that the ECB acting independently use interest rate policy to achieve price stability. National fiscal policy is subject to the requirements of the SGP (with no fiscal policy at the level of the EU with a balanced budget requirement and EU expenditure set at somewhat over 1 per cent of EU GDP). The official rationale for the SGP is twofold. The first is that a medium-term balanced budget rule secures the scope for automatic stabilisers without breaching the limits set by the SGP. Second, since a balanced budget explicitly sets the debt ratio on a declining trend, it reduces the interest burden and improves the overall position of the government budget. Underlying the approach to SGP, though, is the notion of sound public finances. The European Commission (2000) is emphatic on this issue: "Achieving and sustaining sound positions in public finances is essential to raise output and employment in Europe. Low public debt and deficits help maintain low interest rates, facilitate the task of monetary authorities in keeping inflation under control and create a stable environment which fosters investment and growth ... The Maastricht Treaty clearly recognises the need for enhanced fiscal discipline in EMU to avoid overburdening the single monetary authority and prevent fiscal crises, which would have negative consequences for other countries. Moreover, the loss of exchange rate instrument implies the need to create room for fiscal policy to tackle adverse economic shocks and smooth the business cycle. The stability and growth pact is the concrete manifestation of the shared need for fiscal discipline" (p. 1).

#### Tables 1 and 2 near here

The figures in Table 1 indicate that over the period 2002-2007 the budget deficit for the euro area as a whole averaged under 2 per cent of GDP. Although this period of six years may not be a complete business cycle the figure is nevertheless suggestive that the overall intention of budgets in balance or small surplus was not attained. The same Table also indicates that four of the initial 12 euro area members breached the 3 per cent of GDP upper limit on budget deficits. It is clear from this table that there are three groups of countries: one group includes those countries that had deficits above the 3 per cent SGP ceiling in their budget throughout

<sup>&</sup>lt;sup>4</sup> For extensive discussion on fiscal and monetary policy in the EMU see Arestis and Sawyer (2006a, 2006b, 2006c).

the period; another group which, although had deficit it was a small percentage of GDP; and a third group that had surplus over the period. The euro area as a whole, though, had a deficit throughout the period. The imposition of an upper limit of 3 per cent of GDP on the size of the budget deficit and the declaration of the aim of a balanced budget over the cycle represented a significant tightening of the fiscal position as compared with the 3 per cent of GDP target for the budget deficit in the Maastricht Treaty convergence conditions. In those conditions, the 3 per cent was to be achieved at a particular point in time: under the SGP the 3 per cent limit is to be exceeded only under extreme conditions. The figures for 2008 begin to worsen and the ones for 2009 and 2010 clearly well exceed the 3 percent limit, with the exception of Luxembourg.

The general requirement that the budget be in balance or small surplus over the course of the business cycle is more deflationary than it sounds when allowance is made for inflation and the deficit is calculated in real terms. For example, with a 60 per cent debt to GDP ratio, inflation of 2 per cent per annum would mean that the real value of the outstanding debt declined by 1.2 per cent of GDP, and hence in real terms a balanced budget in nominal terms equates to a 1.2 per cent of GDP surplus. There is also an essential contradiction between the 60 per cent debt to GDP ratio and a balanced budget. It can readily be shown that a persistent overall budget deficit (that is including interest payments on government debt) of d (relative to GDP) would lead to public debt stabilising at b = d/g where g is the nominal rate of growth. Taking as an example g = 0.05 (a 5 per cent growth rate built up from say 2 ½ per cent real growth and 2 ½ per cent inflation) then the debt ratio would be 20 times the deficit ratio. In that example a 60 per cent debt ratio would be consistent with a persistent 3 per cent deficit ratio — indeed that precise calculation was given as a justification for the 3 per cent deficit, 60 per cent debt target in the convergence criteria.

The ECB and the national central banks of the EMU countries comprise the European System of Central Banks (ESCB), and the ECB was endowed with the responsibility for the single monetary policy "that is independent from political influence" (ECB, 2004, p. 12). The ESCB Treaty, Article 105 (1), states that "the primary objective of the ESCB shall be to maintain price stability" and that "without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2". Table 2 shows that inflation in the euro area has generally been above the 2 per cent level, with the exception of 2009, albeit by a relatively small amount, and averaged 2.6 per cent over the period 2002-2008. Only Finland and Germany managed an inflation rate of less than 2 per cent during that period; the 12 euro area average of inflation rose to 2.9 percent in 2010. Furthermore, it is the differences in inflation between countries, which have plagued the euro area. This has meant that a country with a relatively low (high) inflation rate has a relatively high (low) real interest rate since there is a common nominal interest rate anchor as set by the ECB applying across the EMU. Thus, monetary policy has operated in a perverse manner with low real rates applying where inflation is relatively high, running counter to the presumptions of inflation targeting that high inflation is met by high real rates of interest to dampen demand.

The ECB may appear to have been rigid, especially when compared with the Bank of England and the US Federal Reserve System (Fed). If we take the period of the 'great recession' since August 2007, the US Fed has aggressively reduced interest rates over the period; the Bank of England has behaved in a similar, if in a less aggressive, manner. The

<sup>&</sup>lt;sup>5</sup> The change in the debt ratio is given by  $\frac{d}{dt}(\frac{B}{Y}) = \frac{1}{Y}\frac{dB}{dt} - \frac{B}{Y^2}\frac{dY}{dt} = \frac{1}{Y}D - \frac{B}{Y}\frac{1}{Y}\frac{dY}{dt}$  where Y is the level

of income since the change in debt is equal to the deficit (including interest payments) and the debt ratio is stable when the change in this ratio is zero. This would imply d - bg = 0 and hence b = d/g.

ECB has not behaved in such a fashion. There has been great reluctance to reduce interest rates even in obvious circumstances. It is true that the ECB adopted a 'wait and see' approach, at the beginning of the 'great recession', before following the other two central Banks. Focusing more closely in terms of the period near but after August 2007, the reaction of the ECB was relatively modest. Initially, the upsurge in inflation convinced the ECB to keep interest rates relatively high for a long time, and this was especially so in July 2008 when there were already signs of economic slowdown. Subsequently, the ECB was slow to push interest rates down. In the event when the banking crisis began to infect the real economy very seriously, interest rates were cut by a total of 225 basis points up to January 2009 and eventually to 1 per cent in May 2009. The reduction in interest rates by 225 basis points was done in four steps within a historically short period of time. But it was not as bold as that of other central banks. In any case, it has been raised to 1.25 percent in April 2011. Nor has the ECB pursued 'Quantitative Easing' (QE) as, for example, the Federal Reserve System or the Bank of England. Although it has resisted QE, the ECB has, nonetheless, pioneered other types of policies. Under the phrase 'Enhanced Credit Support' (ECS), the ECB's policy has been one of providing unlimited liquidity to banks at its rate and under covered bonds. Covered bonds are securities that usually attract top triple-A ratings. They are also a major source of mortgage finance in the EMU. They are, thus, safe securities since in the event of default investors have redress to the issuer's balance sheet; they are, thus, of low risk of default. The ECB broadened the collateral it accepts in June 2009, when under the ECS scheme it extended the maturity of the collateral to up to 12 months. The reason for such a policy as opposed to QE is that in addition to the low risk, in Europe conventional loans comprise the bulk of credit, so that using covered bonds, which are issued by banks, could potentially affect bank lending. The banking system plays a much bigger role in providing finance in Europe than in, for example, the US and the UK.

The Treaty of Lisbon, and its forerunners, bars the monetisation of member governments' deficits and debts. It is permissive but not mandatory for the ECB to act as a lender of last resort. The general practice is for a central bank to act as a 'lender of last resort' and to operate such that 'sound financial paper' is discounted at the pre-announced discount rate and exchanged for base money. Banks can then obtain reserves from the central bank in exchange for 'sound financial paper'. Such paper would include (but not always limited to) government debt. The ECB announced soon after the bailout of Greece in May 2010 that it would only accept sound financial assets.

#### 4. Economic Performance in the Euro Area

The economic performance of the euro area countries are briefly reviewed in terms of growth, unemployment, inflation and current account, as well as the extent to which the requirements of the SGP were met. Particular attention is paid to the differential inflation rates, the changes in competitiveness and the current account deficits, and their implications for the future of economic performance within the euro area and the euro itself. The patterns of current account deficits and surpluses are linked with unemployment, lack of competitiveness and budget deficit issues.

Tables 3 and 4 near here

Tables 3 and 4 provide summary data relevant for economic performance of the euro area. The data in both tables relate to the decade since the euro was launched as a 'real currency'. Three main points emerge:

(i) there were large and continuing current account imbalances between the EMU countries; especially and persistently so the large external surpluses and deficits coexisted in the core and peripheral countries respectively. The same situation continues over the

years 2002-2007 and subsequently in 2008, 2009 and 2010 (see Table 3). Those imbalances were not the subject of surveillance within the framework of the SGP;<sup>6</sup>

- (ii) there were substantial differences between countries in terms of changes in unit labour costs (see table 3). The implied changes in competitiveness, and economic policies; in terms of the loss of competitiveness it is estimated to be between 25% and 30% for Greece, Ireland, Portugal and Spain since the creation of the EMU in January 1999. It is clear that economic convergence, crucially in terms of costs in this instance, has not materialised;<sup>7</sup>
- (iii) the growth rates for the periods 1991-2000, 2000-2007 and for 2008-2010 vary significantly amongst the 12 euro area countries; the unemployment rate also differs significantly amongst countries, but worsens by 2010 in a number of countries, especially so in Greece, Ireland, Portugal and Spain.

The growth performance of the euro area during the 2000s was somewhat below the growth of the 1990s (as indicated in Table 4) although the global economy was growing rather faster. The growth figures in that time run through to 2007, whereas, of course, if 2008, 2009 and 2011 were included the comparison between the 2000s and 1990s would be even less favourable to the euro project. Unemployment did fall during the mid-part of the 2000s but the 'great recession' wiped out those gains. The figures in Table 3 indicate that current account positions vary substantially between countries with most Southern European countries having substantial deficits whereas Northern European countries (with the exception of France) have surpluses.

The protracted weak performance of the euro area can be attributed to two main factors: the incomplete integration of the financial system and to the absence of a central authority to deal with crises (IMF, 2011). The latter goes on to warn that the EMU is vulnerable to another systemic banking crisis in view of the sovereign debt problem in some 'distressed peripheral' euro area member countries. Such a situation could easily produce contagion to the 'core euro area' and to the EU, but more so in 'emerging Europe'. This is so, the IMF (op. cit.) suggests, in view of banks in the core periphery countries being significantly exposed to the euro area periphery. Under such circumstances, restructuring the sovereign debt of the 'distressed peripheral' countries could produce a systemic risk to the entire EMU, thereby risking a 'second credit crunch' (IMF, op. cit.). We elaborate further on the aspects mentioned above

The data in Tables 2 and 3 indicate something of the scale by which relative prices and relative unit labour costs have changed, when the nominal exchange rates of the national currencies of the original EMU member states were locked together. One interpretation of those changes could be that they represent the adjustment of real exchange rates between EMU member countries in the face of a combination of inappropriately set of nominal

<sup>&</sup>lt;sup>6</sup> It should be noted that a current account deficit can interact with a budget deficit in the following sense. A current account deficit and a budget deficit will be related for a given net savings position. Other things being equal (that is net savings) then a larger current account deficit would be associated with a larger budget deficit (there is no causal link implied).

<sup>&</sup>lt;sup>7</sup> The percentages mentioned in the text are from the *OECD Economic Outlook* data (various issues).

<sup>&</sup>lt;sup>8</sup> According to IMF (2011) estimates, Germany's banking sector exposure to EMU 'distressed periphery' (Greece, Ireland, Portugal, Spain) debt is over 150 percent of their equity capital; France's banking sector exposure is just under 100 percent, and the rest of the EMU is about 50 percent. Interestingly enough, and following the bailout of Greece in May 2010, the ECB exposure to the Greek state and Greek banks is 190bn euros. Clearly, the ECB exposure to Greek debt is very high so that restructuring of this debt would produce huge losses to it. It clearly follows that restructuring of the Greek sovereign debt would produce huge losses to the ECB. It is for this reason that the Governor of the ECB is so much against restructuring of the Greek debt (see, for example, Trichet, 2011a).

exchange rates (back in 1998 for most) and 'shocks'. But that overlooks the prevailing current account deficits when the euro was formed and some tendency for the current account deficits to persist and widen. A country in a fixed exchange rate system, which is, of course, in the nature of a currency union for participating countries, in dealing with cumulative differential inflation and current account deficits can endure domestic deflation to reduce imports and perhaps lower domestic costs, or can devalue its currency. The latter is ruled out by membership of the EMU: so it would appear to be the case that deflation is the only answer.

We would draw the following conclusions from the analysis in this section. First, the record of achieving the targets of the EMU has not been a particularly good one, with inflation target persistently missed albeit by a small amount, and national budget deficits frequently exceeding 3 percent of GDP. Second, the economic performance in terms of growth and unemployment has been lack lustre. Third, there are clear problems of differential inflation, of major changes in competitiveness and the persistence of large current account imbalances. However, the overall conclusion then is that the economies of the euro area have not been performing particularly well, and that the financial crisis has highlighted problems at the heart of the euro project. This would clearly suggest that it may very well be the case that the time has arrived for the euro to be replaced or disappear. Under the circumstances and the problems highlighted in this section, three questions emerge: the first question is whether the euro can still be saved. If the answer is negative, then the second question follows; could reforming the institutional setup of the euro save it? If the answer is positive then the third question evolves around the precise institutional changes that could potentially save the euro. We now deal with these questions

#### 5. Adjustment Processes and Optimal Currency Area Considerations

The ideas on the Optimal Currency Area (OCA) had rather little influence on the formation of the 'euro'. Baldwin and Wyplosz (2009), for example, argue that "The negotiators who prepared the Maastricht Treaty did not pay attention to the OCA theory" (p. 345). The same source also poses the question of whether Europe is an optimum currency area with the answer that "most European countries do well on openness and diversification, two of the three classic economic OCA criteria, and fail on the third one, labour mobility. Europe also fails on fiscal transfers, with an unclear verdict on the remaining two political criteria" (p. 340). It is clear that EMU is not fiscally integrated. Taxpayers in one country do not pick up, for example, any of the costs of a bank bailout of another country. It is also true that while citizens of the EMU have the legal right to move freely in any of the member countries in search for employment, in practice citizens are much less geographically mobile than in countries like the US, for example. A currency union that works coincides with a nation that has a central government and a common language; EMU has neither.

The OCA literature clearly points out that a monetary union means that the exchange rate between constituent members cannot be changed in nominal terms. Hence, the possibility of using changes in the exchange rate as a means of adjusting to economic 'shocks' or indeed to continuing difficulties is ruled out. There can, though, be changes in the real exchange rate through a change in the relative prices of constituent members. The OCA literature points to the possibility of 'price flexibility' as a device through which a country could adjust to an 'economic shock'. But the expectation would be that a negative shock would be compensated by a fall in relative prices (of a country). In the euro area it appears that there have been substantial changes in the real exchange rate of countries, as relative prices of countries have changed reflecting differential inflation between countries. But it is rather unlikely that these

<sup>&</sup>lt;sup>9</sup> The OCA literature starts from Mundell (1961), McKinnon (1963) and Kenen (1969): for reviews see, for example, Baldwin and Wyplosz (2009, chapter 11).

changes in relative prices have been responses to differential shocks and that those changes are an adjustment process. If anything the changes in relative competitiveness have worsened rather than lessened the disparities in current account positions.

The emphasis of the OCA approach was on the ability (or otherwise) of an economy to adjust to shocks, where the adjustments were viewed in terms of market ones of price and factor mobility. What was little considered in the OCA, or other literature, was the consequence for an economy, which joined the currency union with an economy, which was 'unbalanced'. By the latter we mean an economy (or parts thereof), which had high levels of unemployment or one that had a large current account deficit. It is then not a matter of asking how an economy could adjust to a shock (particularly a negative one) to restore full employment but rather whether there is any prospect of an economy in a currency union escaping from high levels of unemployment. In order to reach a lower level of unemployment, the demand for the output of that economy has to be increased faster than output increases in other EMU countries. This would generally require that the productive capacity on which workers could be employed would also have to be created. Whilst there may be spontaneous increases in investment, there are clear limits on the policy instruments available to promote such investment. Further, those countries have to find additional markets for their exports without the benefits of devaluation.

In a similar vein, an economy that enters into a currency area with a current account imbalance lacks the ability to correct that imbalance. When that economy is able to borrow to meet any deficit, and similarly is willing to lend when there is a surplus, the position would be sustainable, though its debts would mount. But such an economy has to rely on borrowing from overseas and being able to continue to do so. In our interpretation it is difficulties arising from such borrowing which underlies many of the problems of the EMU at present. Table 3, the column under Current Account /GDP (%), clearly demonstrates the problem to which we have just referred. In 1999, the start year of the euro area, and also subsequently that is data for 2002 to 2010, all this data shows that current account imbalances did prevail and are relevant even now.

The development of a substantial EU budget, which operates to make fiscal transfers between the relatively rich and the relatively poor countries and to act as some form of stabiliser, that is a country experiencing a downturn receiving a greater inflow of funds, is a major policy way in which concerns of OCA literature could be addressed. But the current account imbalances would remain, which would seem to require mechanisms by which a country with a current account deficit can in effect devalue in real terms, and hence a country with a surplus revalue. This is not possible, of course, within the EMU area, while the experience of the past decade in the EU area does not suggest that such adjustments would readily occur, and indeed it appears that on the whole prices have adjusted in a manner opposite to that.

#### 6. Can the Euro be Saved?

There are two key features of the euro project, which are highly relevant when thinking about its future and whether the euro can continue in anything like its present form and be associated with economic prosperity.

The first is an essentially neo-liberal policy framework (which has been briefly outlined above; see, also, Arestis and Sawyer, 2006c for extensive discussion This framework has been enshrined in law (most recently in the Treaty of Lisbon) and the neo-liberal ideology has become deeply embedded in the European political elite and the institutions of the European Union (and nowhere more evident than in the European Union). The second is that the single currency has been widely viewed as the crowning pinnacle of economic integration

in removing what could be seen as the final barrier to free trade (different currencies and the associated costs) after the removal of non-tariff barriers under the Single European Act.

The major question here is how these two features of the euro project interact with the operations of the euro and its problems, and more how those two features may prevent the EMU project being changed in order for the EMU to operate to provide economic prosperity across all its member countries. In our view the policy framework within which the EMU operates needs to be drastically changed, but to do so runs into the major obstacles, political and ideological, to changing the policy framework. Further, the euro has been a key element of the drive to economic integration that any withdrawal of a country from the euro would be a major defeat for the integration process.

The first feature was embedded in the Treaty of European Union in its various forms and now cemented in the Treaty of Lisbon ('The Treaty on the Functioning of the European Union'). Changes to the Treaty of Lisbon require the unanimous agreement of the 27 member countries, and since the changes required to support the euro involve policies, which could be seen as moves towards political integration, the possibilities of making those changes is close to zero. This indicates not only the serious weakness of the policy framework, but also that of embedding economic policies into a constitution, which is virtually impossible to change. It would also have to be recognized that the dominant macroeconomic institutions in the EMU, notably the ECB and the Directorate-General of Economics and Finance, appear to be fully signed up to the neo-liberal agenda. <sup>10</sup>

With regard to the second feature, it was recognised by some advocates of the euro, that there were many ways in which there was insufficient economic integration to support a single currency, but that in the presence of a single currency, integration would continue to a stage, which did support a single currency. The conditions indicated by the Optimal Currency Area (OCA) literature could be seen as the nature of the integration—generating movements in relative prices and permitting factor mobility.

We have previously argued (Arestis et al., 2003, Arestis and Sawyer, 2006a, 2006b, 2006c) that in the absence of economic integration monetary unions without political integration did not in general have a good record of long-term survival. It is true, though, that those monetary unions involving very small countries, for example Eastern Caribbean Currency Union, which covers a total population of half a million, had a better survival rate. From a state view of money, it can also be argued that a monetary union has one feature of political integration in the sense that it is governments, which determine what is treated as legal tender and accepted as payment of taxes. In this sense, the need for a significant EMU fiscal policy is argued in the section that follows. The implementation of such a policy does require that the levels of tax revenues and of public expenditure, which come within the scope of EMU fiscal policy, and the balance between them (i.e. the budget deficit/surplus) is settled at the EMU level. It is though also remarkable how little attention has been paid by the EMU to the promotion of economic integration, which would promote convergence of economic conditions between the member countries, whether with respect to unemployment, positions in the business cycle or common inflationary and changes in competitiveness experience.

We now advance a range of macroeconomic policies and reforms which we believe would substantially improve the economic performance and sustainability of the Economic and

<sup>&</sup>lt;sup>10</sup> D-G ECFIN stands for The Directorate-General for Economic and Financial Affairs, which reports to the EU Commissioner for Economic and Monetary Affairs. The D-G ECFIN "strives to improve the economic wellbeing of the citizens of the EU - through policies designed to promote sustainable economic growth, a high level of employment, stable public finances and financial stability. At the present juncture, this means working to ensure that the European economy emerges quickly and strongly from the present deep economic and financial crisis" – this quote is available from: http://ec.europa.eu/dgs/economy\_finance/index\_en.htm

Monetary Union. But we in no way underestimate the political, legal and ideological barriers, which are raised against policy changes along the lines indicated. But it is clear to us that the EMU cannot proceed with its current policy arrangements, and for those who strive for economic integration in the EU must realise that changes are urgently required 'to save the euro'.

## 7. Fiscal Policy

Two basic changes in the fiscal policy arrangements in EMU are required. The first is the need for an EMU-level fiscal policy under which the scale of the EMU budget would be greatly increased and the EMU would be able to run budget deficits (or surpluses) to support the level of economic activity within the EMU. The particular concern here is with the euro area, and as such fiscal policy would be limited to EMU members. The scale of such a policy has been variously put at 7½ percent of GDP (Commission of the European Communities, 1977), 5 percent (Huffschmid, 2005, Chapter 16), 2 to 3 percent of GDP (Currie, 1997; Goodhart and Smith, 1993). An EMU fiscal policy would, in general, only be able to address EMU-wide 'shocks'. The present crisis could be considered such an EMU-wide shock (though perhaps one on a scale only experienced every several decades), but figures such as those suggested above would not be on a scale to cope with such a shock, unless combined with substantial deficits at the national level. The second is, in effect, to permit each member country to set its fiscal stance in what it judges to be its own best interests. There have always been concerns of 'spill-over' effects, whereby one country's deficit affects the credit ratings and interest rates faced by others. These concerns have been very much overstated. In the absence of a substantial EU-wide fiscal policy designed to achieve high levels of economic activity, each country has to be free to pursue that objective (if it wishes to do so).

The proposition of 'functional finance' (starting from Lerner, 1943) is that the budget deficit should be set with a view to ensure a high level of economic activity and not tied to any notion of a balanced budget (whether in current budget or total budget terms, whether on an annual basis or over the business cycle). There is the well-known accounting relationship of (G-T) = (Q-X) + (S-I) (where G is government expenditure, T tax revenues, Q imports, X exports plus net income from abroad, S private savings and I private investment). The scale of the budget deficit (or indeed budget surplus) then depends on the size of the current account deficit, private savings and investment at a high level of economic activity. It then follows that the appropriate budget deficit depends on the conditions surrounding the current account (propensities to import, exports) and the net savings position (savings minus investment). For a country with a current account deficit and a tendency for savings to exceed investment would require a large budget deficit, while in contrast for a country with a current account surplus, and investment tending to exceed savings, a budget surplus would be appropriate. This is the basis of the 'one size fits all' problem, which comes with the SGP. The shortcomings of the present SGP is that it seeks to impose the same conditions on all countries regardless of their broader economic circumstances and that it is a balanced budget (over the cycle), which is imposed on all. The latter will inevitably lead to deflationary tendencies in many countries without any compensating stimulatory tendencies in other countries.

It should be noted in the context of SGP rules and fiscal rules in more general terms that they are very difficult if not impossible to enforce. Yet they do exist, and as noted in the Economist (14 May, 2011, p. 88) there are 80 countries in 2011, which have fiscal rules, with only 7 in 1990. Experience clearly shows that enforcement is difficult, if not impossible - see above for relevant SGP enforcement difficulties and failures. In any case, SGP rules never prevented the debt crisis in the EMU. Fiscal rules also entail the serious distributional effects for such rules normally reduce benefits, which hurt severely the low-income groups.

The 'great recession' has raised a host of issues regarding the merits of fiscal policy and worries in certain quarters of debt financed budget deficits. In the EU/EMU, it has raised another issue, which is concerned with fiscal policy in the environment of a monetary union. We have argued that monetary unions need an active fiscal policy, which is accompanied by fiscal transfers. The reason is simple enough. Regions within the EU/EMU are hit by asymmetric shocks, which can only be contained by inter-regional transfers, which substitute potentially for capital and labour mobility. The EU/EMU lack such a system, which is desperately needed. In its absence it is conceivable that some member countries may be compelled to exit the euro area.

### 8. European Central Bank: Monetary and Financial Policies

There is a need to make some fundamental changes to the operation of the European Central Bank. The ECB, and the European System of Central Banks (ESCB), has been established as an 'independent' central bank. 'Independence' is to be interpreted in a political sense: "When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the Statute of the ESCB and of the ECB, neither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body. The Union institutions, bodies, offices or agencies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks" (Article 130 of the Treaty establishing the European Community).

It is not 'independent' in an ideological sense, and the ECB has frequently advocated fiscal and other policies, which are formally outside of its remit but which conform to the anti-Keynesian approach of fiscal consolidation and advocacy of 'flexible labour markets'. For example, writing in December 2009, ECB (2009) argued that "As regards fiscal policies, the Governing Council [of the ECB] re-emphasises how important it is for governments to develop, communicate and implement ambitious fiscal consolidation strategies in a timely manner. These strategies must be based on realistic output growth assumptions and focus on structural expenditure reforms, not least with a view to coping with the budgetary burden associated with an ageing population. ... With regard to structural reforms, most estimates indicate that the financial crisis has reduced the productive capacity of the euro area economies, and will continue to do so for some time to come. In order to support sustainable growth and employment, labour market flexibility and more effective incentives to work will be needed. Furthermore, policies that enhance competition and innovation are also urgently needed to speed up restructuring and investment and to create new business opportunities" (p. 7). The 'independence' of a Central Bank has been based on ideas that politicians are not to be trusted with key elements of macro-economic policy particularly in that elected politicians would favour expansionary policies with little regard to the inflationary implications. This view in part has been based on the idea of the Phillips curve and its different shape in the short and long run. There is a short-run trade-off between economic activity and inflation, which is absent in the long run in view of a hypothesised vertical Phillips curve relationship (see Arestis and Sawyer, 2004; Sawyer, 2010, for a critique of this position). However, the financial crisis has emphasised, to say the least, the need for financial stability as a key objective of macroeconomic policy and of monetary policy. We would argue that the financial stability objective should be a prime objective and the operational independence of

Similar statements are made by the Governor of the ECB at the press conference after the monthly meetings of the Governing Council of the ECB. See, for example, Trichet (2011b).

the European Central Bank brought to an end. The adoption of financial stability objective would, of course, require the development of a range of policy instruments.<sup>12</sup>

The 'independence' of the ECB would appear to preclude co-operation and co-ordination between the different bodies responsible for aspects of macroeconomic policies. Yet, in a world of multiple objectives (including high levels of economic activity and employment, financial stability, inflation etc.) there is a need for multiple instruments, which are operated by different authorities, and where there should be some co-ordination. At present, it is more like subordination with monetary policy taking pride of place and fiscal policy neutered by the lack of EMU fiscal policy and the constraints of the SGP on national budget deficits.

Sub-national government can differ from national government with respect to its debt and deficits in that the bonds of the sub-national government tier may not be accepted by the Central Bank as an 'acceptable' financial asset and its debt cannot be monetised, and further lacks any ability to 'print money'. The national government cannot itself 'print money', but through its relationship with the Central Bank its debt can be monetised, and *in extremis*, could require the Central Bank to buy central government bonds in exchange for 'base money'. In effect, through its relationship with the Central Bank, a national government would never need to default on its own debt, provided that the debt is denominated in the domestic currency. The arrangements within the EMU leave a national member government in the position of a sub-national tier in the sense that the ECB can decide whether national debt is 'acceptable' for financial-asset purposes and on what terms. The position needs to be changed such that all financial assets issued by EMU member governments are always accepted by the ECB.

The key reforms required with regard to the ECB are: (i) a reformulation of the objectives of the ECB to include high and sustainable levels of employment and economic growth and financial stability; (ii) the ECB must be made accountable to the European Parliament, and its statutes changed so that it can clearly be involved in the co-ordination of fiscal and monetary policies, and indeed that ultimately it can take instructions from other European bodies such as the Economic and Financial Affairs Council (ECOFIN)<sup>13</sup>; (iii) the ECB operates with regard to national governments within EMU in the ways in which a national central bank would operate with regard to a national government, and specifically be able to, in effect, monetise the debts of national governments.

#### 9. Inflation

The policies on inflation have been, as indicated above, at best, a limited success. We have argued that even this has been more by good luck and probably due to globalisation rather than through the efficacy of the policy instrument (Arestis and Sawyer, 2011). In our view, inflation in the EMU (and elsewhere) is influenced only to a limited extent by domestic policies (Angeriz and Arestis, 2007, 2008; Arestis and Sawyer, 2008). Although there has been an EMU level inflation policy operated through the ECB, there are also inflation policies at the national level. To a greater or lesser extent there are national policies on wage and price determination. As seen above, whether for reasons of national policies and/or

<sup>12</sup> We elaborate on the importance of financial stability in Arestis and Sawyer (2011).

<sup>&</sup>lt;sup>13</sup> The ECOFIN is a "configurations of the Council of the European Union ... and is composed of the Economics and Finance Ministers of the 27 European Union member states, as well as Budget Ministers when budgetary issues are discussed". The tasks of the ECOFIN are: "economic policy coordination, economic surveillance, monitoring of Member States' budgetary policy and public finances, the euro (legal, practical and international aspects), financial markets and capital movements and economic relations with third countries. It also prepares and adopts every year, together with the European Parliament, the budget of the European Union bn" which about €100 (both from is quotes are http://en.wikipedia.org/wiki/Economic\_and\_Financial\_Affairs\_Council).

differences in the price and wage setting institutions, differences in national inflation rates have persisted.

Some of the proponents of the euro acknowledged that the conditions to be in place for a successful single currency suggested by the OCA literature were not present (at least to the degree needed) but that the continuing process of integration under a single currency would generate changes in the direction of those conditions. One of the conditions of OCA is price flexibility, understood to mean that the general level of prices in one country could change relative to those in other countries within the currency union where there was a 'shock' to the relative standing of that country. Essentially, changes in the demand or supply position would be compensated by corresponding changes to relative prices. But it turned out that while there was, in a sense, price flexibility between countries it was not in the manner envisaged. As can be seen from Table 2, over the period 2002-2008 inflation in Germany did not increase as rapidly as in Greece, Portugal and Spain. Yet Germany was running a current account surplus and Greece, Portugal and Spain deficits. The differences in inflation also had perverse effects in terms of inflation policy.

If the differences in inflation experience persist, then the euro will be further undermined. There is clearly no EU level policy at present, which can address this issue. One approach would be to assert that the pressures of integration would lead to countries having to achieve similar inflation rates. Even if that is so, similar inflation rates may well be combined with different levels of unemployment. Paradoxically this commonality of inflation rates could be engineered by national fiscal policy. There is then a need for the development of some understanding between EMU member countries on this issue.

### 10. Current Account Deficits and Competitiveness

The data in Tables 2 and 3 indicate something of the scale by which relative prices and relative unit labour costs have changed, when the nominal exchange rates of the national currencies of the original EMU member states were locked together. One interpretation of those changes is that they represent the adjustment of real exchange rates between EMU member countries in the face of a combination of inappropriately set nominal exchange rates (back in 1998 for most) and 'shocks'. But this overlooks the prevailing current account deficits when the euro was formed and some tendency for the current account deficits to persist and widen. A country in a fixed exchange rate system, which is in the nature of a currency union for participating countries, in dealing with cumulative differential inflation and current account deficits can endure domestic deflation (to reduce imports and perhaps lower domestic costs) or can devalue its currency. The latter is ruled out by membership of EMU. So it would appear that deflation is the only answer. Before dealing with this proposition it is important to note that current account imbalances among the EMU member countries were not considered in the process of setting up the euro area (see Arestis and Paúl, 2009, for further details). However, more recently and in view of the 'great recession' a new mechanism for the prevention and correction of macroeconomic imbalances has been proposed (European Council, 2011). Economies with problematic imbalances would be identified along with numerical monitoring. Subsequent inspections would be undertaken to identify the seriousness of the problem and recommendations would be proposed. The latter could include corrective measures to be reviewed by the Council subsequently. Economic sanctions would be applied if necessary within the framework of the revised SGP or the new 'pact for the euro' (see section 11 below for further details on the revised SGP and the new 'pact for the euro').

A current account deficit can interact with a budget deficit in the following sense. As is well known from the identity (X-Q) = (S-I) + (T-G), with the symbols as in section 7, a current account deficit and a budget deficit will be related for a given net savings position. Other

things being equal (that is net savings) then a larger current account deficit would be associated with a larger budget deficit (there is no causal link implied). The current account deficits on the scale observed in a number of EMU countries are not sustainable. Yet countries are locked into a fixed nominal exchange rate system, where many have experienced a loss of competitiveness and in effect rising real exchange rates. There have to be mechanisms developed for the adjustments of those exchange rates, which would seem to require a co-ordinated mechanism for the adjustment of the prevailing exchange rates between member countries of the EMU and for the generation of similar rates of inflation. It has also been argued above that the ECB should relate to member governments and to their financial liabilities in a manner similar to the ways in which a national central bank would to a national government. These policy initiatives involve many of the features of a political integration. It is on the latter aspect to which we turn our attention next. Before doing so it is worth noting that another way of regaining the possibility of achieving competitiveness is for the weak countries to reintroduce their national currencies. Such a move would also enable these countries to manage their public debts and avoid bankruptcy since they can under the new circumstances print money and finance budget deficits in the process. However, the latter solution entails the serious problem that the accounts of non-residents are bound to be shifted to non-domestic bank accounts that would lead to an outflow of capital with dramatic adverse implications for the domestic banking sectors. The rescue packages, described below in section 11, are designed to avoid problems of the type to which we have just referred and also bail out weak countries to prevent them from bankruptcies.<sup>14</sup>

The pattern of current account imbalances poses considerable difficulties for EMU. The presence of trade deficits along with the statistics on the evolution of unit labour costs and prices suggest that many, particularly Mediterranean, countries suffer from a lack of competitiveness and in the context of a single currency area an inability to devalue. The pattern of current account deficits and surpluses implies a corresponding pattern of capital account surpluses (i.e. borrowing) and deficits (i.e. lending). Directly or indirectly capital is flowing from the current account surplus countries to deficit countries, bearing in mind that EMU has an entity close to balanced current account position. In the era prior to the financial crisis, countries with current account deficits were able to borrow readily from others to fund the deficit, and indeed within the EMU to do so at relatively low rates of interest. As noted above, for those countries with relatively high inflation, real interest rates were particularly low or even negative. The major difficulty with any current account deficit comes from the requirement to continually fund the deficit, and the mounting debts and interest and similar payments on the borrowing. The major challenge now facing EMU is how to correct the pattern of surpluses and deficits, and to put in place policies which will prevent similar severe imbalances reappearing in the future.

There may be doubts on the effectiveness of devaluation in terms of a nominal exchange rate depreciation leading to a sustained real depreciation and the responsiveness of imports and exports to the changes in prices involved with a devaluation. For a country with its own currency devaluation would clearly be one response to current account deficit. In a single currency area, a combination of slower or negative inflation in the deficit countries and faster inflation in the surplus countries would help to resolve the current account imbalances. But in

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<sup>&</sup>lt;sup>14</sup> It is interesting to note that "As of 31 December 2009, banks headquartered in the euro zone accounted for almost two thirds (62%) of all internationally active banks' exposures to the residents of the euro area countries facing market pressures (Greece, Ireland, Portugal and Spain). French and German banks were particularly exposed to the residents of Greece, Ireland, Portugal and Spain. Together, they had \$727 billion of exposures to Spain, \$402 billion to Ireland, \$244 billion to Portugal and \$206 billion to Greece. At the end of 2009, they had \$958 billion of combined exposures (\$493 billion and \$465 billion, respectively) to the residents of these countries. This amounted to 61% of all reported euro area banks' exposures to those economies" (BIS, 2010a, pp. 18-19). It clearly is the case that France and Germany have a strong interest in rescuing the weak countries to avoid possible bankruptcies and/or dramatic fall in the value of these countries' sovereign debt.

EMU this would involve a reversal of the patterns of inflation observed over the past decade and would be a lengthy process to generate the scale of changes in relative competitiveness. Further the process by which a deficit country sought to generate low or negative inflation could well involve demand deflation with the consequent loss of employment and output.

This last point leads us to the major point that a failure to correct the current account imbalances would condemn the deficit countries to many years of slow or negative growth, with spillover effects on to the surplus countries. The survival of the EMU in its present form and membership does depend on an ability to correct these imbalances. The alternative is for some of the deficit countries to leave the euro and reintroduce their national currency which would then most likely depreciate against the euro, bringing some relief to the deficit. EMU core countries are, however, determined not to allow this procedure. In any case, there are doubts as to how far devaluation (whether through depressing domestic prices within a single currency or through reintroduction of own currency with subsequent depreciation against the euro) could rectify the current account deficits. The productive base of the export industries of the countries concerned may simply lack the capacity and/or markets to be able to expand production and sales sufficiently in the face of devaluation to bring about the necessary changes. The alternative would require a long-term plan to improve competitiveness and build an industrial base. This, however, is a long-term solution and it is short-term solutions that are solutions are desperately required. In other words, policies to enable the flow of funds from surplus to deficit countries, during the period of reconstruction, are required. How could that be developed is the focus of the section that follows.

## 11. Political Integration

A relevant question is the extent to which the recent changes at both the EMU and the EU levels, especially so since the eruption of the 'great recession' in August 2007 and the subsequent euro area debt crisis, move closer to a *de facto* political integration. To begin with the absence of bailout mechanisms should be noted for it left the euro area completely unarmed to deal with the debt crisis when it was erupted. A series of *ad hoc* measures have been initiated and introduced as we discuss in what follows. It should also be noted that regulation and supervision of the EMU financial system was grossly inadequate. We consider all the aspects just touched upon in the rest of this section.

The European Commission called on 26<sup>th</sup> May 2010, and pledged on 8<sup>th</sup> June 2010, for new taxes to be imposed on all the continent's banks. The levies would form a set of national funds, managed by national governments but under the aegis of a network of 'bank resolution funds' that could be used to disburse emergency money in case of a financial crisis. It is thereby the banks not the taxpayers that would bear the cost of such a crisis. This is a different arrangement from the proposed 'European Financial Stability Facility' (EFSF), formed on 1st July 2010 and endowed with a 250bn-euro fund, which was raised to a 440bneuros at a relevant meeting on 11th March 2011, and confirmed at another meeting of the European Commission on 25th March 2011. This was initially intended to be a temporary arrangement with an operational life of three years. However, on 17th December 2010 European leaders at a summit in Brussels agreed to make a treaty change so that EFSF functions until 2013. It will then be replaced by the European Stability Mechanism (ESM) to help member indebted states when in acute cash flow difficulties; ESM will then become permanent. It was also decided at the meeting of 11th March 2011, confirmed on 25<sup>th</sup> of March 2011, that the new permanent bailout mechanism should be able to lend up to 500bn euros through increased guarantees from triple-A states and paid-in capital from those states with weaker balance sheets – in a subsequent meeting of the European finance ministers it was agreed to 700bn euros capital, of which 80bn euros would actually be paid in; the rest would be 'callable' capital.<sup>15</sup> This facility aims to reassure financial markets and help out euro-area member states struggling to issue sovereign debt and faced with banking troubles. In terms of the funding arrangements of both the EFSF and ESM, however, the relevant decision has been postponed until June 2011. This was due essentially to the German negotiators who bowed at the last minute to domestic political pressure and persistently proposed a reduction of their contribution to the bailout mechanism. Under the deal reached on 25<sup>th</sup> March 2011, euro area and other governments will have to pay their share of capital over five years, instead of the four years initially agreed.<sup>16</sup> The rate of interest on new loans from this facility is expected to be lower by up to 1 percent than previously.

The key element is the creation of a permanent liquidity facility under the aegis of the ESM. This would be available as a means of crisis resolution if there is a risk to the stability of the euro area as a whole. The crucial difference between the EFSF and ESM is that the credits of the latter would be more senior to those of private investors. This will reduce the risk to the budget of the creditor nations, since it is expected that by 2013 European banks should be in a better position to absorb losses. The ESM will not come into force before 2013. All the changes of the 'grand bargain' are expected to be ratified by the parliaments of the EU's member states before the next meeting of the European Commission in June 2011 when the whole package would be eventually confirmed. These new measures reduce the cost of bailing-out countries in trouble but increase it for those who have been, or potentially could be, in need for bailout. They do not address the issue of high sovereign debt, which had appeared to have been the focus of the whole exercise. Still, the exercise has been turned into a political game, one of what should have been an exercise to sort out the economic crisis. In this sense, it would not be surprising if the European leg of the 'great recession' is not contained any sooner.

It should be stressed that all these arrangements had not been envisaged by the creators of the EMU. For it is case that one of the 'pillars' of the EMU and the euro was the 'no bailout, no exit and no default' clause. The sovereign debt crisis simply changed significantly that principle at least in terms of the 'bailout' part of the clause. Still the agreed funds mentioned above should not be used to purchase government debt in the open market. They should be used to buy the debt from struggling governments. But there is a condition attached. This is that the struggling governments should agree to implement significant austerity measures. Yet it all amounts to increase the level of debt in the countries concerned. This is justified on the premise that the new mechanism helps the countries involved in that the loan conditions are much better than the ones replaced. But the debt of the countries involved piles up thereby creating another serious danger, the possibility of default. This, however, entails a further danger in view of the high exposure of a number of European banks to weak countries debt (see footnote 15). This may very well explain that despite the alleged seriousness of the European debt crisis, default has not been seriously considered yet. Indeed, it might not happen to the extent that support continues to be forthcoming. The weak country debt would continue to grow so long as support is forthcoming until the debt is all accumulated in, and held, by the official sector. Under these conditions the official sector will be the last holder of the assets that take the full loss. The taxpayer will carry the burden yet again, not the original bondholder. The ECB is trying very hard to avoid this problem. While helping the troubled

<sup>&</sup>lt;sup>15</sup> It should be noted that the 700bn-euro fund is not really substantial in that the 'callable' capital entails the real danger of some countries not being able to honour their commitments.

<sup>&</sup>lt;sup>16</sup> The EFSF/ESM will comprise of all the seventeen EMU-member states, plus a number of EE, but not EMU, members. The latter include Denmark, Poland, Latvia, Lithuania, Bulgaria and Rumania, which have pledged to join the EFSF/ESM arrangements.

<sup>&</sup>lt;sup>17</sup> In the meantime, the EFSF is in the process of issuing the 'euro bond', a sovereign responsibility of the EMU. This is an important development in that it is the first time that a bond issue is undertaken by an institution on behalf of the EMU as one entity. The first issue took place on the 25<sup>th</sup> January 2011 as part of its mission to provide liquidity to countries whose financial markets face serious difficulties.

countries, at the same time it attempts to sell debt to avoid excess liquidity in the market – the ECB does not undertake 'quantitative easing'. This is not always possible, though. It is not infrequent to find that since May 2010 when this operation started that that the ECB failed in its attempt to neutralise fully the effect on liquidity of purchasing government bonds.

Further relevant developments that will come into effect in 2013 include common fiscal and economic policies. One dimension of these policies may very well be dubbed as 'a reformed Stability and Growth Pact'. This includes close monitoring on government spending, pension schemes, and limits on wage increases in the public sector. There is also a further commitment for country-members to close the gap between their current debt levels and the EU's debt limit of 60 per cent of GDP. This is of course in addition to the financial penalties of countries that do not conform with the budget deficit of 3 per cent. The debt to GDP limit should be achieved by member countries initiating a 5 per cent per year reduction until the 60 percent target is met. If a member country fails to close the gap between its debt level and the 60 per cent limit of GDP, by 5 percentage points per year, it will be subject to a fine of 0.2 per cent of its GDP. The fine would be automatic, unless a majority of the council opposed it. The agreement does also allow pension reforms to be offset in national accounts and private indebtedness taken into consideration before a country is fined. Furthermore, governments must not spend more each year than their medium term economic growth rate. All these measures, however, amount to deficit- and debt-tightening until the same rules as prior to the 'great recession' are achieved. But those rules failed since they lacked credible enforcement. So that for the same reasons its predecessors failed in the past (see, for example, Arestis, 2010; also Arestis and Sawyer, 2006), the current proposals are bound to fail again. This is actually the third attempt at a SGP. It clearly follows that what is needed is a plan for reform not a pact that has shown to have been so unsuccessful in the past. Such a plan should be based on effective economic governance, with firm roots on economic convergence. Coordination of economic policies is vital. Consequently the current, similar with previous, proposals are bound to fail again without such different and more secured foundations. An important missing dimension of the 'grand bargain' in relation to the 'great recession' is the lack of pan-European policies to let banks fail safely thereby forcing losses on creditors rather than on taxpayers.

There is also the competitiveness pact, what has been labelled as the 'pact for the euro', or 'euro-plus pact'. This is concerned with boosting the growth potential along with a common corporate tax base in the region. It covers a number of areas: improving competitiveness, through higher productivity and better alignment of wages and productivity; boosting employment through flexibility and tax reforms; improving public finances; reinforcing financial stability through legislation on banking and regular bank stress tests; and introducing a financial transaction tax. The 'pact for the euro' is in principle a framework for economic policy co-ordination in a number of macroeconomic policies. But it is far from it in that no indication of such an objective is evident in the 'pact for the euro'. It should be noted that these arrangements are not merely for the EMU members. They would equally apply for the non-EMU members of the EU, if they chose to participate in the 'pact for the euro'.

On 23<sup>rd</sup> July 2010, the results of the Committee of European Banking Supervisors (CEBS) bank stress tests were published. These tests subjected banks in Europe to 'unlikely but plausible scenarios', and were designed to ascertain whether banks had enough capital to avoid default in crisis; also the setting of reasonable capital targets a better lending environment would follow. Like the 2009 US similar bank stress tests, the European results revealed a clean bill of health and a resilient banking system. However, in view of the

<sup>&</sup>lt;sup>18</sup> In the European case 91 banks, with 7 of them failing the stress test, were included in the sample. In the US 19 banks were included and 10 failed the stress test. Apparently the more stringent and earlier US stress test has not helped in terms of its objective to boost bank lending, which continues to contract under tight conditions.

results, interesting questions arise. The most important is perhaps the question of no provision for the possibility of sovereign default. A further question is the extent to which the safety margin of capital ('core' capital to asset ratio with a threshold of 6 per cent) that banks were required to hold should have been higher. Consequently, was the threshold ratio sufficiently stressful? Indeed, a number of banks perceived as weak, managed to pass the test – including five of the six Greek banks tested. There is also the argument that the 'core' capital, defined as equity, retained earnings and various types of hybrid debt instruments (which have the characteristics of equity but also of bonds) is not suitable. The relevant argument is that if 'core' capital had been defined as equity and retained earnings, the real risk-absorbing elements, a number of banks would not have passed the test. Still there is the question of whether the institutions left out were unimportant enough. Indeed, there are institutions whose financial health is not entirely clear and yet left out of the test. In any case, these tests complement the establishment of the EFSF and the recent financial supervisory framework within Europe. We may note in passing that CEBS is due to become the European Banking Authority (EBA). 19

These recent changes, which are by far stricter than previously, do not form in any way a step forward towards a *de facto* political integration. One implication is that the agreement to strengthen the euro area, the 'reformed Stability and Growth Pact' together with the 'europlus pact', focussing on broader macroeconomic reforms imply that future economic decisions will be taken collectively by the 17 euro-area states – not separately as in the past. Still they rely on the supply-side of the EMU economy, neglecting the role and importance of aggregate demand. They also need to be applied to all member countries in a consistent way. For example, in the case of imbalances within the euro area countries both deficit and surplus members should be involved in the rebalancing, not merely to deficit countries as it is in the current versions. This type of policies failed in the past and they will fail again in the future. There is nothing in the revised proposals to suggest that they will not fail. When it comes to conflicts between national governments and the European Commission, the latter loses. This reinforces our main point. For it is clear that all these developments lack the important dimension of integration. It clearly follows that future steps to closer integration are absolutely necessary. For otherwise there is a serious risk of gradual unravelling of what little has been achieved. It is true of course that some integration is in place within the EU/EMU, which is difficult to break. It is, nonetheless, too weak to function satisfactorily as we have demonstrated in this contribution. Clearly further integration is vital.

An interesting proposal comes from the President of the ECB in a speech (Trichet, 2011a) where he argues for an EU Finance Ministry. The suggestion is that "In this Union of tomorrow, or of the day after tomorrow, would it be too bold, in the economic field, with a single market, a single currency and a single central bank, to envisage a ministry of finance of the Union? Not necessarily a ministry of finance that administers a large federal budget. But a ministry of finance that would exert direct responsibilities in at least three domains: first, the surveillance of both fiscal policies and competitiveness policies, as well as the direct responsibilities mentioned earlier as regards countries in a 'second stage' inside the euro area; second, all the typical responsibilities of the executive branches as regards the union's integrated financial sector, so as to accompany the full integration of financial services; and third, the representation of the union confederation in international financial institutions" (p. 7). The president concludes by clarifying to suggest that "I think that [eventually] a confederation of sovereign states of a new type, with new institutions to manage the

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<sup>&</sup>lt;sup>19</sup> An important international development that affects the EU/EMU members and their banking sectors is the Basel III standards (BIS, 2010b). The main purpose of Basel III is to enhance banks' capital requirements to make them safer and avoid the problems of the 'great recession'. The EU intends to modify Basel III standards in an attempt to allow banks to count for more in their total capital. This would relax Bael III regulations and relax EMU's grip on banks when the opposite should be forthcoming.

interdependence of today and tomorrow, would be fully in line with such a heroism of reason" (Trichet, op. cit., p. 8; see, also, Trichet, 2011b). This proposal may be seen as a step towards a closer integration of national budgetary policies and enforcement of controls over spending and borrowing within the EU. Such a suggestion, though, is by far short of providing a true and closer integration that would provide policies to be able to tackle the kind of problems the EU/EMU area has faced at the time of the 'great recession'.

### 12. Concluding Comments

We would argue that the policy framework within which the euro is placed is 'not fit for purpose'. Three aspects of this argument stand out. First, the 'independence' of the ECB precludes the ECB devoting its attention to financial stability and to co-ordinating and co-operating with other macroeconomic institutions in pursuit of other objectives, such as high levels of economic activity. Second, it does not have ways of developing fiscal policy, which would be supportive of high levels of economic activity, recognising that budget deficits are generally required. Third, there are no mechanisms for resolving the pattern of current account deficits and surpluses, which we argue are unsustainable in their present form. Without the ability to vary the exchange rate, countries with current account deficits will be thrown back to deflation. For it is the case that the EMU completely lacks any mechanisms by which countries can resolve their deficit problems.

A further problem, which has emerged and highlighted by the 'great recession' is the dual economic reality in the EMU. This is the northern part of the EMU, where the economies are reviving, with Germany and France at the forefront, especially Germany; and the periphery, mostly southern (Greece and Portugal) but including Ireland, heavily involved in the sovereign-debt crisis. Given the onerous austerity packages imposed on the latter countries, the really interesting question is how long they will be able to withstand the pressures for even more austerity and the undesirable consequences. Fallout is seriously and eminently possible. At the same time, though, no serious attempt is initiated at seriously resolving the dual economic reality. The choice faced by many EMU countries is then the stark one of remaining with the euro and suffering an indefinite future of deflation and high unemployment or in effect leaving the euro.

The economic problems within the euro area have been building since its inception, and have become acute with the 'great recession'. The faults lie in the neo-liberal design of the euro project, now embedded in the Treaty of Lisbon, and where there is little prospect of serious changes because of the unanimity requirements for change. But without basic and fundamental changes, many (perhaps all) euro area countries face a bleak economic future. Under these circumstances the future of the euro is surely not bright to say the least. This contagious financial crisis is the biggest threat not merely to Europe but globally. Changes within the euro area are thereby desperately needed. Most important of which is fiscal integration. Indeed, the history of monetary unions around the world is very telling. In the absence of economic integration, aq monetary union without a political integration simply cannot survive (Arestis et al., 2003; Arestis and Sawyer, 2006a, 2006b, 2006c). Whether the latter or any other fundamental change is forthcoming, it is unfortunately a very sad expectation. It should also be clear that cosmetic measures as currently proposed will not save the euro. It is undoubtedly the case that the euro experiment is going through a severe test.

#### References

- Angeriz, A. and Arestis, P. (2007), "Monetary Policy in the UK", *Cambridge Journal of Economics*, Vol. 31, No. 6, pp. 863-884.
- Angeriz, A. and Arestis, P. (2008), "Assessing Inflation Targeting Through Intervention Analysis", *Oxford Economic Papers*, Vol. 60, No. 2, pp. 293-317.
- Arestis, P., Baddeley, M. and Sawyer, M.C. (2007), "The Relationship between Capital Stock, Unemployment and Wages in Nine EMU Countries", *Bulletin of Economic Research*, 59 (2), pp. 125-148.
- Arestis, P., Brown, A. and Sawyer, M. (2001), *The Euro: Evolution and Prospects*, Cheltenham: Edward Elgar Publishing Limited.
- Arestis, P., Ferrari, F. Fernando de Paula, L. F. and Sawyer. M. (2003), "The Euro and the EMU: Lessons for Mercusor", in P. Arestis and L. Fernando de Paula (eds), *Monetary Union in South America: Lessons from EMU*, Cheltenham: Edward Elgar Publishing Limited.
- Arestis, P. and Paúl, J. (2009), "Déficits en cuenta Corriente en la Unión Económica y Monetaria europea y crisis Financiera Internacional", *Ola Financiera*, September-October.
- Arestis, P. and Sawyer, M. (2004), "Can Monetary Policy Affect the Real Economy?", European Review of Economics and Finance, 3(3), 9-32.
- Arestis, P. and Sawyer, M. (2005), "Aggregate Demand, Conflict and Capacity in the Inflationary Process", *Cambridge Journal of Economics*, vol. 29, no. 6, pp. 959-974.
- Arestis, P. and Sawyer, M. (2006a), "Alternatives for the Policy Framework of the Euro", in W. Mitchell, J. Muysken and T.V. Veen (eds.), *Growth and Cohesion in the European Union: The Impact of Macroeconomic Policy*, Cheltenham: Edward Elgar Publishing Limited.
- Arestis, P. and Sawyer, M. (2006b), "Reflections on the Experience of the Euro: Lessons for the Americas" in M. Vernengo (ed.), *Monetary Integration and Dollarization: No Panacea*, Cheltenham: Edward Elgar Publishing Limited.
- Arestis, P. and Sawyer, M. (2006c), "Macroeconomic Policy and the European Constitution", in P. Arestis and M. Sawyer (eds), *Alternative Perspectives on Economic Policies in the European Union*, Basingstoke: Palgrave Macmillan.
- Arestis, P. and Sawyer, M. (2008), "A Critical Reconsideration of the Foundations of Monetary Policy in the New Consensus Macroeconomics Framework', *Cambridge Journal of Economics*, Vol. 32, No. 5, pp. 761-779.
- Arestis, P. and Sawyer, M (2011), "Economic Policies of 'New Economics", Paper Given at the Conference, *Economic Policies of the New Thinking in Economics*, St. Catharine's College, Cambridge 14 April.
- Baldwin, R. and Wyplosz, C. (2009), *The Economics of European Integration*, 3<sup>rd</sup> edition, London: McGraw Hill.

- Bank of International Settlements (BIS) (2010a), "International Banking and Financial Market Developments", *Quarterly Review*, June, Basel: Switzerland.
- Bank of International Settlements (BIS), (2010b), *The Group of Governors and Heads of Supervision Reach Agreement on Basel Committee Capital and Liquidity Reform Packages*. Available at: http://www.bis.org/press/p100726/annex.pdf
- Commission of the European Communities (1977), Report of the Study Group on the Role of Public Finances in European Integration, chaired by Sir Donald MacDougall, Economic and Financial Series No. A13, Brussels: Belgium.
- Currie, D. (1997), *The Pros and Cons of EMU*, London: HM Treasury (Published originally by the Economist Intelligence Unit, January 1997).
- European Central Bank (ECB) (2003), *Monthly Bulletin*, May 2003, Frankfurt: European Central Bank.
- European Central Bank (ECB) (2004), *The Monetary Policy of the ECB*, Frankfurt: European Central Bank.
- European Central Bank (ECB) (2009), *Monthly Bulletin*, May 2003 December 2009, Frankfurt: European Central Bank.
- European Commission (2000), *Public Finances in EMU*, European Commission: Brussels, Belgium.
- European Council (2010), *Strengthening Economic Governance in the EU*, Report of the Task Force to the European Council, Brussels, 21 October.
- Goodhart, C.A.E. and Smith, S. (1993), "Stabilization", *The Economics of Community Public Finance*, European Economy: Reports and Studies No.5/1993, Brussels: Belgium.
- Huffschmid, J. (ed) (2005), Economic Policy for a Social Europe A Critique of Neo-Liberalism and Proposals for Alternatives, Basingstoke: Palgrave Macmillan.
- IMF (2007), World Economic Outlook Database, October, Washington D.C.: International Monetary Fund.
- IMF (2011), Regional Economic Outlook for Europe: Strengthening the Recovery, Washington D.C.: International Monetary Fund.
- Issing, O. (2003), "Evaluation of the ECB's Monetary Policy Strategy", *ECB Press Conference and Press Seminar*, 8 May, Frankfurt: Germany.
- Kenen, P. (1969), "The Theory of Optimum Currency Areas", in R. Mundell and A. Swoboda (eds.), *Monetary Problems of the International Economy*, Chicago: Chicago University Press.
- Lerner, A. (1943), "Functional Finance and the Federal Debt", *Social Research*, February, pp. 38-51.

- Lucarelli, B. (2004), "European Monetary Union: A Neo-Liberal Trojan Horse?", *Contributions to Political Economy*, Vol. 23, pp.81-91.
- McKinnon, R. (1963), "Optimal Currency Areas", *American Economic Review*, Vol. 53, pp. 717-25.
- Mundell, R. (1961), "A Theory of Optimum Currency Areas", *American Economic Review*, Vol. 51, pp. 657-65.
- Sawyer, M. (2002), "The NAIRU, Aggregate Demand and Investment', *Metroeconomica*, Vol. 53, No.1, pp.66-94.
- Sawyer, M. (2010), "Phillip's Curve, Independence of Central Banks and Inflation Targeting", in G. Fontana, J. McCombie and M. Sawyer (eds.), *Macroeconomics, Finance and Money, Essays in Honour of Philip Arestis*, Houndmills, Basingstoke: Palgrave Macmillan.
- Taylor, J.B. (1993), "Discretion Versus Policy Rules in Practice", *Carnegie-Rochester Conference Series on Public Policy*, December, 195-214.
- Trichet, J-C. (2011a), "Building Europe, Building Institutions", Speech on receiving the Karlspreis, 2011 in Aachen, 2 June 2011. Available at: <a href="http://www.ecb.int/press/key/date/2011/html/sp110602.en.html">http://www.ecb.int/press/key/date/2011/html/sp110602.en.html</a>
- Trichet, J-C. (2011b), "Introductory Statement to the Press Conference (with Q&A)", Frankfurt am Main, 9 June. Available on: http://www.ecb.int/press/pressconf/2011/html/is110609.en.html

Table 1: Budget/GDP and Debt/GDP

	Budget	Budget	Budget	Budget	Debt	Debt
	Position/GDP	Position/GDP	Position/GDP	Position/GDP	/GDP	/GDP
	(%)	(%) 2008	(%) 2009	(%) 2010	(%)	(%)
	Average				2007	2010
	2002-07					
Austria	-1.85	-0.5	-3.5	-4.4	63.1	75.9
Belgium	-0.60	-1.4	-6.1	-4.9	88.0	102.5
Finland	3.40	4.2	-2.7	-3.3	45.5	58.4
France	-3.15	-3.3	-7.6	-7.4	70.9	92.4
Germany	-2.68	0.1	-3.0	-4.0	65.3	79.9
Greece	-5.07	-7.8	-13.7	-8.3	108.5	129.2
Ireland	1.07	-7.3	-14.2	-32.3	29.4	104.9
Italy	-3.22	-2.7	-5.2	-5.0	117.2	131.3
Luxembourg	1.08	3.0	-0.7	-2.2	7.6	21.0
Netherlands	-1.12	0.5	-5.4	-5.8	61.1	74.6
Portugal	-3.67	-3.0	-9.4	-7.3	68.8	92.9
Spain	0.63	-4.2	-11.1	-9.2	42.3	72.2
Euro Area						
Average						
(12)	-1.27	-2.0	-6.2	-6.3	70.9	91.6

Source: Calculated from OECD, Economic Outlook Database (Various Issues)

**Table 2 Inflation Rates** 

	Annual	Annual	Annual	
	Inflation	Inflation	Inflation	
	Rate	Rate	Rate	
	2002-08	2009	2010	
Austria	2.1	0.4	2.9	
Belgium	2.3	0.0	2.1	
Finland	1.8	1.6	1.4	
France	2.2	0.1	1.6	
Germany	1.9	0.2	1.0	
Greece	3.7	1.3	4.7	
Ireland	2.9	-1.7	-1.6	
Italy	2.6	0.8	1.5	
Luxembourg	3.1	0.0	2.6	
Netherlands	2.2	1.0	0.8	
Portugal	2.7	-0.9	1.4	
Spain	3.3	1.4	1.5	
Euro Area				
Average	2.6			
(12)		0.4	2.9	

**Source:** Calculated from OECD, *Economic* 

Outlook Database (Various Issues)

**Table 3 Current Account Positions and Competitiveness** 

	Current		Current	Current	Change in Unit Labour
	Account	Account	Account	Account	Costs (%)
	/GDP (%)	/GDP	/GDP	/GDP	2001-2008
	Average	(%)	(%)	(%)	
	2002-07	2008	2009	2010	
Austria	2.53	3.3	2.7	2.6	3.50
Belgium	3.05	-1.9	0.8	1.0	11.96
Finland	5.50	2.9	2.7	1.5	4.33
France	0.13	-1.9	-1.9	-2.2	7.66
Germany	4.62	6.7	4.9	5.1	5.37
Greece	-8.75	-14.7	-11.4	-10.5	17.02
Ireland	-2.33	-5.6	-3.0	-0.3	34.55
Italy	-1.63	-3.6	-3.2	-3.3	9.73
Luxembourg	10.42	5.3	6.7	7.8	9.48
Netherlands	6.52	4.3	4.6	5.3	11.41
Portugal	-9.07	-12.6	-10.3	-10.3	7.44
Spain	-6.42	-9.7	-5.5	-5.5	16.49
Euro Area Average					
(12)	0.58	-0.8	-0.4	-0.2	11.58

Source: Calculated from OECD, Economic Outlook Database (Various Issues)

Table 4 GDP Growth and Unemployment

	GDP Growth 1991- 2000	GDP Growth 2002- 2007	GDP growth 2008- 2010	Unemployment Rate (%) 2000	Unemployment Rate (%) 2010
Austria	2.3	2.48	0.03	3.6	4.3
Belgium	2.3	2.13	0.07	6.9	7.7
Finland	2.9	3.45	-1.47	9.6	8.4
France	2.1	1.87	-0.27	9.0	9.5
Germany	1.7	1.30	-0.17	7.5	7.1
Greece	2.3	4.13	-1.63	11.2	15.9
Ireland	7.7	5.40	-3.83	4.2	14.7
Italy	1.6	1.05	-1.80	10.1	8.3
Luxembourg	4.6	4.60	0.33	2.2	5.5
Netherlands	3.2	1.98	-0.10	3.0	5.0
Portugal	2.7	1.00	-0.33	4.0	12.4
Spain	2.8	3.38	-1.00	11.1	20.7
Euro Area					
Average					10.0
(12)	3.0	1.88	-0.70	8.5	

Source: Calculated from OECD, Economic Outlook Database (Various Issues)