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The European Financial and Economic Crisis: Alternative Solutions from a (Post-) Keynesian Perspective

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Institut für Makroökonomie
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Macroeconomic Policy Institute

Working Paper

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The European Financial and Economic Crisis: Alternative Solutions from a (Post-) Keynesian Perspective

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The European Financial and Economic Crisis: Alternative Solutions from a (Post-) Keynesian Perspective*

Eckhard Hein, Achim Truger, Till van Treeck

Abstract: The financial and economic crisis in the Euro area has revealed a number of important flaws in the economic policy framework in Europe. On the one hand, the imbalances, which have dominated European development since the introduction of the euro, are not sustainable; and this is more serious in a period of crisis in particular. On the other hand, it has become clear that the Euro area suffers from a serious lack of institutions and policy concepts, which will not allow coping with deep financial and economic crises unless a deep restructuring takes place. The policy reactions of European governments, the European Commission and the European Central Bank in cooperation with the IMF will, therefore, hardly be able to initiate recovery. On the one hand, some important steps towards financial stabilisation have been made. On the other hand, however, these are combined with restrictive fiscal and wage policies, which will impose deflationary pressure on major parts of the Euro area and thus prevent stabilisation (or reduction) of public debt-GDP ratios. In the paper we will first analyse the imbalances, which have been built up in the Euro area, before we briefly review the policy responses towards the crisis. Since the prescribed fiscal and wage policies are still dominated by the New Consensus Macroeconomics theoretical framework, we will then develop an alternative macroeconomic policy model based on Keynesian and Post-Keynesian principles. It will be shown that stabilising wage and active fiscal policies will have major roles to play in order to cope with the imbalances and to initiate recovery for the EU as a whole. Furthermore, current account targets will have to be included into intra-Euro area policy coordination.

Keywords: European financial and economic crisis, current account imbalances, Post-Keynesian economic policies

JEL code: E20, E61, E63, E64, E65, E66

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The European Financial and Economic Crisis: Alternative Solutions from a (Post-) Keynesian Perspective

1. Introduction

The European Union and the Euro area are presently facing the most serious crisis since the introduction of the euro in 1999. As a consequence of the world wide financial and economic crisis, which started in 2007 in the US and rapidly spread over major parts of the world economy, Greece in early 2010, Ireland in late 2010 and Portugal in early 2011 were the first three Euro area economies with serious public debt problems. These problems triggered massive increases in interest rates on public debt of these economies and finally public debt crises with rescue measures introduced by the European Union member countries together with the IMF. The financial and economic crisis in the Euro area has revealed a number of important flaws in the economic policy framework in Europe. It has become clear that the European Union and the Euro area suffer from a serious lack of institutions and policy concepts. In particular, there are no efficient mechanisms designed to prevent the building up of external macroeconomic imbalances across Euro area countries. The current debate over a reform of the Stability and Growth Pact, and the economic policy framework more broadly, is still dominated by the paradigm that has led to the crisis. Despite the recognition that current account imbalances contributed to the crisis, the policy reactions of European governments, the European Commission and the European Central Bank are still characterised by a narrow focus on public deficits and debt. At the same time, there is a continued call for intensified deregulation of labour and product markets, in an attempt to raise the 'competitiveness' of the Euro area as a whole. These measures are conceptually flawed and will, therefore, hardly be able to initiate recovery. Some important urgency measures have been taken to stabilise financial markets and prevent government defaults, in particular the European Financial Stability Facility (EFSF) as well as the European Financial Stabilisation Mechanism (EFSM), and the European Stability Mechanism (ESM), which will assume the role of providing external financial assistance to Euro area member states in trouble after June 2013. However, these measures are combined with restrictive fiscal and wage policies associated with the access to the EFSF and the ESM, a tighter Stability and Growth Pact (SGP) and a new 'Euro Plus Pact',¹ which will impose deflationary pressures on major parts of the Euro area and will thus prevent stabilisation (or reduction) of public debt-GDP ratios. Unless the structural causes for the public debt and euro crises, i.e., the causes for the external imbalances, are overcome, the Euro area will continue to face serious threats of deflationary stagnation and a collapse of the euro as a common currency.

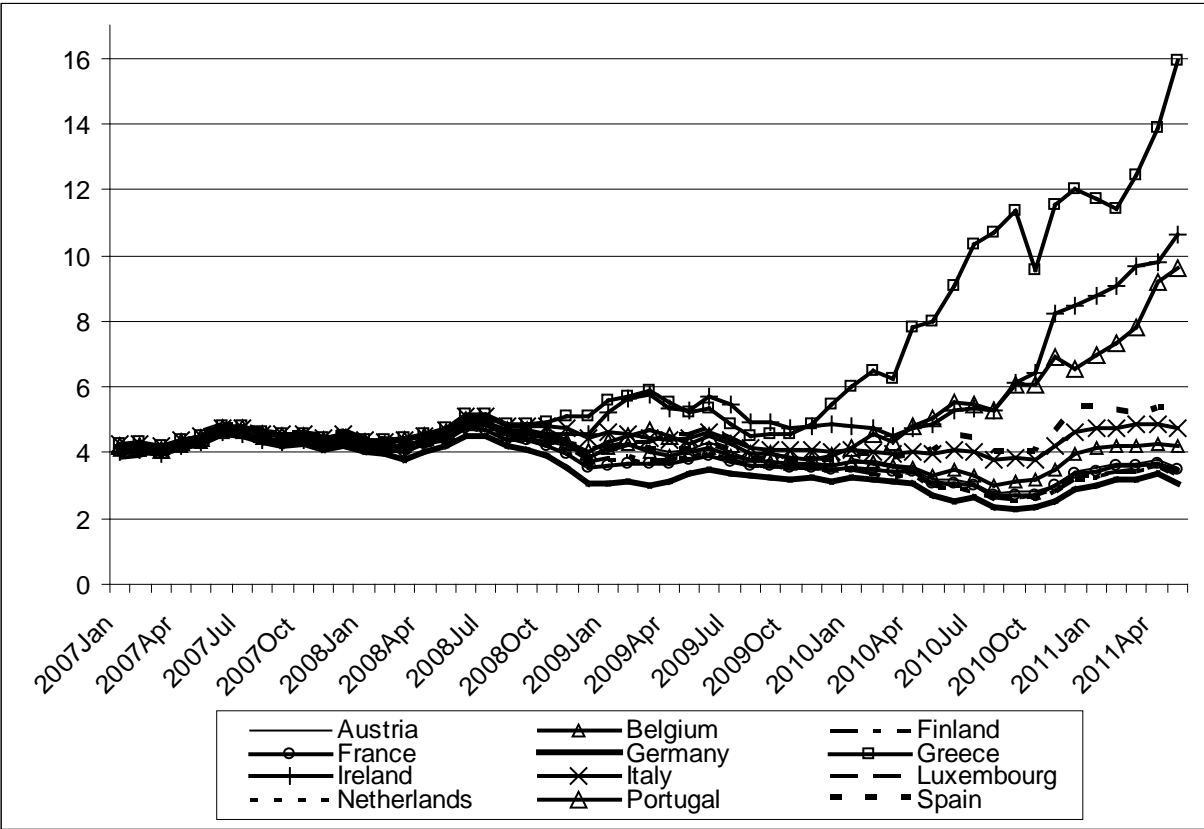
¹ See the conclusions of the meeting of the European Council (2011) in March 2011.

In the paper we will first analyse the imbalances, which have been built up in the Euro area and which are at the roots of the present crisis in Section 2. Then we will briefly review the economic policy framework in the European Monetary Union (EMU) in Section 3 and analyse in how far its underlying theoretical concepts have contributed to the building up of the causes of the crisis. Since the prescribed macroeconomic policies are still dominated by the New Consensus Macroeconomics theoretical framework, we will then develop an alternative macroeconomic policy model based on Keynesian and Post-Keynesian principles in Section 4. Having outlined the basic principles of a Post-Keynesian macroeconomic policy approach, we will apply this approach to the Euro area. It will be shown that stabilising wage and active fiscal policies will have major roles to play in order to cope with the imbalances and to initiate recovery for the Euro area as a whole. Further more it will be argued that current account targets will have to play a major role in intra-Euro area policy coordination.

2. Imbalances in the Euro area at the roots of the euro crisis

The current euro crisis is considered by many observers – above all by the dominating economic policy makers and advisors in Germany and also in the European Commission – as a crisis of government deficits and debt. And a first, very casual look at the developments might even seem to confirm this view: Since the start of the global financial crisis in 2007 the up to that point in time almost negligible spreads of government bonds of Euro area member states relative to the benchmark German bonds started to increase, most notably for Greece, Ireland, Portugal, and Spain (GIPS) (see Figure 1). After a first culmination, especially for Ireland and Greece, in mid-2009 the situation calmed down a little until in spring 2010 the development escalated dramatically again in the Greek case. Dramatic emergency measures had to be taken in order to prevent a Greek government default – and possibly government defaults in the aforementioned other member states as well, and therefore to prevent an end to the euro as a currency. The relief provided by the Greek rescue package and the Euro rescue fund set up to prevent further problems for other governments proved to be very short-lived as in October 2010 spreads for Irish government bonds increased dramatically again so that in November finally the Irish government decided to request assistance by the Euro rescue fund. In spring 2011, the Portuguese government got under severe pressure and many expect that its much larger neighbour Spain could soon become the next victim of the Euro debt crisis.

Figure 1:
10-year government bond yields, selected countries, January 2007 – May 2011

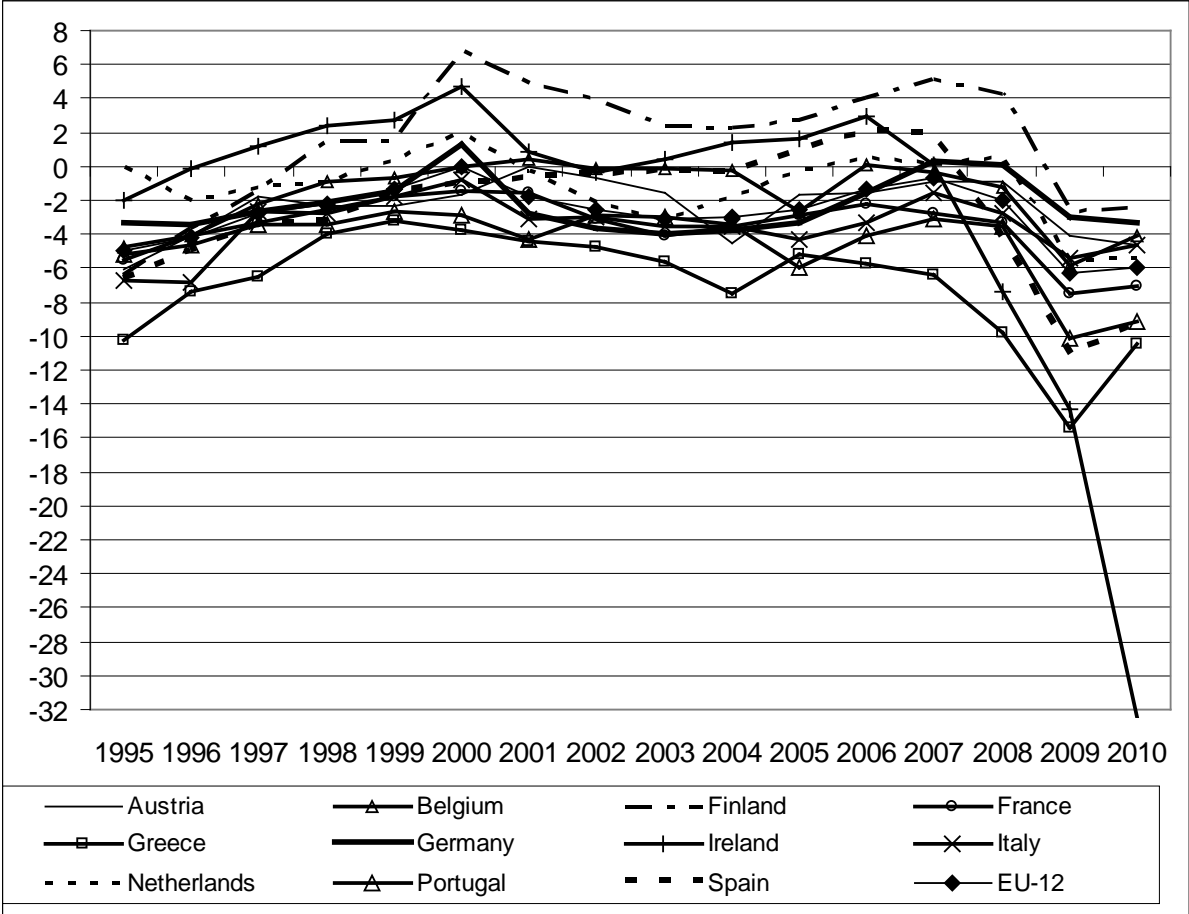


Source: ECB, authors' calculations.

Mainstream economics and economic policy debates see the high and rising government debts, and the failure of the Stability and Growth Pact (SGP) to contain government deficits and debt, as the main reason for the crisis and therefore the most important problem to be tackled in the Euro area. From that point of view the main threat for the euro is caused by governments which have run irresponsibly high deficits leading public finances to the brink of default. However, even a casual look at the data raises many doubts regarding that point of view (see Figures 2 and 3): For Greece, of course, the picture seems clear, as the budget deficit was outstandingly large over the whole period since the mid-1990s. For Portugal, however, the picture is less clear, as the budget deficit was not larger than in Germany for a long time period. And most strikingly, both Ireland and Spain looked perfectly well before the crisis as they seemed to follow the SGP in an almost ideal manner. Ireland ran a budget surplus of 3 per cent of GDP in 2006 and Spain had a surplus of 1.9 per cent in 2007. Turning to gross government debt in relation to GDP, which should in theory be a much better indicator for the sustainability of public finances, the evidence for the purely fiscal view of the crisis becomes even weaker: Portugal used to have a considerably smaller debt burden than Germany. And in 2007 gross government debt in relation to GDP was only

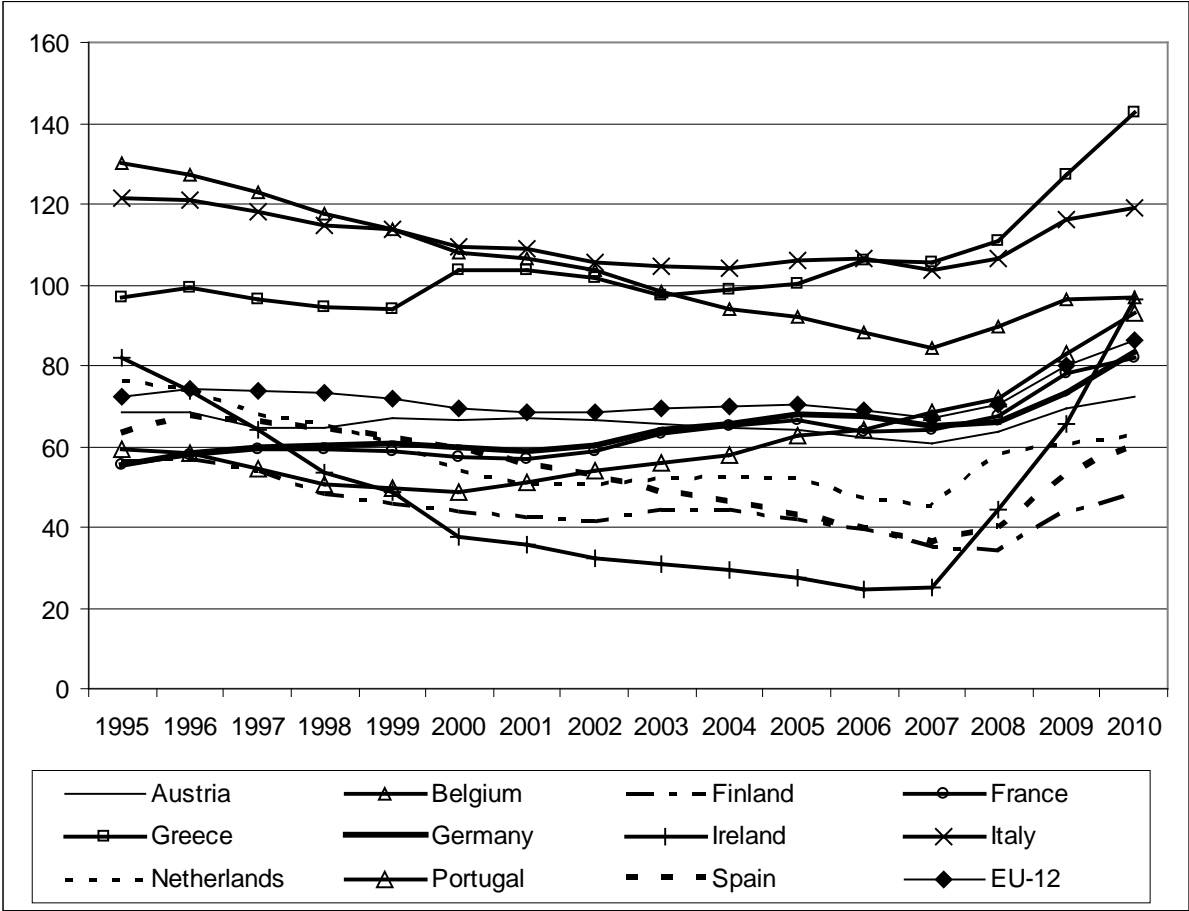
25 per cent in Ireland and 36 per cent in Spain, far below the 60 per cent threshold of the SGP. From this perspective, nobody would have suspected any risk of government default in Portugal, let alone in Ireland or Spain.

Figure 2:
General government financial balance relative to GDP, selected countries,
1995 to 2010, in per cent



Source: AMECO Database of European Commission, authors' calculations.

Figure 3:
General government gross consolidated debt relative to GDP, selected countries, 1995-2009, in per cent



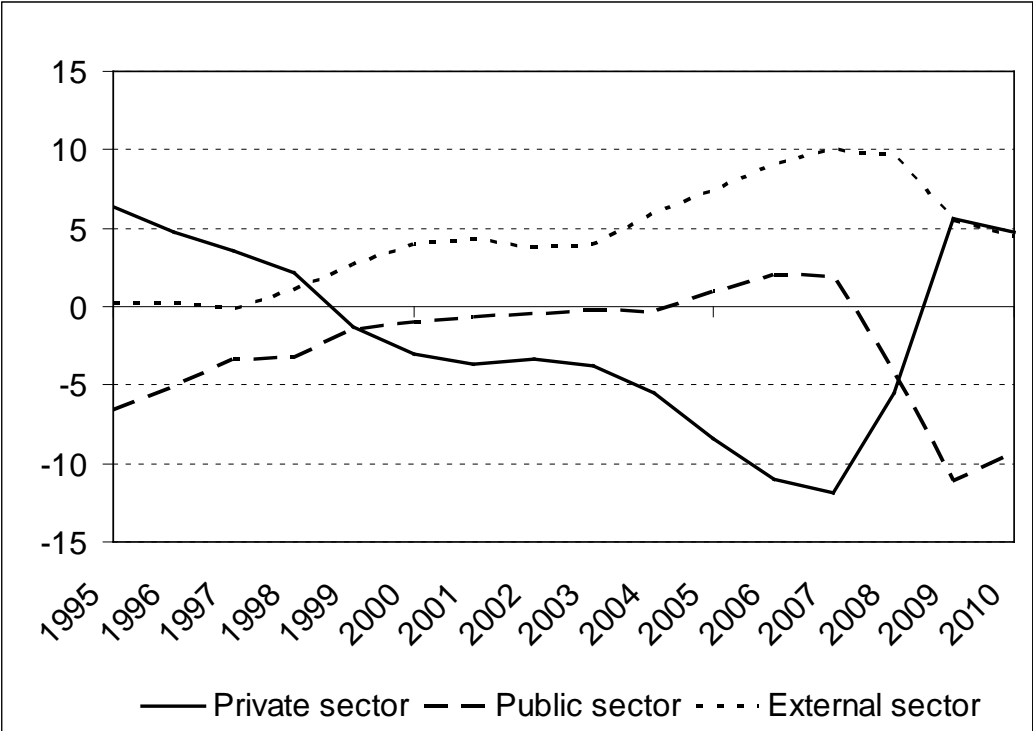
Source: AMECO Database of European Commission, authors' calculations.

The fact that the aforementioned countries nevertheless ran into trouble must thus be due to other imbalances: And, of course, for both Spain and Ireland it is well known that it was the private sector which had gone deeply into debt before the crisis unfolded, partly as a consequence of a housing price bubble. Once the crisis struck, it was the government that had to step in and go into debt. The interconnection of public and private and foreign debt can be more systematically explored if one recalls that the following accounting identity holds for any economy:

$$\begin{aligned}
 & \text{Public sector financial balance} + \text{Private sector financial balance} \\
 & + \text{Foreign sector financial balance} = 0.
 \end{aligned}$$

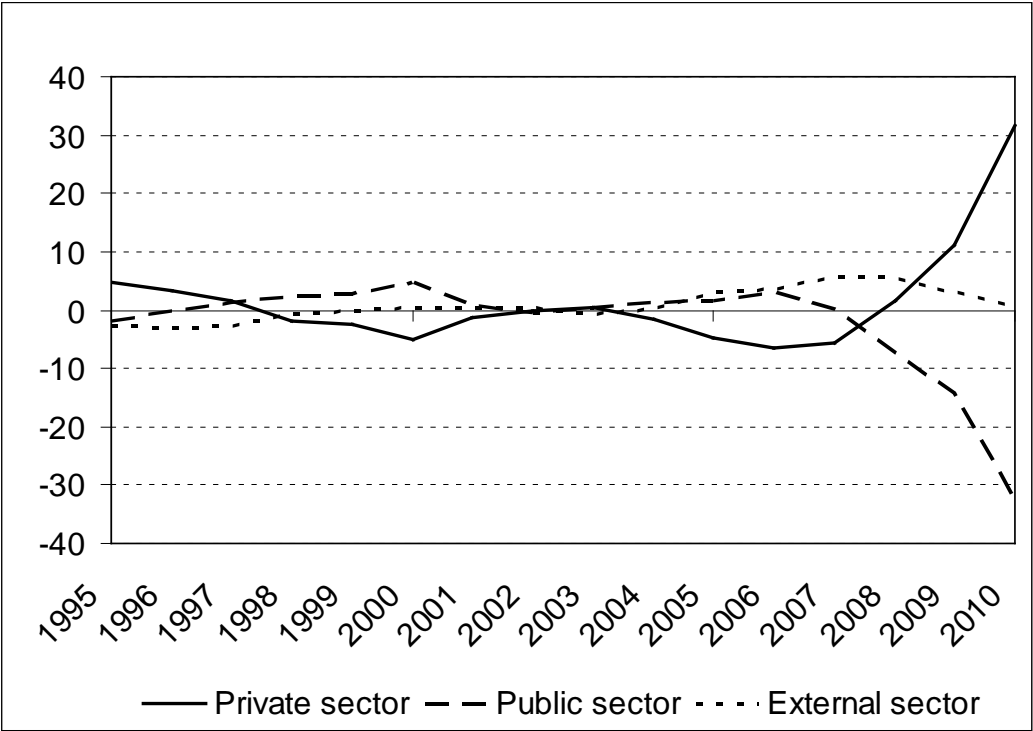
This simply means that any particular sector in the economy cannot run a surplus, without the remaining two sectors of the economy running a joint deficit of exactly the same magnitude. If one country runs a current account surplus, then at least in one other country the government or the private sector has to run a financing deficit, and so on.

Figure 4:
Sectoral financial balances as a share of nominal GDP, Spain, 1995 - 2010



Source: AMECO Database of European Commission, authors' calculations.

Figure 5:
Sectoral financial balances as a share of nominal GDP, Ireland, 1995 - 2010

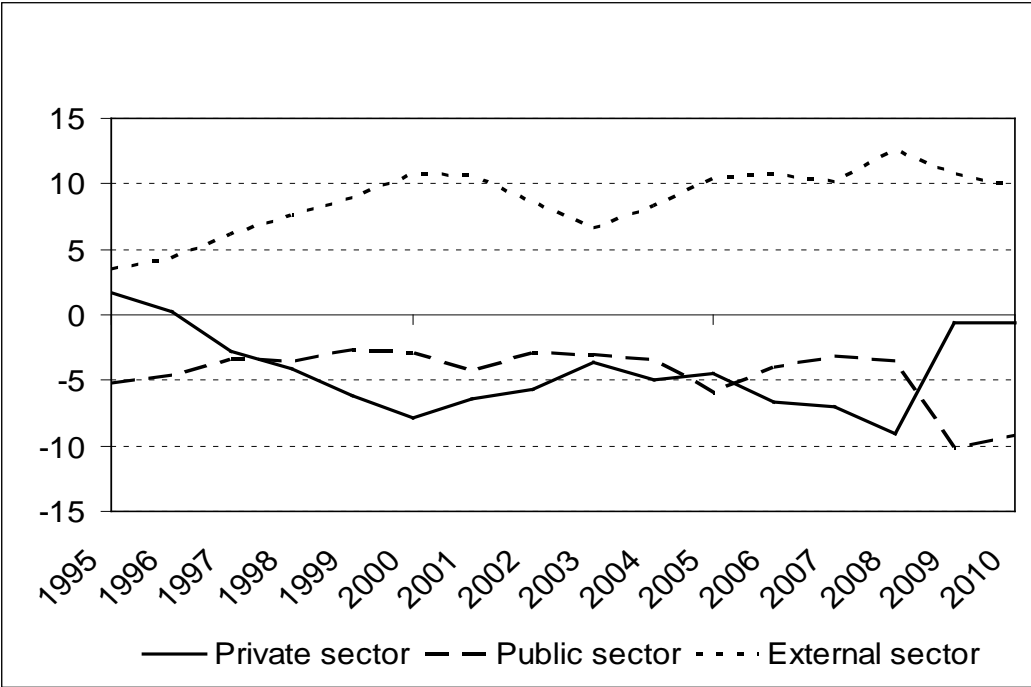


Source: AMECO Database of European Commission, authors' calculations.

Figures 4 and 5 show the financial balances of the private sector, the public sector and the external sector for Spain and Ireland respectively. Although the figures are more striking for Spain, in both countries huge deficits of the private sector (more than 5 per cent of GDP in Ireland for some years and more than 10 per cent of GDP in Spain) were associated with (relatively small) surpluses in the government balance and to a much larger extent with current account deficits against the rest of the world. When the bubble growth models came to a sudden end as the result of the crisis, the private sector balance quickly turned into surplus and governments stabilising the economy had to accept a dramatic rise in government deficits. Therefore, the ‘unsustainable’ government deficit turns out to be a consequence of unsustainable private and external sector balances in the first place.

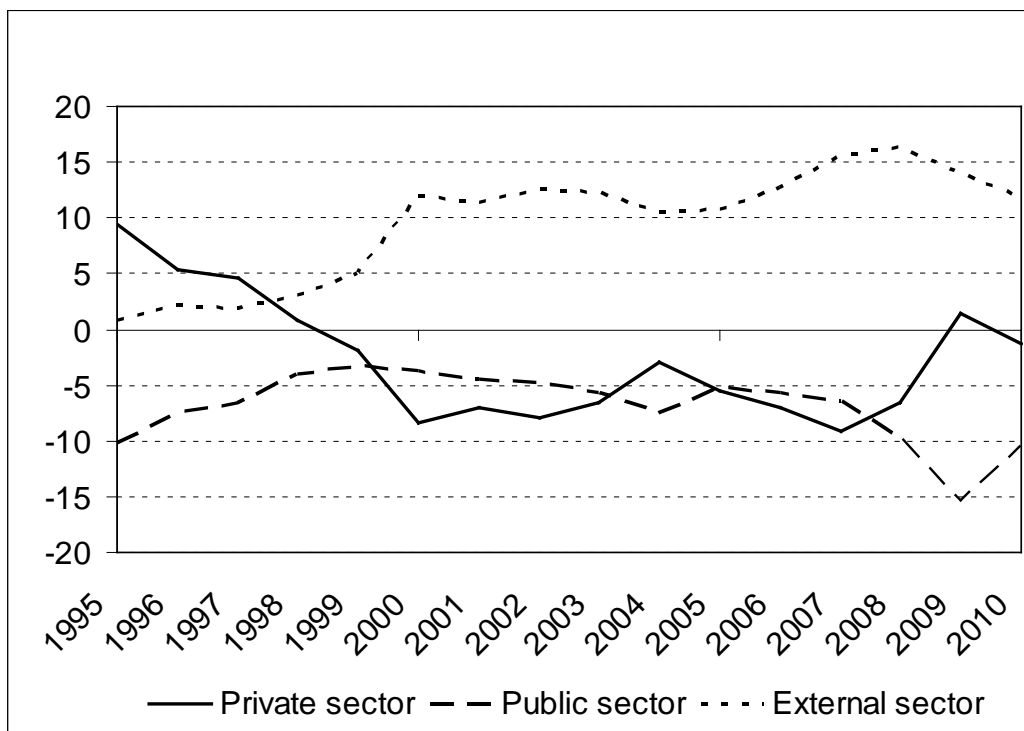
In fact, if one takes a look at two other economies currently in trouble with their public debt, it turns out that the picture is very similar for them. In Portugal and Greece (Figures 6 and 7), both the private sector and the government sector had continuously run deficits since the start of the euro. Those deficits had to be financed by capital inflows and hence current account deficits of about 10 per cent of GDP in the case of Portugal and even about 12 per cent of GDP in the case of Greece before the crisis. After the crisis, in both countries the government stepped in to prevent the economy from collapsing when the private sector reduced deficits or turned into surplus again, leading to rising public deficits and the ‘problems of government debt’ currently in the focus of public attention.

Figure 6:
Sectoral financial balances as a share of nominal GDP, Portugal, 1995-2010



Source: AMECO Database of European Commission, authors’ calculations.

Figure 7:
Sectoral financial balances as a share of nominal GDP, Greece, 1995-2010

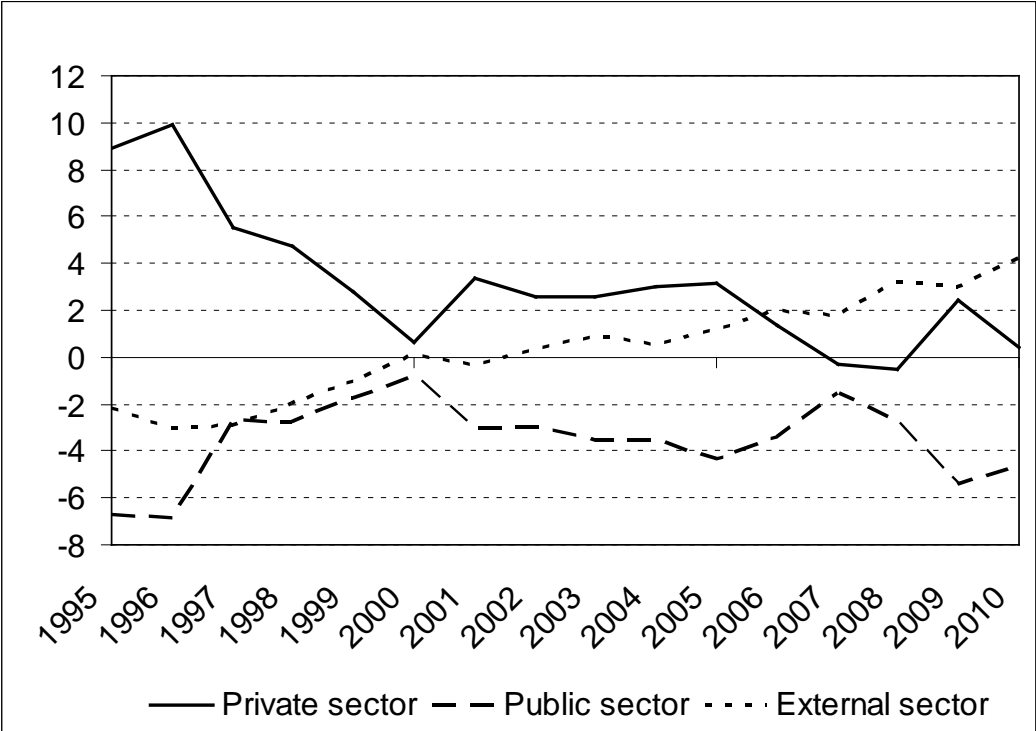


Source: AMECO Database of European Commission, authors' calculations.

Therefore, it seems that the current euro crisis can better be interpreted as the consequence of preceding private debt and current account imbalances and not as a result of excessive public deficits. In the four countries outlined above, the private sector obviously tended to spend more than its income. This was associated with government surpluses (Ireland, Spain) or amplified by government deficits (Portugal, Greece), which led to very high and rising current account deficits in the four countries.

For Italy, which is sometimes considered part of the GI(I)PS countries, the picture is less clear (see Figure 8). In this country the private sector balance was consistently positive. Therefore the government deficit could be financed partly by the private sector surplus and partly by the capital inflows associated with the moderate, but continuously rising, current account deficit. When the crisis hit, the improvement in the private sector balance was compensated mostly by a rather modest increase in the government deficit.

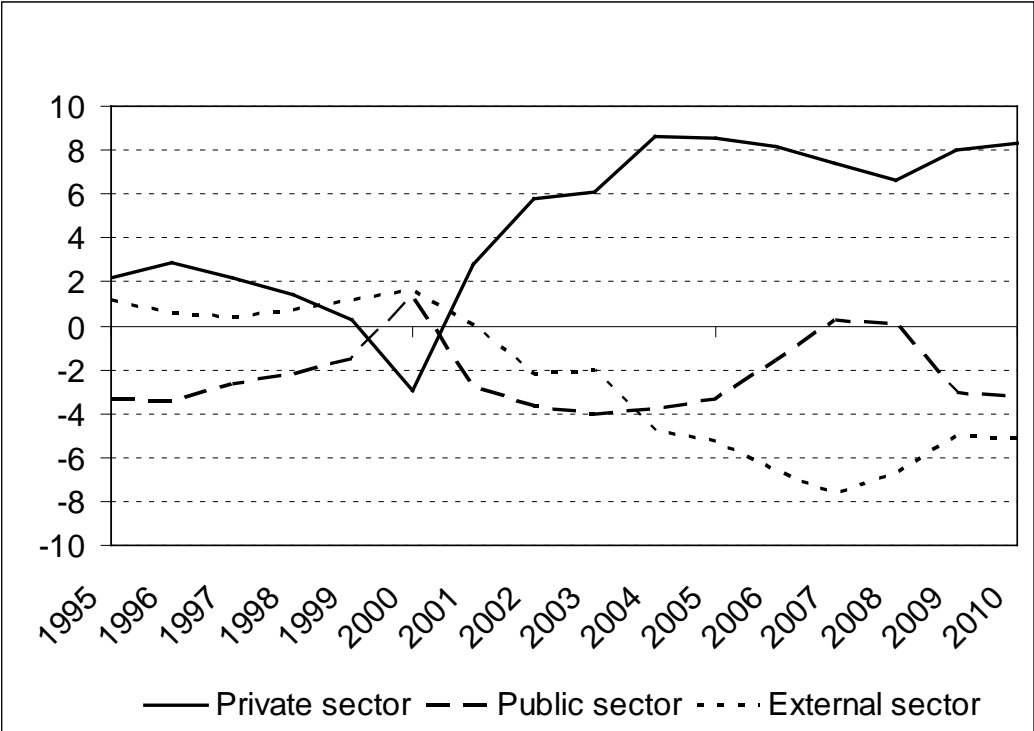
Figure 8:
Sectoral financial balances as a share of nominal GDP, Italy, 1995-2010



Source: AMECO Database of European Commission, authors' calculations.

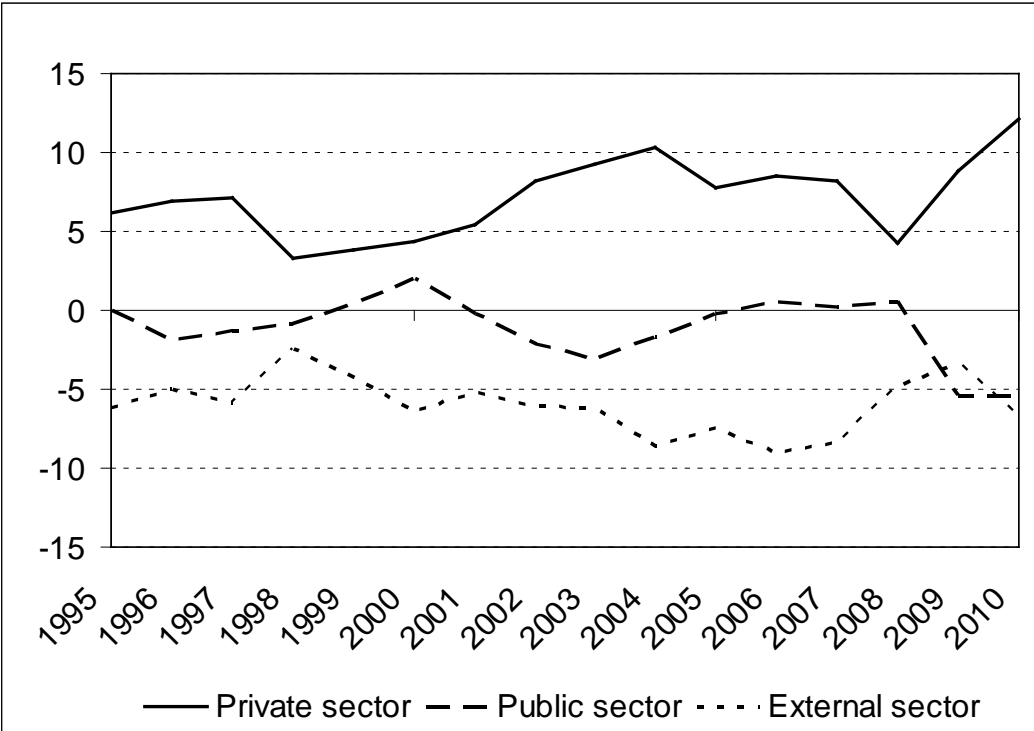
Obviously, there must be a counterpart to the rising current account deficits of the GIPS countries. In fact, since the current account of the Euro area as a whole has been roughly balanced, there must have been other countries in which the private sector has consistently spent much less than it earns. If in such cases the government is not willing (or is prevented by the SGP) to run a correspondingly high deficit, then this will imply a deficit of the foreign sector, i.e. a current account surplus – taking GDP as given. Within the Euro area there are at least four countries for which such characteristics hold: Germany, the Netherlands, Austria, and Belgium, with Germany as the largest Euro area country being the most important one (see Figures 9 to 12).

Figure 9:
Sectoral financial balances as a share of nominal GDP, Germany, 1995-2010



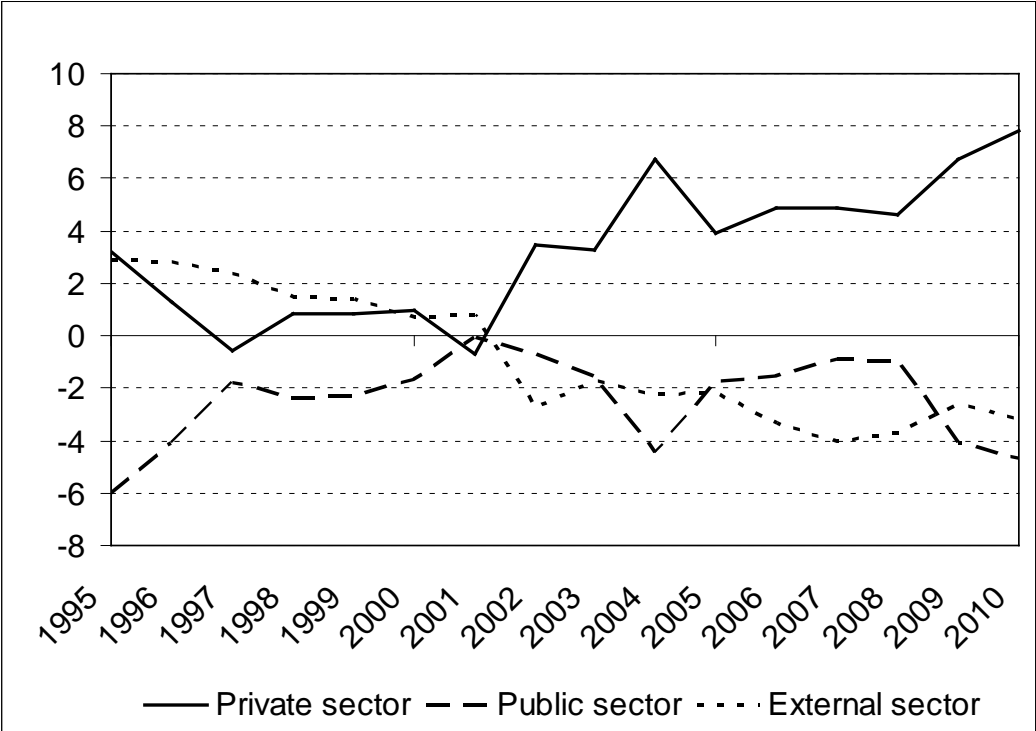
Source: AMECO Database of European Commission, authors' calculations.

Figure 10:
Sectoral financial balances as a share of nominal GDP, Netherlands, 1995-2010



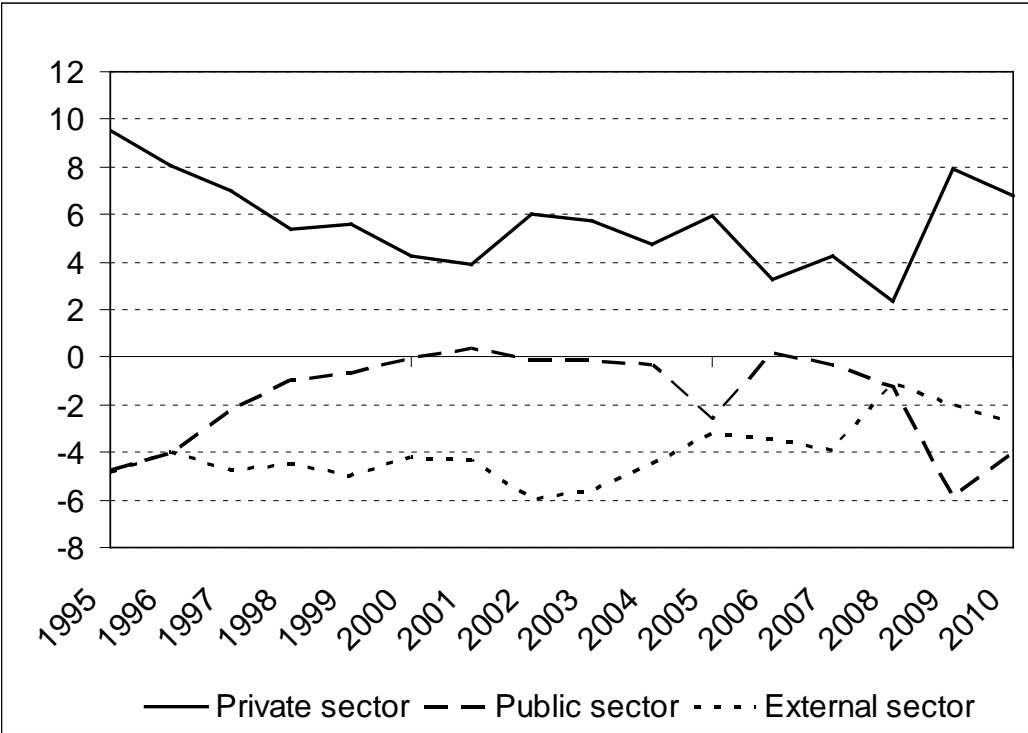
Source: AMECO Database of European Commission, authors' calculations.

Figure 11:
Sectoral financial balances as a share of nominal GDP, Austria, 1995-2010



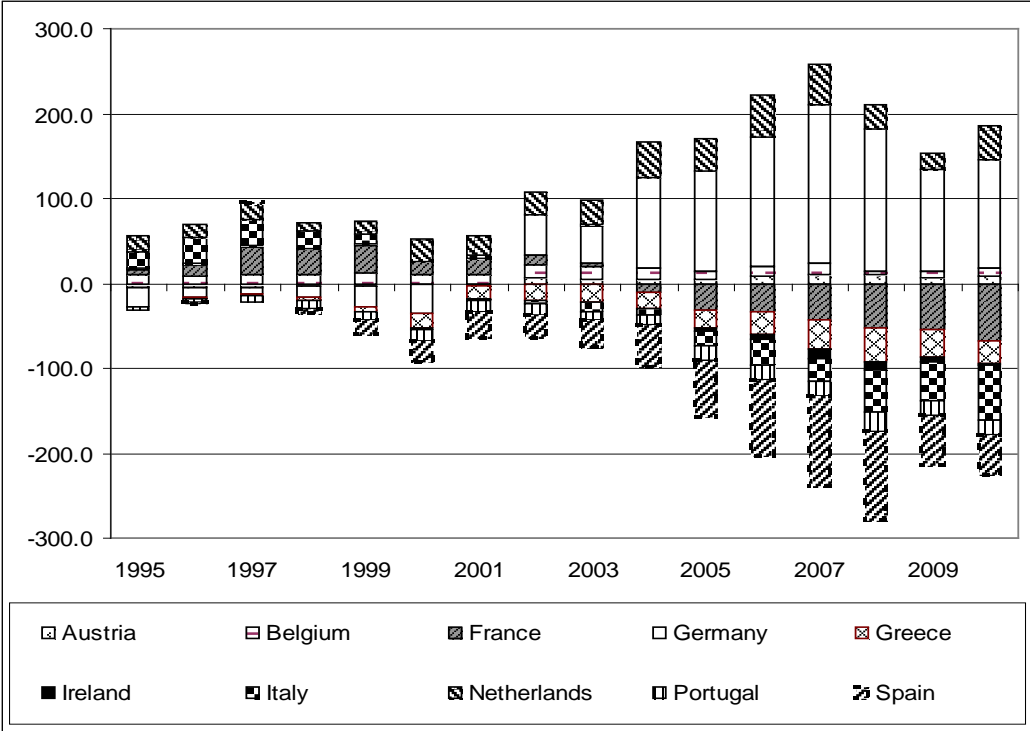
Source: AMECO Database of European Commission, authors' calculations.

Figure 12:
Sectoral financial balances as a share of nominal GDP, Belgium, 1995-2010



Source: AMECO Database of European Commission, authors' calculations.

Figure 13:
Current account in billions ECU/euro, selected Euro area countries, 1995 – 2010



Source: AMECO Database of European Commission.

The economic imbalances in the Euro area as expressed by the current account developments can be summarised with the help of Figure 13. As can be seen, the imbalances have increased almost continuously since the start of the euro in 1999 peaking in the year 2007, before the crisis. For most of the countries (with the notable exception of Ireland) the current account is dominated by the balance of goods and services, i.e. net exports of goods and services.

As can be seen from Table 1, with the exception of Ireland, the current account deficit countries in trouble have had negative growth contributions from their net exports, whereas the surplus countries on average from 1999 to 2007 had positive growth contributions. Since the development of the balance of goods and services (in real terms) mainly depends on two factors, the growth of domestic demand (relative to foreign demand) and on international price competitiveness (relative to trading partners), we take a look at indicators of these factors next.

As a proxy for the first factor we look at the growth contributions of real domestic demand on average over the period from 1999 to 2007 and compare it to the average for the old Euro area (EU-12) (Table 1). Concerning the current account surplus countries, in Germany the GDP growth contribution of domestic demand was considerably weaker than the EU-12 average. Also Austria had a well below EU-12 average growth contribution of

domestic demand, and in Belgium and the Netherlands it was slightly below EU-12 average, too. As for the second group, the troubled deficit countries, the case is very clear for Ireland, Spain and Greece, where the growth contribution of domestic demand by far exceeded the EU-12 average. Portugal and Italy, however, were slightly below EU-12 average and over the whole period even a little bit below Belgium and the Netherlands.

As for the second indicator, the international competitiveness, we use the development of nominal unit labour costs since the start of the euro in 1999 until 2007 (Table 1). Obviously, within the group of surplus countries Germany is the country with the slowest unit labour cost growth; between 1999 and 2007 unit labour costs almost stagnated. Austria used to follow the German example until 2004, since then its unit labour cost growth has accelerated a little, but it is still way below EU-12 average. Belgian unit labour costs grew almost perfectly in line with the EU-12 average, whereas in the Netherlands it was visibly faster, although this is almost entirely due to a rather steep increase in the first years of the euro; since 2003 there has been a remarkable deceleration. Taking a look at the current account deficit countries, the picture is very clear for all of them: Their unit labour cost growth has been much faster than that of the EU-12 average. In particular, it has exceeded the 2 per cent rate consistent with the ECB inflation target (2.5 per cent in the case of Italy, 2.7 per cent for Portugal and 3 per cent in the case of Spain), whereas the EU-12 average rate (1.6 per cent) is below this target rate. The relative inflation rates mostly reflect the differences in unit labour cost growth: the current account surplus countries mostly have inflation rates below EU-12 average, whereas in the current account deficit countries inflation exceeds EU-12 average.

Table 1: Key macroeconomic indicators for imbalances, selected euro area countries, 1999 – 2007. average values

	Consumption boom deficit economies			Slow growth deficit economies		Surplus economies					
	GR	IRE	Spain	Italy	POR	EU 12	FRA	AUT	BEL	GER	NL
Financial balances of external sector as a share of nominal GDP, per cent	11.5	1.4	5.7	0.6	9.5	-0.4	0.1	-1.5	-4.5	-2.9	-6.8
Financial balances of public sector as share of nominal GDP, per cent	-5.3	1.6	0.1	-2.8	-3.6	-1.8	-2.6	-1.8	-0.5	-2.1	-0.5
Financial balance of private sector as a share of nominal GDP, per cent	-6.2	-3.0	-5.8	2.2	-5.8	2.2	2.6	3.3	4.9	5.0	7.3
Financial balance of private household sector as a share of nominal GDP, per cent**	-9.3	--	-1.0	4.3	0.3	--	4.0	4.4	4.3	5.1	0.1
Financial balance of the corporate sector as a share of nominal GDP, per cent	3.1	--	-4.8	-2.1	-6.1	--	-1.5	-1.3	0.5	-0.1	7.0
Annual real GDP growth, per cent*	4.2	6.5	3.8	1.5	1.8	2.2	2.2	2.5	2.3	1.6	2.0
Annual growth contribution of domestic demand including stocks, percentage points	4.7	5.7	4.8	0.8	1.9	2.1	2.7	1.6	1.9	0.7	2.0
- of which private consumption, percentage points	2.7	2.9	2.3	0.7	1.5	1.1	1.5	0.9	0.8	0.5	0.8
- of which public consumption, percentage points	0.8	0.9	0.9	0.4	0.4	0.4	0.4	0.3	0.4	0.2	0.8
- of which gross fixed capital formation, percentage points	1.3	1.4	1.6	0.2	0.0	0.6	0.8	0.3	0.6	0.2	0.4
Annual growth contribution of the balance of goods and services, percentage points	-0.6	1.4	-1.0	-0.2	-0.1	0.1	-0.4	0.8	0.4	0.9	0.5
Net exports of goods and services as a share of nominal GDP, per cent	-11.3	13.5	-3.8	0.6	-9.0	1.6	0.3	3.6	4.3	3.9	6.7
Annual growth rate of nominal unit labour costs, per cent	3.1	3.1	3.0	2.5	2.7	1.6	1.7	0.6	1.6	0.0	2.2
Annual inflation (HCPI growth rate), per cent	3.2	3.7	3.2	2.3	3.0	2.1	1.7	1.9	2.0	1.5	2.3
Annual growth rate of nominal effective exchange rates (relative to 23 countries), per cent	0.8	0.9	0.7	0.9	0.4	--	0.7	0.6	0.6	0.9	0.5
Annual growth rate of real effective exchange rates (relative to 23 countries), per cent	1.5	2.2	1.6	1.5	1.2	--	0.6	-0.4	0.5	-1.2	1.1

* Growth contributions for some countries may not add up to GDP growth rates even for individual years in the AMECO data.

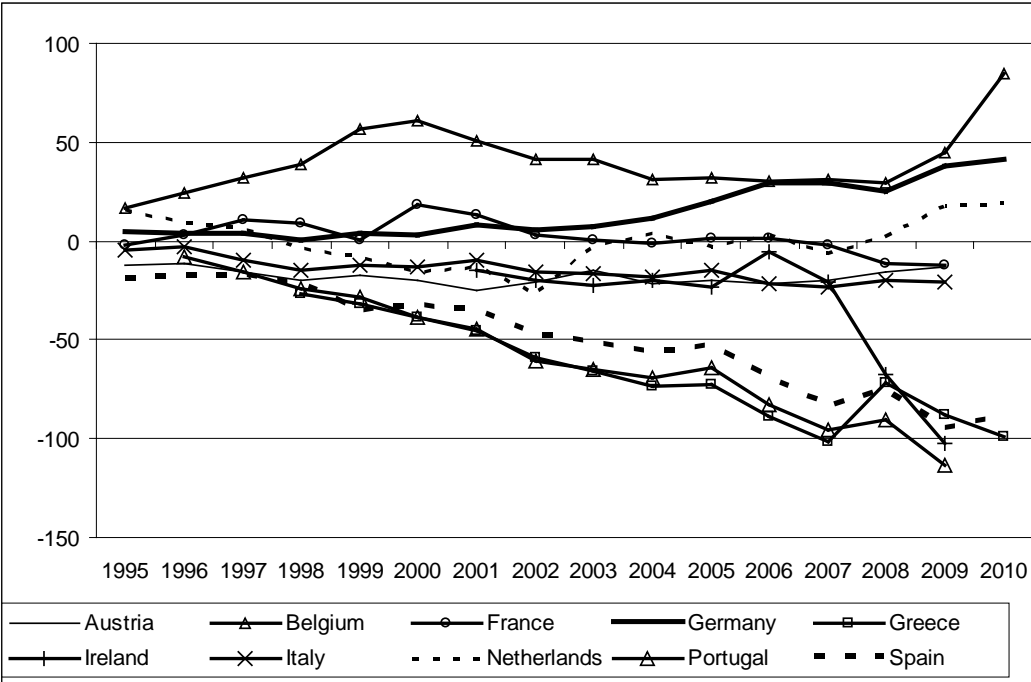
** Balance adjusted such that the sum of household and corporation sub-sectors equals the private sector balance as a whole.

Source: AMECO Database of European Commission, authors' calculations.

So far we have argued that instead of the financial balance of the government the financial balances of all three sectors should be taken into account and that this will automatically lead to focus on the imbalances in the current account of Euro area member states as the major object of concern. In the analysis we have shown that international competitiveness and differences in domestic demand growth are the main factors driving the development of the balance of goods and services and correspondingly the current account. What we have not done is to provide an analysis on whether the current account deficits/surpluses are sustainable, or how sustainable let alone optimal levels could be determined. We also did not give causal reasons for the development of the factors driving the current account. Both these tasks are well beyond the scope of this paper. In Section 3, we shall show, however, that the existing economic policy framework, and the theoretical paradigm on which it relies, have either largely ignored the threat posed by the external imbalances or proposed completely inadequate remedies.

From a descriptive perspective, with respect to the question of sustainability we simply note, that the net foreign asset position of the four economies currently under pressure from the financial markets has deteriorated tremendously over the past five years (see Figure 14). It is highly improbable that such a development could go on for a longer period of time without a major debt crisis – be it a crisis of government or private debt.

Figure 14:
Net foreign asset position for selected Euro area countries,
in per cent of GDP, 1995 – 2010



Source: IMF, authors' calculations.

With respect to the economic reasons for the current account deficits/surpluses we refer to our analysis of the neo-mercantilist strategy of Germany (Hein and Truger 2009) for the most important surplus case. As is well known, Germany combined a strategy of wage restraint and welfare state reforms, which led to a dramatic increase in income inequality and a stagnation of private consumer demand, with a retrenchment of the state and highly restrictive fiscal policies (see also Horn et al. 2010). For the deficit economies a distinction has to be made. On the one hand, there are the economies with very high pre-crisis growth rates, Greece, Ireland and Spain. Although part of their current account deficits may well be explained by catching up to the higher GDP levels of the other EU economies, there is much evidence for a debt driven consumption boom that was doomed to fail (see Hein 2011a, 2011b for a more detailed analysis): Growth contributions from private consumption are very high and the private (household) sector was driven into substantial deficits (see Table 1). Furthermore, except for Greece, a substantial part of the observed investment dynamics must be attributed to a construction boom, much of it in residential investment, which is evidence for a housing boom (see Table 2).

Table 2: Gross fixed capital formation and its subcategories in 2000 prices for selected EU countries, average annual growth rate in per cent, 1999-2007							
	Overall	Constru- ction	Non resi- dential	Resi- dential	Equip- ment	Machi- nery	Trans- port
Austria	1.4	0.3	1.8	-0.9	2.3	1.7	4.0
Belgium	3.1	2.2	0.0	1.6	4.2	3.5	6.9
France	4.1	2.9	4.0	1.7	4.2	3.7	5.7
Germany	1.2	-1.8	-1.5	-1.1	4.6	4.6	5.0
Greece	6.1	0.8	0.4	3.2	10.8	9.9	13.3
Ireland	5.9	4.4	7.3	4.2	6.9	3.9	12.0
Italy	2.6	2.2	2.7	1.3	2.5	2.4	2.8
Netherlands	2.1	1.6	1.6	1.0	3.2	3.9	1.3
Portugal	0.1	0.4	0.7	-1.3	2.0	3.9	-1.5
Spain	6.1	4.5	5.4	3.4	5.9	5.1	8.0

Source: AMECO Database of European Commission, authors' calculations

3. The flawed theoretical underpinnings of the economic policy framework in the EU

The economic policy framework in the EU is succinctly described by the ECB (2009: 22) as follows:

“The Treaty foresees three different modes for policy-making in the various fields of EMU: i) full transfer of competence to the Community level for monetary policy; ii) rules-based coordination for fiscal policy; iii) ‘soft’ coordination for other economic policies.”

In other words, while the individual European nations have completely lost their currency sovereignty in favour of an independent central bank that focuses primarily on an average inflation target for the Euro area as a whole, no federal sovereign institution has been created that coordinates the remaining fields of economic policy. Instead, national fiscal policies are subject to one size fits all quantitative criteria for public deficits and debt (the SGP). And the ‘soft’ coordination of other economic policies refers primarily to structural policies aiming at “highly flexible and competitive markets” that are considered “necessary for the smooth functioning of EMU, as the countries can no longer resort to some of the pre-EMU adjustment mechanisms to restore their competitiveness” (ECB 2008: 26). Hence, this coordination approach relies on “peer pressure and support” (ECB 2008: 26) and “allows for some degree of policy competition aimed at improving policy efficiency and emulating best practices” (ECB 2008: 21). It was enshrined in the ‘Lisbon Strategy’ adopted in March 2000 and promotes the deregulation of labour, product and financial markets in all member states.

Put in a nutshell, the intended interaction of the three different modes for policy-making in the EU and the Euro area can be summarised as follows: Monetary policy follows an interest rate rule, whereby the policy rate is changed in response to deviations of (expected) inflation from target and of (expected) output from its supply-determined potential. The sole objective of the ECB is to maintain inflation at the target of below, but close to, 2 per cent. It is argued that this is the best contribution that monetary policy can make to economic growth at the euro area level. The role of fiscal policy is to ‘balance the budget’ over the medium term and to never run excessive deficits, i.e., above 3 per cent of GDP. Moreover, the government debt-to-GDP ratio must not exceed 60 per cent. Hence, while there is some room for manoeuvre for automatic stabilisers and discretionary fiscal policy to react to country-specific shocks, fiscal policy nevertheless is confined to playing a rather passive role, with an emphasis on ‘solid’ public finances. As a consequence, as individual member countries have lost interest rate and exchange rate policies as macroeconomic stabilisation tools, and with fiscal policy subject to the constraints of the SGP, flexible wages and prices and, more generally, flexible and deregulated labour, product and financial markets are expected to provide efficient adjustment mechanisms in the presence of macroeconomic shocks and to ensure full employment and macroeconomic stability.

In this section, we shall briefly review the three pillars of the economic policy framework in the Euro area in turn. We shall explain why we see their theoretical underpinnings as theoretically flawed and empirically inappropriate in view of the macroeconomic developments during the first decade after the introduction of the single currency, as sketched in the previous section. We will conclude that the current crisis of the Euro area, far from indicating that individual member states have lacked discipline in terms of fiscal consolidation and structural reforms, clearly reveals the conceptual limits of the so-called New Consensus Macroeconomics (NCM),² on which much of the existing economic policy framework in the Euro area is based.

3.1. Monetary policy: Inflation targeting through short-term interest rate policies and financial market deregulation

As is well known, the European Central Bank follows a strategy of inflation targeting. In the evaluation of its monetary policy strategy in 2003, the Governing Council of the ECB clarified that it aims to keep the Harmonised Index of Consumer Prices (HICP) ‘below, but close to 2’. Furthermore, monetary policy follows the principle of ‘one instrument, one objective’, with the short-term interest rate being the instrument, and the objective being the medium-run stabilisation of the euro area-wide inflation rate. There is no explicit exchange rate policy, and the monetisation of public debt is precluded (of course, this principle had to be abandoned during the crisis). Also, there is no attempt to directly intervene in financial markets, for instance, to prevent excessive credit expansions or asset price bubbles in particular sectors of the economy. In the words of the ECB (2009: 34):

“(P)rice stability is the best – and, ultimately, the only – contribution that a credible monetary policy can make to economic growth, job creation and social cohesion. This reflects the fact that a policy-maker who controls only one instrument cannot meet, and be held accountable for the fulfilment of, more than one objective. The pursuit of additional objectives would risk overburdening monetary policy, and would ultimately result in higher inflation and higher unemployment. Over the longer term, monetary policy can only influence the price level in the economy; it cannot exert a lasting impact on economic activity. This general principle is referred to as the ‘long-run neutrality of money’. It is against this background that the Treaty provides for a clear and efficient allocation of responsibilities, with monetary policy being assigned the primary objective of maintaining price stability.”

The theoretical justification for this approach is the notion that, as long as inflation is at target, the output gap will also be closed, and hence the economy will be at its structurally determined rate of unemployment, or NAIRU (the ‘divine coincidence’ property, see

² For NCM see Goodfriend and King (1997) and Clarida, Gali and Gertler (1999), and for detailed critiques of the NCM, see Arestis (2009), Arestis and Sawyer (2004a), and Hein and Stockhammer (2010).

Blanchard and Gali (2007) for a critique). When inflation deviates from target, it is expected that changes in the short-term interest rate will bring output, employment and inflation back to their potential or target levels. Financial market deregulation and integration is seen as a key contributing factor to the efficient transition of the ECB interest rate policy to the real economy:

“In line with its position that the financial integration process should be market-led, the Eurosystem considers that the role of public policy in fostering financial integration should be limited. In particular, policy measures should not promote a specific level or type of cross-border activity, as only market participants themselves are in a position to develop the underlying business strategies, take the respective investment decisions and assume responsibility for the economic consequences.” (ECB 2008: 101)

Asset price and credit bubbles are of concern to the central bank only insofar as they pose a risk to price stability. As Michael Woodford, one of the most prominent advocates of inflation targeting and financial deregulation put it:

“Not only expectations about policy matter, but, at least under current conditions, very little *else* matters. Few central banks of major industrial nations still make much use of credit controls or other attempts to directly regulate the flow of funds through financial markets and institutions. Increases in the sophistication of the financial system have made it more difficult for such controls to be effective, and in any event the goal of improvement of the efficiency of the sectoral allocation of resources stressed previously would hardly be served by such controls, which (if successful) would inevitably create inefficient distortions in the relative cost of funds to different parts of the economy. Instead, banks restrict themselves to interventions that seek to control the overnight interest rate in an interbank market for central-bank balances (...).” (Woodford 2003: 15, italics in the original)

In light of the present crisis, the emphasis on inflation targeting via short-term interest rate policy and financial market deregulation, which was actively pursued by the European Union and justified theoretically by the NCM, appears very much flawed.

A further cause for concern is posed by the country-specific differences in the patterns of inflation, financial asset price and credit developments and macroeconomic trends more broadly. Clearly, as the ECB's only objective is the Euro area-wide inflation target (which has been roughly met since 1999), it can neither be held accountable for inflation differentials between countries (see Table 1), nor for reacting to country-specific shocks to output and employment.

3.2 Fiscal policy: One-size fits all recommendation of 'stability-oriented' fiscal policies

As individual member states have given up monetary sovereignty, they can no longer use monetary policy for macroeconomic stabilisation. However, the use of fiscal policy as a

means to react to country-specific aggregate demand problems is strongly limited as well by the public deficit and debt criteria of the SGP. As emphasised by the ECB (2009: 71-72):

“In addition to structural reforms, stability-oriented fiscal policies are a pre-condition for the smooth functioning of EMU. (...) High deficits can give rise to demand and inflationary pressures, potentially forcing the monetary authority to keep short-term interest rates at a higher level than would otherwise be necessary. Fiscal may also undermine confidence in a stability-oriented monetary policy if private agents come to expect that excessive government borrowing will ultimately be accommodated by the central bank. Sound and sustainable fiscal policies are therefore a pre-condition for sustainable economic growth and a smooth functioning of monetary union, including the avoidance of imbalances across countries.”

All member states adopting the euro are obliged by the Treaty on the European Union to avoid excessive government deficits above 3 per cent of GDP and they must keep the public debt-to-GDP ratio below 60 per cent of GDP. The SGP, adopted in 1997 and revised in 2005, furthermore obliges EU member states, as a medium-term objective (MTO), to keep the government budget ‘close to balance or in surplus’. While the need to react to adverse country-specific shocks is recognised, all member states should aim at fiscal positions that leave enough room to allow the operation of ‘automatic fiscal stabilisers’ without violating the deficit and debt criteria.

Clearly, one peculiar ingredient of the economic policy framework in the EU is that one-size fits all recommendations for fiscal discipline are expected to contribute to the ‘avoidance of imbalances across countries’. As shown in the previous section, external imbalances in terms of trade and current accounts emerged soon after the introduction of the euro and intensified around 2004/5. However, the link between the fiscal policy stance and those imbalances was hardly recognised by the European authorities. In its opinion on the Stability Programme of Spain, 2005-2008, ECOFIN was “of the opinion that, overall, the budgetary position is sound and the budgetary strategy provides a good example of fiscal policies in compliance with the Stability and Growth Pact” (Council of the EU 2006a: 3). In the spring of 2007, just before the outbreak of the financial crisis, while recognising that “(m)aintaining a strong budgetary position, thus avoiding an expansionary fiscal stance, is important in the light of large and rising external imbalances and the existing inflation differential with the euro area”, ECOFIN still considered that “the medium term budgetary position is sound and the budgetary strategy provides a good example of fiscal policies conducted in compliance with the Stability and Growth Pact” (Council of the EU 2007a: 3). Moreover, it was judged that “it provides a sufficient safety margin against breaching the 3 per cent of GDP deficit threshold with normal macroeconomic fluctuations in every year” (Council of the EU 2007a: 2). Similarly, in its assessment of the Stability Programme of Ireland, 2006-2009, the Council considered “that the medium-term budgetary position is

sound and, the budgetary strategy provides a good example of fiscal policies conducted in compliance with the Stability and Growth Pact. Nonetheless, it would be prudent to maintain room for manoeuvre against any reversal of the current growth pattern which has been led by strong housing sector developments” (Council of the EU 2007b: 3). At the same time, Germany, by then running very large current account surpluses, was struggling with reducing the government deficit below the 3 per cent threshold of the SGP:

“(T)he budgetary stance in the programme seems consistent with a correction of the excessive deficit by 2007. However, it does not seem to provide a sufficient safety margin against breaching the 3 per cent of GDP deficit threshold with normal macroeconomic fluctuations until the penultimate year of the programme period. (...) In view of the above assessment, the Council welcomes the priority attributed by the government to budgetary consolidation as laid out in the programme, but notes that there are risks linked to the achievement of the budgetary targets and to long-term sustainability of public finances.” (Council of the EU 2006b: 3)

As the above mentioned examples show, within the economic policy framework of the EU, fiscal policy hardly plays a role in addressing external imbalances: If this had been the case, then the recommendation for the fiscal policy stance would have been to be much more contractionary in Spain and Ireland, but much more expansionary in Germany. Rather, the overall very passive roles attributed to both monetary and fiscal policies reflect a strong belief in the efficient working of flexible labour, product and financial markets and their ability to contain ‘imbalances across countries’ over the medium term (see next section). Clearly, the present crisis of the Euro area suddenly revealed that Spain and Ireland may not have been such ‘good example of fiscal policies’ and that ‘long-term sustainability of public finances’ was much less a problem in Germany than in those two countries (as private saving was large enough to ‘finance’ both the government debt and build up a strong net external creditor position). Yet, it is not surprising that the defenders of the NCM policy framework, including the ECB, parts of the European Commission and the German government, now call for more structural reforms, especially on the labour markets, and a ‘competitiveness pact’ rather than acknowledging the conceptual flaws in the design of monetary and fiscal policy.

Therefore it comes with no surprise that the European Council in March 2011 “endorsed the priorities for fiscal consolidation and structural reform. It underscored the need to give priority to restoring sound budgets and fiscal sustainability, reducing unemployment through labour market reforms and making new efforts to enhance growth” (European Council 2011: 2). In particular, the European Council requires reductions of the structural budget deficits of “well above 0.5 per cent of GDP” (European Council 2011: 2) for 2012 in most countries, in order to restore ‘confidence’.

The ‘Euro Plus Pact’ agreed at the European Council in March 2011 is mainly targeted at improving competitiveness by means of monitoring wage setting, in particular in

the public sector, at labour market reforms increasing ‘flexicurity’, life-long learning and reducing taxes on low-paid labour, and at improving sustainability of public finances by means of extending effective retirement ages, reducing early retirement and implementing fiscal rules (i.e. ‘debt brakes’) into national legislation.³ These commitments in the ‘Euro Plus Pact’ shall be reflected in the annual National Reform and the Stability Programmes which are assessed by the Commission, the Council, and the Eurogroup in the context of the so called European Semester, and will thus have a major impact on European economic policies in the years to come.

3.3 Structural reforms: reliance on wage and price flexibility and capital mobility as adjustment mechanisms to macroeconomic imbalances

In its assessment of the economic policy framework in the Euro area, conducted ten years after the introduction of the single currency and in the midst of the global financial crisis, the ECB still considered the deregulation of labour, product and financial markets as the key prerequisite of a well-functioning monetary union that is characterised by an essentially abstinent monetary and fiscal policy strategy:

“Economic reforms in the goods, capital and labour markets, as well as the completion of the Single Market, aim to remove barriers to competition, increase market flexibility and allow more intense national and cross-border competition. In general, such structural reforms are very relevant to monetary policy, as they are important for mitigating inflationary pressures and inflation persistence in response to adverse shocks. More specifically, rigidities in the wage and price-setting mechanisms or ongoing excessive wage developments may delay the necessary adjustments of relative prices to economic shocks and thereby give rise to inflation persistence. Flexible and competitive markets, which would adjust smoothly to economic changes and absorb economic shocks – also across national borders – are of particular importance in a monetary union such as the euro area, in which adjustments to national monetary and exchange rate policies are no longer available to respond to economic changes.” (ECB 2008: 66)

The call for wage and price flexibility and deregulated financial markets can be traced back to the so-called theories of optimum currency area (OCA). However, the array of competing and largely contradictory OCA theories is very confusing, and hence “(t)here is no robust, widely accepted theory of optimum currency areas which can be used as a compass for policy-makers” (Priewe 2007: 47).⁴ The current stage of the debate is that the ‘optimality’ of a currency area can be assessed against a catalogue of various properties, including the

³ The ‘Euro Plus Pact’ also briefly mentions the reinforcement of financial stability and tax policy coordination.

⁴ As Priewe (2007: 47-8) summarises his survey of OCA theories, “there are numerous approaches with strong contrasts and contradictions, both among the early theorists (Mundell, McKinnon, Kenen) and the ‘second generation’ theories summarised in the criteria-approach put forward by Tavlas and others. The latter is a hybrid approach, paving the way for large and heterogeneous unions, albeit with strong shortcomings.”

mobility of labour and other factors of production, price and wage flexibility, economic openness, and diversification in production and consumption, similarity in inflation rates, fiscal integration and political integration (see Mongelli 2002). However, there is no consensus whatsoever as to how far the lack of one ingredient of the aforementioned list could be compensated by the existence of others, or which degree of, say, price and wage flexibility would be required for a currency area to be optimal, given the various other factors. While in some OCA theories, a high degree of wage and price flexibility is an indispensable prerequisite for an optimal currency union, in others labour mobility may to some degree be a substitute for wage and price flexibility.⁵ While a thorough assessment of OCA theories would be beyond the scope of this paper, it suffices here to note that within the framework of economic policy in the Euro area the main focus has been on the deregulation of labour, product and financial markets, while the importance of fiscal federalism and political union have been downplayed.

As a consequence, in practice, the presence of large current account balances has been interpreted as reflecting in part equilibrium phenomena linked to catching-up processes, demographic differences, national consumption preferences, etc. For the other part, they were seen as the result of wage and price rigidities:

“Divergent price and cost competitiveness developments might reflect normal and even desirable responses to catching-up processes and country specific shocks. However, they may also be an indication of labour cost developments that are not economically justified and which in turn may reflect a lack of price and wage flexibility or overly optimistic expectations regarding future income growth in some countries. For this reason the interpretation of divergent developments in cost and price competitiveness indicators is difficult and developments need to be monitored carefully. As national monetary and exchange rate policies are no longer options within the euro area, it is important to make sure that the remaining mechanisms of adjustment to shocks function properly. The efficient and smooth functioning of economic adjustments within the euro area requires the removal of institutional barriers to flexible wage and price-setting mechanisms as well as the completion of the Single Market and thus greater cross-border competition.” (ECB 2007: 48-50)

The reliance on wage and price flexibility as a macroeconomic adjustment mechanism is grounded in the New Keynesian or NCM view that business cycle fluctuations result from

⁵ For instance, it seems that in the United States, generally considered an optimal currency union, wage and price flexibility is not much higher than in Europe, but labour mobility is much higher. Hence, when a particular region is affected by an adverse shock to output and employment, workers migrate to more dynamic regions with higher growth and employment (see Blanchard and Katz 1992, Goodhart 2007: 92-93). Another scenario is that capital mobility may take the place of labour mobility (which for obvious reasons is limited in the Euro area), hence avoiding prolonged external imbalances across countries: “There is no question that a single currency enhances capital mobility. The hope is that a rise in labour availability (i.e. unemployment) and constrained wages may make capital flow into such, previously uncompetitive, regions and thereby restore their productivity and growth” (Goodhart 2007: 93). Goodhart (2007: 93) adds: “This prospect seems (to me) unconvincing as the deflationary pressure is likely to raise political and exchange rate risks, while the unemployed are quite likely to be less skilled and demotivated.”

nominal aggregate demand shocks and that these shocks have real effects because nominal wages and prices are rigid (e.g. Gali 2008). Of course, this view is in sharp contradiction with the conviction expressed by Keynes (1936), according to which highly flexible wages and prices are likely to be destabilising rather than stabilising. In fact, it is not at all clear why falling (rising) (expected rates of change of) wages and prices should have expansionary (contractionary) effects following an adverse (positive) output shock. Rather, by increasing (reducing) the real value of private debts and by increasing (lowering) real interest rates, they are likely to destabilise the economy further (see Tobin (1993) for an excellent summary of the arguments). This is all the more true in a monetary union, where a lower (higher) than average rate of inflation is associated with a lower (higher) than average real rate of interest, given the common monetary policy. While the ECB has recognised this fact, it has continued to believe in the correction of current account imbalances via the price mechanism:

“Finally, in a monetary union, where exchange rates among countries are by definition fixed, there are strong market-based forces that work in a stabilising manner. In particular, if a country has lower than average inflation on account of weak demand, it will become more competitive in relation to other countries. This tends to increase demand in that country (and reduce demand in others) over time. As has been shown in a number of recent studies, the competitiveness (‘real exchange rate’) channel, although slow to build up, eventually becomes the dominating adjustment factor.” (ECB 2005: 70)

Hence, even after the outbreak of the current crisis, the ECB (2009: 71) recommends further deregulation of labour and product markets and moreover relies on capital mobility as an adjustment mechanism to external imbalances, arguing that “a deepening of financial integration in the years to come will allow investors to diversify their portfolios more efficiently and thereby provide a cushion against localised macroeconomic risks.” Clearly, until the sudden panic of the financial crisis, the financial markets seemed to consider current account imbalances as equilibrium phenomena not giving rise to any particular concerns about the sustainability of private and public indebtedness in the deficit countries. This was reflected in very low risk premia for private and public debt in the deficit countries (see Figure 1).

The global financial and economic crisis and the crisis of the Euro area have shown that the policy package combining monetary and fiscal policy abstinence and the deregulation of labour and financial markets has failed. While recent official proposals for reform of the economic policy framework in EMU recognise the importance of addressing ‘excessive macroeconomic imbalances’, including current account imbalances (European Commission 2010, van Rompuy 2010), the monetary policy strategy is not called into question. The flawed emphasis on the public deficit and debt criteria of the Stability and Growth Pact is even to be strengthened. And the emphasis on ‘structural reforms’ and ‘deregulation’ is maintained, as the conclusions from the March meeting of the European Council (2011) mentioned above underline. In the next section, we present the main

principles of an alternative macroeconomic policy framework for the Euro area which should be more appropriate when it comes to tackling the present crisis.

4. Post-Keynesian policy-mix for the Euro area

The outline of a Post-Keynesian policy mix for the Euro area targeted at overcoming the present crisis takes place in three steps.⁶ In the first step we will recall the Post-Keynesian macroeconomic policy assignment as compared to the still dominating mainstream NCM approach outlined in the previous section. In the second step we will apply this approach to the Euro area assuming that in the long run each country should grow at a rate consistent with a balanced current account. In the third step we will then lift this restriction and consider that long-run growth dynamics may persistently tend to violate balanced current accounts, in particular due to productivity catch-up processes.

4.1 The basic principles of a Post-Keynesian macroeconomic policy mix

In Hein and Stockhammer (2010) a blueprint for a Post-Keynesian macroeconomic policy mix – as opposed to the NCM focussing on labour market deregulation in order to reduce the NAIRU and on monetary policy for short-run real and long-run nominal stabilisation – has been developed, which can be used as a theoretical foundation for our suggestions here. Macroeconomic policies should be co-ordinated along the following lines:

First, central bank's interest rate policies should abstain from attempting to fine tune unemployment in the short run and inflation in the long run, as suggested by the NCM. Varying interest rates have cost and distribution effects on the business sector, which may be effective in achieving inflation targets in the short run, in particular if the economy suffers from accelerating inflation. With accelerating inflation increasing the base rate of interest under the control of the central bank will finally also make credit and financial market rates increase and will be able to choke off an investment boom. But if accelerating disinflation and finally deflation prevail, monetary interest rate policies will be ineffective due to the zero lower bound of the nominal interest rate, due to rising mark ups in the setting of interest rates in credit and financial markets by banks and financial intermediaries, because of increasing risk and uncertainty premia, and due to interest rate inelasticities of real investment of firms in a disinflationary or deflationary climate. Further on, in the long run, rising interest rates, applied successfully in order to stop accelerating inflation in the short run, will feed cost-push inflation

⁶ For the integration of the macroeconomic policy mix for the Euro area outlined here into a broader Keynesian New Deal in order to tackle and overcome the world wide financial and economic crisis see Hein and Truger (2011). Such a 'Keynesian New Deal at the European and the Global Level' should include the following pillars: the re-regulation of the financial sector, the re-orientation of macroeconomic policies and the re-construction of international macroeconomic policy co-ordination, in particular on the European level, as well as the introduction of a new world financial order.

again, because price setting of surviving firms will have to cover higher interest costs. Therefore, central banks should focus on targeting low real interest rates in credit and financial markets in order to avoid unfavourable cost and distribution effects on firms and workers, while favouring rentiers.⁷ A slightly positive long-term real rate of interest, below the long-run rate of productivity growth, seems to be a reasonable target: Rentiers' real financial wealth will be protected against inflation, but redistribution of income in favour of the productive sector and at the expense of the rentiers will take place, which should be favourable for real investment, employment and growth. Further on, central banks have to act as a 'lender of last resort' in periods of liquidity crisis, and central banks should be involved in the regulation and the supervision of financial markets. This includes the definition of credit standards for refinance operations with commercial banks, and the implementation of compulsory reserve requirements for different types of assets to be held with the central bank, in order to channel credit into desirable areas and to avoid credit-financed bubbles in certain markets.

Second, incomes and wage policies should take responsibility for nominal stabilisation, i.e. stable inflation rates. In the end, accelerating inflation is always the result of unresolved distribution conflicts. If distribution claims of firms, rentiers, government and the external sector are constant, nominal wages should rise according to the sum of long-run economy wide growth of labour productivity plus the inflation target. A reduction of claims of the other actors, however, would allow for an increase of nominal wages exceeding this benchmark. In order to achieve the nominal wage growth targets, a high degree of wage bargaining co-ordination at the macroeconomic level, and organised labour markets with strong labour unions and employer associations seem to be a necessary condition.⁸ Government involvement in wage bargaining may be required, too. In particular, minimum wage legislation, especially in countries with highly deregulated labour markets and increasing dispersion of wages, will be helpful for nominal stabilisation at the macroeconomic level, apart from its usefulness in terms of containing wage inequality. Further deregulation of the labour market, weakening labour unions, and reductions in the reservation wage rate by means of cutting unemployment benefits, however, will be detrimental to nominal stabilisation and will rather impose deflationary pressure on the economy.

Third, fiscal policies should take responsibility for real stabilisation, full employment and also a more equal distribution of disposable income. This has several aspects. By definition the excess of private saving (S) over private investment (I) at a given level of economic activity and employment has to be absorbed by the excess of exports (X) over imports (M) (including the balance of primary income and the balance of income transfers, thus the current account balance) plus the excess of government spending (G) over tax

⁷ See Rochon and Setterfield (2007) for a review of Post-Keynesian suggestions regarding the 'parking it' approach towards interest rate policies of central banks and the rate of interest central banks should target.

⁸ See Hein (2002) for a review of the related theoretical and empirical literature.

revenues (T): $S - I = X - M + G - T$. Therefore, with balanced current accounts government deficits ($D = G - T$) have to permanently take up the excess of private saving over private investment in order to assure a high desired level of employment.⁹ As is well known from Domar (1944), a constant government deficit-GDP ratio (D/Y) with a constant long-run GDP growth rate (g) will make the government debt-GDP ratio (B/Y) converge towards a definite value [$B/Y = (D/Y)/g$].¹⁰ Therefore, there will be no problem of accelerating public debt-GDP ratios. Further more, low real interest rates – falling short of GDP growth and hence of tax revenue growth – will prevent that government debt services redistribute income in favour of rentiers. Permanent government deficits should be directed towards public investment in a wider sense (including increasing public employment), providing the economy with public infrastructure, and public education at all levels (Kindergartens, schools, high schools, universities) in order to promote structural change towards an environmentally sustainable long-run growth path. Apart from this permanent role of government debt, which also supplies a safe haven for private saving and thus stabilises financial markets, counter-cyclical fiscal policies – together with automatic stabilisers – should stabilise the economy in the face of aggregate demand shocks. At the same time, progressive income taxes, relevant wealth, property and inheritance taxes, as well as social transfers, should aim at redistribution of income and wealth in favour of low income and low wealth households. On the one hand, this will reduce excess saving and thus stabilise aggregate demand – without generating problems of unsustainable indebtedness for private households. Progressive income taxation and relevant taxes on wealth, property and inheritance thus also reduce the requirements for government deficits. On the other hand, redistributive taxes and social policies will improve automatic stabilisers and thus reduce fluctuations in economic activity.

4.2 The Post-Keynesian macroeconomic policy mix applied to the Euro area

Applying the Post-Keynesian macroeconomic policy mix to the Euro area takes place in two steps. In the first step we assume that in the medium to long run each of the member countries will be able to grow at a rate consistent with a balanced national current account. Starting from Thirlwall's (1979; 2002: chapter 5) derivation of the balance of payments constrained growth rate,¹¹ this growth rate for the single economy in the Euro area is given by:¹²

⁹ This is, of course, the 'functional finance' view, pioneered by Lerner (1943). See also Arestis and Sawyer (2004b).

¹⁰ A constant government debt-GDP ratio (B/Y) requires that government debt and GDP grow at the same rate $g = \Delta B/B = \Delta Y/Y$. Since the government deficit $D = G - T = \Delta B$, it follows that $B/Y = (D/Y)/g$.

¹¹ See Appendix A for the derivation of the balance of payments constrained growth rate.

¹² McCombie (2002: 15) nicely summarises the balance of payments constrained growth model as follow: "The central tenet of the balance-of-payments-constrained growth model is that a country cannot run a balance-of-payments deficit for any length of time that has to be financed by short-term capital flows and which results in an increasing net foreign-debt-to-GDP ratio. If a country attempts to do this, the operation of the international

$$(1) \hat{Y}_d^b = \frac{(1 + \eta + \psi)(\hat{p}_d - \hat{p}_f) + \varepsilon \hat{Y}_f}{\pi}, \quad \eta, \psi < 0, \quad \varepsilon, \pi > 0,$$

where \hat{Y}_d^b is the balance of payments constrained growth rate of GDP for the domestic economy, \hat{Y}_f is the foreign GDP growth rate, i.e. the growth rate of the rest of the Euro area since its current account with the rest of the world is roughly balanced and should remain in balance in the future, \hat{p}_d is domestic inflation, \hat{p}_f is foreign inflation, i.e. inflation in the rest of the Euro area, η is the price elasticity of the demand for exports, ψ is the price elasticity of demand for imports, ε is the income elasticity of the demand for exports and π is the income elasticity of the demand for imports. Disparities in ε and π among countries are considered to reflect differences in non-price competitiveness. With given foreign GDP growth and given foreign inflation, the balance of payments constrained growth rate of a single economy can be improved by lower domestic inflation, provided that $1 + \eta + \psi < 0$, i.e. the Marshall-Lerner condition holds, a higher income elasticity of domestic exports, or a lower income elasticity of domestic imports.

Applying the model to the member countries of the Euro area means that each of the member countries should grow at its balance of payments constrained growth rate, i.e. avoid current account surpluses and current account deficits. Each of the countries should also target the same rate of inflation and thus equalise domestic and foreign inflation, because a rate of inflation below the foreign rate will mean a higher balance of payments constrained growth rate of the country under consideration, but it implies a lower balance of payments constrained growth rate of the other countries of the Euro area, because its current account with the rest of the world is assumed to (and should) be roughly balanced. Following this rule therefore implies that the balance of payments constrained growth rate for each of the member countries becomes:

$$(2) \hat{Y}_d^b = \frac{\varepsilon \hat{Y}_f}{\pi} = \frac{\hat{X}}{\pi}.$$

Note that with balanced current accounts within the currency area, and with equal rates of inflation, GDP growth rates of member countries may nonetheless differ, depending on the relative income elasticities of demand for exports and imports. Also note that the improvement of the balance of payments constrained growth rate of a single country within a currency area, by means of increasing the income elasticity of exports or by reducing the income elasticity of imports, has the adverse effect on the balance of payments constrained growth rate of the rest of the currency area, because it will mean increasing its income

financial markets will lead to increasing downward pressure on the currency, with the danger of a collapse in the exchange rate and the risk of a resulting depreciation/inflation spiral. There is also the possibility that the country's international credit rating will be downgraded. Consequently, in the long run, the basic balance (current account plus long-term capital flows) has to be in equilibrium. An implication of this approach is that there is nothing that guarantees that this rate will be the one consistent with the full employment of resources or the growth of productive potential."

elasticity of imports and decreasing the income elasticity for its exports – assuming a roughly balanced current account of the currency area with the rest of the world. One might therefore want to argue that in an ideal currency union, income elasticities of intra-union exports and imports should be equal, and the balance of payments constrained growth rate for each member country should therefore be given by the growth rate for the currency union as a whole:

$$(3) \hat{Y}_d^b = \hat{Y}_f.$$

In order to improve the growth rate of the Euro area as a whole, and thus the balance of payments constrained growth rate for each member country, and to provide the conditions and incentives for each country to grow at a rate consistent with balanced current accounts, major institutional reforms in the European Union and the Euro area are required.

First, the institutional setting of the ECB and its monetary policy strategy have to be modified such that the ECB is forced to take into account the long-run distribution, employment and growth effects of its policies, and to pursue a monetary policy targeting low real interest rates. In a first step, an adjustment towards the objectives of the US Federal Reserve might be helpful, which include stable prices, maximum employment and moderate long-term interest rates on an equal footing (Meyer 2001). In its monetary policy strategy the ECB should refrain from fine tuning the economy in real or nominal terms and should target low interest rates such that long-term real interest rates remain below Euro area average productivity growth in the medium run. This should be conducive to real investment and growth in the Euro area. The ECB should focus on financial market stability. Instead of the blunt instrument of the interest rate it should introduce those instruments which are appropriate to contain bubbles in specific asset markets in specific countries or regions, i.e. asset-based reserve requirements (Palley 2004 and 2010).

Second, the orientation of labour market and social policies towards deregulation and flexibilisation still prevalent in the European Union and the Euro area will have to be abandoned in favour of re-organising labour markets, stabilising labour unions and employer associations, and Euro area-wide minimum wage legislation. This could provide the institutional requirements for the effective implementation of nominal stabilising wage policies: Nominal wages should rise according to the sum of long-run average growth of labour productivity in the national economy plus the target rate of inflation for the Euro area as a whole.¹³ This would contribute to equal inflation rates across the Euro area, it would prevent improving the balance of payments constrained growth rate of single country at the

¹³ Quite remarkably, the president of the ECB recently acknowledged the importance of this wage rule: “Thus a medium-term inflation rate of somewhat below 2 per cent over the medium term is the appropriate benchmark also at the national level. Unit labour costs, and therefore developments in compensation, after having taken due account of the labour productivity increases, need to be consistent with this in order to avoid a rise in unemployment.” (Trichet 2011).

expense of the rest of the Euro area, and it would prevent mercantilist strategies based on nominal wage moderation in general.

Third, the SGP at the European level has to be abandoned and needs to be replaced by a means of coordination of national fiscal policies at the Euro area level which allows for the short- and long-run stabilising role of fiscal policies. Hein and Truger (2007) have suggested the coordination of long-run expenditure paths for non-cyclical government spending, i.e. those components of spending which are under control of the government. Such expenditure paths could be geared towards stabilising aggregate demand in the Euro area at full employment levels, and automatic stabilisers plus discretionary counter-cyclical fiscal policies could be applied to fight demand shocks. In order to avoid the current account imbalances within the Euro area which have caused the present euro crisis, these expenditure paths would have to make sure that, on average over the cycle and the average tax rate in each member country given, as a first approximation the government deficits in each of the countries would have to be roughly equal to the excess of private saving over private investment in the respective country, such that the current accounts are roughly balanced at a high level of aggregate demand and employment ($S - I = G - T$), and GDP growth is close to the balance of payments constrained growth rate of the individual country. All government debt issued in line with this principle should be guaranteed by all member states (either in the form of Eurobonds or by guarantees provided by a European Monetary Fund): The avoidance of external balances is beneficial to the Euro area as a whole; and as long as Euro area governments are not indebted in foreign currency, there is no solvency issue for sovereign debt.

Fourth, attempts at effective macroeconomic 'ex ante' policy coordination among monetary, fiscal and wage policies at the Euro area level will have to be made in order to contribute to an improvement of Euro area average growth rate – with positive feedbacks on the balance of payments constrained growth rates for each of the member countries. For this the Macroeconomic Dialogue (Cologne-Process) provides an institutional basis.¹⁴

Fifth, on the global level, the European Union should push for a return to a world financial order with fixed but adjustable exchange rates, symmetric adjustment obligations for current account deficit and surplus countries, and regulated international capital markets in order to avoid the imbalances that have contributed to the severity of the present crisis. Keynes' (1942) proposal for an International Clearing Union can be seen as a blueprint for this: As is well known, Keynes suggested an International Clearing Union in a fixed but adjustable exchange rate system, with the 'bancor' as international money for clearing operations between central banks, the Clearing Union as an international central bank financing temporary current account deficits, and selective controls of speculative capital

¹⁴ See Hein and Niechoj (2007), Hein and Truger (2005) and the papers in Hein et al. (2005) for the deficiencies of macroeconomic policies and macroeconomic policy co-ordination in the Euro area and for an outline of required institutional reforms.

movements between currency areas. What is most important for the present situation is that, according to Keynes (1942), whereas permanent current account deficit countries would be penalised in order to contract domestic demand (or to depreciate their currencies), also permanent current account surplus countries should be induced to expand domestic demand and thus to increase imports (or to appreciate their currencies), so that the whole burden of adjustment does not have to be carried by the deficit countries. This should give an overall impetus to world aggregate demand and would therefore increase the balance of payments constrained growth rates for each of the individual countries, and thus also for the Euro area and its member countries.¹⁵

4.3 How to deal with existing (and persisting?) current account imbalances?

As we have shown in Section 2 the basic problem underlying the present euro crisis are the massive current account imbalances which have developed within the Euro area. Whereas on average over the period from 1999 – 2007, GDP growth in Greece, Ireland, Spain and Portugal has exceeded their respective balance of payments constrained growth rates, GDP growth in Austria, Belgium, Germany and the Netherlands has fallen short of the respective balance of payments constrained growth rates. From this it follows, that the immediate task for the member countries is to adjust actual growth to the balance of payments constrained growth rate.

For the current account surplus countries this means that they should use expansionary fiscal policies to increase domestic demand and adjust actual growth to the balance of payments constrained growth rate. This would lift foreign growth for all the current account deficit countries and raise their balance of payments constrained growth rate, and would thus allow the current account deficit countries to reduce their deficits. For a transitional period, the current account surplus countries should also increase their rates of inflation relative to the rates of inflation in the current account deficit countries (equation 1), lowering the balance of payments constrained growth rate in the surplus countries and increasing it in the deficit countries. Unit labour cost growth should therefore exceed the sum of national productivity growth plus the Euro area inflation target during the adjustment process.

The major task for the current account deficit countries, with the exception of Ireland,¹⁶ will be to improve their balance of payments constrained growth rates. This means, on the one hand, to contribute to a reduction of the inflation differentials with respect to the

¹⁵ See Davidson (2009: 134-142), Guttman (2009) and Kregel (2009a) for a more detailed discussion of the needs for a reform of the international monetary system, and UNCTAD (2009) for a concrete proposal which, however, is yet incomplete because it does not include capital controls.

¹⁶ In the case of Ireland, the current account deficit was not due to a deficit in external trade but rather a deficit in the flows of primary incomes. Ireland shows huge surpluses in the balance of goods and services which, however, fell short of the net payment commitments associated with the negative balance of primary incomes.

surplus countries, by means of unit labour cost growth below the sum of national productivity growth plus the inflation target. In order to prevent the risk of deflation in these countries during the process of adjustment, the Euro area inflation target should be increased above the rather ambitious present target of 'below, but close to 2 per cent' for the HICP. On the other hand, current account deficit countries have to increase the income elasticity of demand for their exports and to reduce the income elasticity of demand for imports by means of industrial, structural and regional policies, that is they have to improve their non-price competitiveness.¹⁷ In fact, export growth in Greece (6.1 per cent average annual growth in 1999-2007) and Spain (5.3 per cent) have been rather dynamic, but imports have grown even more. These countries would therefore have to reduce their income elasticities of demand for imports. Italy and also France have had the weakest export growth (2.8 per cent and 3.8 per cent respectively) among the countries considered in our study, with import growth exceeding export growth. These countries would have to focus on increasing the income elasticity of demand for their export goods. Due to the still considerable negative balance of goods and services, Portugal should aim at both increasing the income elasticity of demand for its exports and reducing the income elasticity of its imports, although export growth has already exceeded import growth in the past.

Even if these adjustment processes of actual and balance of payments constrained growth rates in each of the Euro area member countries takes place, we would not expect complete adjustment in the short or medium run. Growth rates of member countries will differ due to productivity catch-up processes and it is hard to imagine that these differences in growth rates will be matched by reverse differentials in inflation rates or by inverse relative income elasticities of demand for exports and imports. In other words, it is not very likely that the more rapidly growing catching up countries will have lower inflation, higher income elasticities of demand for their exports, and lower income elasticities of demand for imports than the slowly growing more advanced economies, so that actual growth differentials will be matched exactly by balance of payments constrained growth differentials. Therefore, current account surpluses and deficits will arise due to these differentials.

Coordinating fiscal policies and government deficits should therefore take tolerable current account deficits associated with catch-up processes into account in the short and medium run. With a constant current account deficit-GDP ratio ($\Delta L_d / Y_d$) and constant nominal GDP growth (\hat{Y}_d), the foreign liabilities-GDP-ratio (L_d / Y_d) of a current account deficit country will be constant, too, i.e. the growth rates of foreign liabilities and nominal GDP will be equal ($\hat{Y}_d = \hat{L}_d$) (see Appendix B):

¹⁷ Following Thirlwall (2002: 78), "The only sure and long-term solution to raising a country's growth rate consistent with balance of payments equilibrium on current account is structural change to raise ϵ (the income elasticity of demand for exports, the authors) and to reduce π (the income elasticity of demand for imports, the authors)."

$$(4) \hat{Y}_d = \hat{L}_d = \frac{\Delta L_d}{L_d} = \frac{\frac{\Delta L_d}{Y_d}}{\frac{L_d}{Y_d}} \Rightarrow \frac{L_d}{Y_d} = \frac{\hat{L}_d}{\hat{Y}_d}.$$

Provided that nominal GDP growth exceeds the nominal interest rate, also the foreign debt service-GDP-ratio will not rise. Furthermore, the higher the (sustainable!) growth trend of the catching up economy, the higher will be the tolerable current account deficit-GDP-ratio for a given maximum foreign-liabilities-GDP-ratio.¹⁸ As derived in Appendix B, in a currency union with a balanced current account with the rest of the world and therefore with a zero net foreign assets/liabilities position, a constant net foreign liabilities-GDP-ratio of the current account deficit member countries will be associated with a rising net foreign assets-GDP-ratio of the current account surplus member countries, provided that GDP growth in the deficit countries exceeds growth in the surplus countries. Alternatively, a constant net foreign assets-GDP-ratio of the surplus countries will be accompanied by falling net foreign liabilities-GDP-ratios of the deficit countries, or net foreign assets-GDP-ratio of surplus countries will be rising and net foreign liabilities-GDP-ratios of deficit countries will be falling. In other words, provided that current account deficit countries have a higher growth rate than the surplus countries, it is impossible for their net foreign liabilities-GDP-ratio to rise!

Sustainably higher growth than the surplus countries on Euro area average should therefore be the ultimate criterion for tolerating current account deficits in the coordination process of fiscal policies within the Euro area. Current account deficits of countries with a below surplus country average growth rate, and the related current account surpluses, should not be tolerated and should be tackled symmetrically, i.e. by deficit and surplus countries, with the measures discussed above.

Current account deficits will have to be financed by capital imports. Appropriate financial regulations, avoiding excessive asset price inflation and credit bubbles, are a key prerequisite for sustainable growth, and for the stability of productivity growth catch-up processes and the related current account deficits and net foreign liabilities position. Long-term capital flows as a means of finance of acceptable current account deficits are therefore most important. Long-term direct investment may be the most stable and beneficial, but structural effects (and also the outflow of profits) have to be taken into account (see Ireland!). If capital inflows are financed by credit, the focus should be on long-term credit. Therefore,

¹⁸ Dullien (2010) and Dullien and Schwarzer (2009) have proposed an ‘External Economic Stability Pact’ for the Euro area countries allowing for external deficits or surpluses of 3 per cent of GDP. For deficit countries this would stabilise foreign debt at 60 per cent of GDP, for surplus countries the foreign assets-GDP-ratio would also become 60 per cent, assuming that trend nominal GDP growth amounts to 5 per cent. The advantage of this suggestion is that it includes symmetric adjustment obligations for deficit and surplus countries. However, the proposed target or threshold ratios would have to be differentiated for individual countries because tolerable current account deficits should be based on different growth dynamics. In Appendix B we also show that with different growth dynamics foreign liabilities-GDP-ratios of current account deficit countries and foreign assets-GDP-ratios of current account surplus countries cannot be stabilised simultaneously.

the European Union and the Euro area will have to develop institutions which take care of the transfer of the current account surpluses of the more slowly growing mature member countries to the catching up less developed economies. On the one hand, for this a European Monetary Fund which guarantees the public debt of the current account deficit countries meeting the conditions for tolerable current account deficits (sustainable above Euro area average real GDP growth), and of course also of the current account surplus countries, and a European Central Bank ready to monetise these liabilities, seem to be most important. On the other hand, the European Investment Bank, together with the European regional and structural funds and the government institutions of the recipient countries, should be involved in directing the private capital flows into appropriate sectors and areas which facilitate real catching-up processes and avoid bubbles in certain sectors (i.e. in housing or financial sectors).

5. Conclusions

In the paper we have analysed the imbalances, which have been built up in the Euro area and which are at the roots of the present crisis, i.e. the Greek, the Irish and the Portuguese public debt crises and the related euro crisis which started in 2010. Since the current reform debate in Europe and the macroeconomic policy measures applied are still grounded in the theoretical framework of the NCM, the reforms are likely to fail and create either further deflationary pressure and/or a resurgence of macroeconomic imbalances. We have therefore described some key ingredients of an alternative macroeconomic policy model based on Keynesian and Post-Keynesian principles. Having outlined the basic principles of a Post-Keynesian macroeconomic policy approach, we have applied this approach to the Euro area. We have derived that stabilising wage and expansionary fiscal policies will have major roles to play in order to cope with the imbalances and to initiate recovery for the Euro area as a whole. Further more we have argued that current account targets will have to play a major role in intra-Euro area policy coordination. We have derived a criterion for acceptable current account deficits, and we have shown that if the criterion is met there is no reason to assume exploding foreign indebtedness-GDP-ratios of the deficit country. Finally we have argued that the European Union and the Euro area will have to develop institutions which guarantee the stable financing of these acceptable foreign deficits and thus a stable transfer of current account surpluses of the mature more slowly growing countries to the more rapidly growing and catching up member countries.

References

- Arestis, P. (2009), "New Consensus Macroeconomics and Keynesian Critique", in: E. Hein, T. Niechoj, & E. Stockhammer (Eds) *Macroeconomic Policies on Shaky Foundations. Whither Mainstream Economics?* (Marburg: Metropolis).
- Arestis, P. & Sawyer, M. (2004a), *Re-examining Monetary and Fiscal Policy for the 21st Century* (Cheltenham: Edward Elgar).
- Arestis, P. and Sawyer, M. (2004b), "On Fiscal Policy and Budget Deficits", *Intervention. Journal of Economics*, 1 (2), 61-74.
- Blanchard, O., Galí, J. (2007), "Real wage rigidities and the New Keynesian model", *Journal of Money, Credit, and Banking* 39 (supplement 1), 35-65.
- Blanchard, O., Katz, L. (1992): Regional evolutions, *Brookings Papers on European Activity* 1, 1-75.
- Clarida, R.; Gali, J.; Gertler, M., (1999), "The science of monetary policy: a New Keynesian perspective", in *Journal of Economic Literature* 37, pp. 1661–1707.
- Council of the EU (2006a), Council Opinion of 14 March 2006 on the updated stability programme of Spain, 2005-2008.
- Council of the EU (2006b), Council Opinion of 14 March 2006 on the updated stability programme of Germany, 2005-2009.
- Council of the EU (2007a), Council Opinion of 27 March 2007 on the updated stability programme of Spain, 2006-2009.
- Council of the EU (2007b), Council Opinion of 27 February 2007 on the updated stability programme of Ireland, 2006-2009.
- Davidson, P. (2009), *The Keynes Solution. The Path to Global Economic Prosperity* (Basingstoke: Palgrave Macmillan).
- Domar, E.D. (1944), "The 'Burden of the Debt' and National Income", *American Economic Review* 34, 794-828.
- Dullien, S. (2010), "Towards a Sustainable Growth Model for Europe: Institutional Framework", *Internationale Politik und Gesellschaft* 1/2010, 36-44.
- Dullien, S. and Schwarzer, D. (2009), "The Euro Zone Needs an External Stability Pact", SWP Comments 2009/C09, Berlin: German Institute for International and Security Affairs.
- ECB (European Central Bank) (2005): "Monetary policy and inflation differentials in a heterogeneous currency area", *Monthly Bulletin* May, 61-77.
- ECB (European Central Bank) (2007): "Output growth differentials in the Euro area: sources and implications", *Monthly Bulletin* April, 73-86.
- ECB (European Central Bank) (2008), *Monthly Bulletin - 10th anniversary of the ECB, Special Edition*, May.

- European Commission (2010), Press Release. EU economic governance: the Commission delivers a comprehensive package of legislative measures, IP/10/1199.
- European Council (2011), Conclusions, 24/25 MARCH 2011, EUCO 10/11.
- Galí, J. (2008), *Monetary Policy, Inflation, and the Business Cycle. An Introduction to the New Keynesian Framework*. (Princeton and Oxford: Princeton University Press).
- Goodfriend, M. and King, R.G., (1997), "The New Neoclassical Synthesis and the role of monetary policy", in Bernanke, B.S., Rotemberg, J.J. (eds.), *NBER Macroeconomics Annual: 1997* (Cambridge, MA, MIT Press).
- Goodhart, C. (2007), Currency unions: some lessons from the Euro zone: Reconsidering the theories of optimum currency areas – a critique, in Hein, E., Priewe, J., Truger, A. (eds.), *European Integration in Crisis* (Marburg: Metropolis).
- Guttman, R. (2009), "Asset Bubbles, Debt Deflation, and Global Imbalances", *International Journal of Political Economy* 38 (2), 46-69.
- Hein, E. (2002), "Monetary Policy and Wage Bargaining in the EMU: Restrictive ECB Policies, High Unemployment, Nominal Wage Restraint and Inflation above the Target", *Banca Nazionale del Lavoro Quarterly Review* 55, 299-337.
- Hein, E. (2011a), Redistribution, global imbalances and the financial and economic crisis – the case for income-led recovery embedded in a Keynesian New Deal, *International Journal of Labour Research*, forthcoming.
- Hein, E. (2011b), Financialisation, re-distribution, and the financial and economic crisis – a Kaleckian perspective, in: Niechoj, T., Onaran, Ö., Stockhammer, E., Truger, A., van Treeck, T. (eds): *Stabilising an Unequal Economy? Public Debt, Financial Regulation, and Income Distribution* (Marburg: Metropolis), forthcoming.
- Hein, E. and Niechoj, T. (2007), "Guidelines for Sustained Growth in the EU? The Concept and the Consequences of the Broad Economic Policy Guidelines", in McCombie, J. and Rodriguez, C. (eds.), *The European Union. Current Problems and Prospects* (Basingstoke: Palgrave Macmillan).
- Hein, E. and Stockhammer, E. (2010), "Macroeconomic Policy Mix, Employment and Inflation in a Post-Keynesian Alternative to the New Consensus Model", *Review of Political Economy* 22, 317-354.
- Hein, E. and Truger, A. (2005), "Macroeconomic Coordination as an Economic Policy Concept – Opportunities and Obstacles in the EMU", in Hein, E., Niechoj, T., Schulten, T. and Truger, A. (eds.), *Macroeconomic Policy Coordination in Europe and the Role of the Trade Unions* (Brussels: ETUI).
- Hein, E. and Truger, A. (2007), "Fiscal Policy and Macroeconomic Performance in the Euro Area: Lessons for the Future", in Bibow, J. and Terzi, A. (eds.), *Euroland and the World Economy. Global Player or Global Drag?* (Basingstoke: Palgrave Macmillan).

- Hein, E. and Truger, A. (2009), "How to fight (or not to fight) a slowdown," *Challenge. The Magazine of Economic Affairs* 52 (3), 52-75.
- Hein, E. and Truger, A. (2011), "Finance-dominated Capitalism in Crisis – the Case for a Keynesian New Deal at the European and the Global Level, in Arestis, P., Sawyer, M. (eds.), *New Economics as Mainstream Economics* (Basingstoke: Palgrave Macmillan), forthcoming.
- Hein, E., Niechoj, T., Schulten, T. and Truger, A. (eds.) (2005), *Macroeconomic Policy Coordination in Europe and the Role of the Trade Unions* (Brussels: ETUI).
- Horn, G.A. ; Niechoj, T.; Tober, S.; van Treeck, T.; Truger, A. (2010), *Reforming the European Stability and Growth Pact: Public Debt is Not the Only Factor, Private Debt Counts as Well*, IMK Report, No. 51, July, Düsseldorf: IMK in der Hans-Böckler-Stiftung.
- Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money* (Cambridge: Cambridge University Press).
- Keynes, J.M. (1942), "Proposal for an International Clearing Union", in *The Collected Writings of J.M. Keynes*, Vol. 25 (London: Macmillan 1980).
- Kregel, J. (2009a), "Some Simple Observations on the Reform of the International Monetary System", The Levy Economics Institute of Bard College, Policy Note 2009/8.
- Lerner, A. (1943), "Functional Finance and Federal Debt", *Social Research* 10, 38-51.
- McCombie, J. (2002), "Balance-of-Payments-Constrained Economic Growth", in King, J. (ed.), *The Elgar Companion to Post Keynesian Economics* (Cheltenham: Edward Elgar).
- Meyer, L.H. (2001), "Inflation Targets and Inflation Targeting", *Federal Reserve Bank of St. Louis Review* 83 (6), 1-13.
- Mongelli (2002), 'New' views on the optimum currency area theory: what is EMU telling us?, ECB Working Paper No. 138.
- Palley, T. (2004), "Asset-based Reserve Requirements: Reasserting Domestic Monetary Control in an Era of Financial Innovation and Instability", *Review of Political Economy* 16, 43-58.
- Palley, T. (2010), "Asset Price Bubbles and Counter-cyclical Monetary Policy: Why Central Banks Have Been Wrong and What Should Be Done", *Intervention. European Journal of Economics and Economic Policies* 7 (1), 91-108.
- Priewe, J. (2007), Reconsidering the theories of optimum currency areas – a critique, in Hein, E., Priewe, J., Truger, A. (eds.), *European Integration in Crisis* (Marburg: Metropolis).

- Rochon, L.-P. and Setterfield, M. (2007), "Interest Rates, Income Distribution and Monetary Policy Dominance: Post-Keynesians and the 'Fair Rate' of Interest", *Journal of Post Keynesian Economics* 30, 13-42.
- Thirlwall, A.P. (1979), "The Balance of Payments Constraint as an Explanation of International Growth Differences", *Banca Nazionale del Lavoro Quarterly Review* 128, 45-53.
- Thirlwall, A.P. (2002), *The Nature of Economic Growth*, Cheltenham: Edward Elgar.
- Tobin, J. (1993), "Price flexibility and output stability: an Old Keynesian view", *The Journal of Economic Perspectives* 7, 45-65.
- Trichet J.-C. (2011), Competitiveness and the smooth functioning of EMU, Speech by Jean-Claude Trichet, President of the ECB, Lecture at the University of Liège, Liège, 23 February (<http://www.ecb.int/press/key/date/2011/html/sp110223.en.html>).
- UNCTAD (2009), *The Global Economic Crisis: Systemic Failures and Multilateral Remedies* (New York and Geneva: UNCTAD).
- Van Rompuy, H. (2010), Report of the Task Force to the European Council, 15302/10, 21.10.2010.
- Woodford, M. (2003), *Interest and Prices: Foundations of a Theory of Monetary Policy* Princeton (NJ: Princeton University Press).

Appendix A: Balance of payments constrained growth in a currency union

Following Thirlwall (2002, chapter 5), we can derive the balance of payments constrained growth rate in the following way. We start with a current account equilibrium:

$$(A1) \quad p_d X = p_f e M,$$

where p_d is domestic prices, p_f is foreign prices in foreign currency, e is the exchange rate, X is the yields from exports, and M is payments for imports (this ignores primary incomes coming from and going abroad and income transfers).

Equation (1) in growth rates gives:

$$(A2) \quad \hat{p}_d + \hat{X} = \hat{p}_f + \hat{e} + \hat{M}.$$

Exports are determined in the following way:

$$(A3) \quad X = Q \left(\frac{P_d}{P_f e} \right)^\eta Y_f^\varepsilon, \quad \eta < 0, \varepsilon > 0,$$

with η denoting price elasticity of demand for exports, ε income elasticity of demand for exports, and Y_f foreign income. From equation (3) we get for the growth rate of exports:

$$(A4) \quad \hat{X} = \eta(\hat{p}_d - \hat{p}_f - \hat{e}) + \varepsilon \hat{Y}_f$$

Imports are given as:

$$(A5) \quad M = R \left(\frac{P_f e}{P_d} \right)^\psi Y_d^\pi, \quad \psi < 0, \pi > 0,$$

with ψ denoting price elasticity of demand for imports, π income elasticity of demand for imports, and Y_d domestic income. From equation (5) we get for the growth rate of imports:

$$(A6) \quad \hat{M} = \psi(\hat{p}_f + \hat{e} - \hat{p}_d) + \pi \hat{Y}_d.$$

Substituting equations (6) and (4) into equation (2) yields the domestic rate of growth which is consistent with a current account equilibrium.

$$(A7) \quad \hat{Y}_d^b = \frac{(1 + \eta + \psi)(\hat{p}_d - \hat{p}_f - \hat{e}) + \varepsilon \hat{Y}_f}{\pi}.$$

Since in a currency union the exchange rate among member countries is fixed, they all use the same currency, the balance of payments constrained growth rate for the individual member country becomes:

$$(A8) \quad \hat{Y}_d^b = \frac{(1 + \eta + \psi)(\hat{p}_d - \hat{p}_f) + \varepsilon \hat{Y}_f}{\pi}.$$

Appendix B: Current account imbalances and net foreign assets/liabilities

In a two country model net foreign liabilities of the domestic economy (L_d) are equal to net foreign assets of the foreign economy (A_f):

$$(B1) \quad L_d = A_f.$$

Current account deficits (surpluses) mean a change in net foreign liabilities (assets) and hence:

$$(B2) \quad \Delta L_d = \Delta A_f.$$

Dividing equation (B2) by equation (B1), it follows that the growth rate of net foreign liabilities of the domestic economy has to be equal to the growth rate of net foreign assets of the foreign economy:

$$(B3) \quad \hat{L}_d = \frac{\Delta L_d}{L_d} = \hat{A}_f = \frac{\Delta A_f}{A_f}.$$

A constant net foreign liabilities-GDP-ratio, or a net foreign-assets-GDP-ratio, requires that net foreign liabilities, or net foreign assets, and nominal GDP of the respective economy grow at the same rate:

$$(B4.a) \quad \frac{L_d}{Y_d} \text{ constant, if } \hat{L}_d = \hat{Y}_d,$$

$$(B4.b) \quad \frac{A_f}{Y_f} \text{ constant, if } \hat{A}_f = \hat{Y}_f.$$

Taking into account equation (B3) this means that the constancy of both, the net foreign liabilities-GDP-ratio of the domestic economy and the net foreign assets-GDP ratio of the foreign economy requires that the two economies have to grow at the same rate:

$$(B5) \quad \frac{L_d}{Y_d} \text{ and } \frac{A_f}{Y_f} \text{ constant, if } \hat{L}_d = \hat{Y}_d = \hat{A}_f = \hat{Y}_f.$$

By definition in a two country model net foreign liabilities have to grow at the same rate as net foreign assets. GDP growth rates of the domestic economy and the foreign economy, however, will not necessarily be equal. If this is the case, only one country can see a constant net foreign liabilities-/net foreign assets-GDP-ratio, whereas the other will witness continuously falling or rising net foreign liabilities-/net foreign-assets-GDP-ratios. If we assume that the current account deficit country, the domestic economy, grows at a higher speed than the current account surplus country, the foreign economy, $\hat{Y}_d > \hat{Y}_f$, either a constant foreign liabilities-GDP-ratio of the domestic economy will be accompanied by a rising foreign-assets-GDP-ratio of the foreign economy; or a constant foreign-assets-GDP-ratio of the foreign economy will be accompanied by a falling foreign liabilities-GDP-ratio of the domestic economy. Of course, one may also obtain both, falling foreign liabilities-GDP-ratios of the domestic economy and rising foreign-assets-GDP-ratios of the foreign economy.

From equations (B3), and (B4.a) and (B4.b) we obtain that the net foreign liabilities-GDP-ratio for the domestic country and the net foreign assets-GDP-ratio of the foreign economy are given as:

$$(B6.a) \quad \hat{L}_d = \frac{\Delta L_d}{L_d} = \frac{\frac{\Delta L_d}{Y_d}}{\frac{L_d}{Y_d}} \Rightarrow \frac{L_d}{Y_d} = \frac{\frac{\Delta L_d}{Y_d}}{\hat{Y}_d},$$

$$(B6.b) \quad \hat{A}_f = \frac{\Delta A_f}{A_f} = \frac{\frac{\Delta A_f}{Y_f}}{\frac{A_f}{Y_f}} \Rightarrow \frac{A_f}{Y_f} = \frac{\frac{\Delta A_f}{Y_f}}{\hat{Y}_f}.$$

With constant current account deficit-GDP-ratios, or current account surplus-GDP-ratios, and constant nominal GDP growth rates, the net foreign liabilities-GDP-ratio, or the net foreign assets-GDP-ratio, will converge towards a definite values. As should be clear from the arguments put forward above, this can only hold for both economies simultaneously if their GDP growth rates are the same.

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