**Greek Economic Crisis**

**Euclid Tsakalotos***

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**Astract:**

*Department of International and European Economic Studies, Athens University of Economics and Business. Email: tsakalotos@aueb.gr
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## Greek Economic Crisis

A major fault line within macroeconomics, which has existed since at least the 1920s, has to do with the way fiscal imbalances are understood. In orthodox conceptualizations, fiscal deficits and debt are the source of economic instability resulting from government profligacy. The tradition of public choice, or the economics of politics approach, has told a multitude of stories to explain how the interaction of political actors, in a context without tight fiscal rules, leads to such imbalances. By contrast, old-fashioned Keynesian (of the non-bastard type as Joan Robinson would have said) and heterodox approaches tend to see the existence of fiscal imbalances as the consequence of more deep-seated problems stemming from the real economy.

The Greek economic crisis provides a good case study to reconsider this fault line. It is argued that both the external (section II) and internal origins (III) of the fiscal crisis that exploded in the autumn of 2009 have been misunderstood by orthodox approaches, and policy-makers at both the EU and Greek levels. The consequent austerity package, together with a host of "structural" reforms, agreed by the PASOK government together with the EU and the IMF will lead not only to severe social hardship but is also unlikely to confront the underlying problems.

### I. Stability and the Legitimization of Market Economies

There are two significant, rarely acknowledged, assumptions in the orthodox approach. **The first** is that the market economy is basically a stable entity which, even if it faces exogenous shocks, has the

mechanisms, without much government intervention[1], which will restore equilibrium fairly orderly and swiftly. Based on this assumption it is fairly easy to see why the economic architecture of the EU relied so heavily on an independent central bank focused almost exclusively on price stability, the Growth and Stability Pact and the liberalization of labour and product markets. On the one hand, governments can only be a source of instability[2]; on the other, labour markets must become more flexible like the textbook model to enhance the stability properties of the market mechanism. Right wing American economists, such as Martin Feldstein, or liberal ones like Paul Krugman, argued at the onset of European monetary union that without supporting mechanisms that exist in other monetary unions, such as the stabilization and equalization functions that accompany a large federal budget, the euro would face serious problems[3]. European economists, and the Commission, would give a number of, often, ingenious economic arguments of why the EU was different[4], but were also prone to argue that the advice coming from the other side of the Atlantic was self-serving, an attempt to prevent the emergence of a

[1] The amount of government intervention deemed necessary varies. For instance, Samuelson claims that classical economists before the Keynesian era were well aware that the government might need to take measures to bolster confidence in a sever downturn (Samuelson, 1968).

[2] It is indicative of the fact that orthodox economists rarely consider endogenous shocks in macroeconomics that Dynamic Stochastic General Equilibrium (DSGE) models usually consider the impact of fiscal or monetary shocks, where those are exogenous to the path that the economy is following, on macroeconomic aggregates (See Cooley (1995) on Real Business Cycle versions of DSGE models; Woodford (2003) on New Keynesian versions). Kocherlakota (2010) provides an overview of DSGE models and their inability to explain the current financial crisis.

[3] Wyplosz (2010), in the introduction to a paper considering the first 10 years of monetary union, emphasizes the difference between the rather pessimistic approach taken by US economists to the European project in contrast to European economists.

[4] One such argument was that EU business cycles were remarkably corresponding, and therefore the single monetary policy of the ECB and the limits imposed on the autonomy of fiscal policies of member states were relatively unproblematic (Christodoulakis et al, 1995). This was an unconvincing argument at the time (see Dickerson et al, 1998), and has subsequently proved even more wide of the mark as we shall see.

challenge to the hegemony of the dollar. In short, the euro area economic and financial architecture was premised on the assumption that major economic shocks, endogenous to the system, were unlikely to hit the European economy and that, therefore, policy mechanisms for such an eventuality were unnecessary, if not positively detrimental. As in many walks of life, the danger is always believing in one's own rhetoric.

The **second assumption** lies in the terrain of political economy. In much orthodox economic analysis the acceptability of market outcomes is taken as given. But in reality, "Renunciation of political weaponry is an unattractive option, above all for groups that look to political weapons to alter the economic and political *status quo* in their favor. (In the words of an old Labour Party slogan: 'The rich man has his money, the poor man has his politics')" (Hirsch, 1978, p.269). Thus "[e]fforts to depoliticize the market tend to be spurious. They usually entail a one-sided buttressing of profits and managerial prerogatives" (Maier and Lindberg, 1985, pp.597-8**).** This prediction by Maier and Lindberg, made over twenty-five years ago has been amply justified by subsequent events. The more liberal economies, that have taken neo-liberalism most to heart, have witnessed incredible increases in inequality of income and wealth. To give just one statistic, of every dollar of real income growth that was generated in the US between 1976 and 2007, 58 cents went to the top 1 percent of households (Rajan, 2010).

In the EU such drastic reversals of the post-war tendency towards income inequality have been avoided[5], but the greater presence of trade unions and social resistance has resulted in greater levels of unemployment in order to constrain conflicting claims. In the real world, where market outcomes are not acceptable, mechanisms and policies have to be pursued to mitigate the potential for social conflict. In the more liberal economies, the most significant, in light of the world economic crisis that erupted in 2008, was lending to poorer households, especially in the US. Tsakalotos (2008) argues that the Democratic Party in the US and New Labour in the UK had a much easier time than socialist parties elsewhere (France, Spain, Greece and Italy, for example). Liberalised financial markets in the context of an Anglo-Saxon financial system allowed more borrowing. This enabled the middle class and sections of the working class to be incorporated into the interests of the neo-liberal project. However, the consequence was a rapid rise in household borrowing as a percentage of GDP (to around 130% of GDP in the US and 160% in the UK) and this "solution" to the problem of rising inequality was a primary cause of the crisis of 2008 and beyond. In heterodox approaches such social roots to the crisis are commonplace. But more recently they have been accepted even by economists with impeccably orthodox credentials[6].

The orthodox case has been much undermined by events since 2008. The financial crisis cannot be put down, at a fundamental level, to the greed and lack of regulation of the financial system, even if they were present.

[5] An early account of the reversal of the post-war trend towards greater equality can be found in Harrison and Bluestone (1988). More recent accounts detailing the phenomenon can be found in Green et al (1994), Atkinson (1997) and Piketty and Saez (2003).
[6] See Rajan (2010); for a more heterodox account see Konings and Panitch (2008).

On the one hand, we have proof, if proof be needed, that the market economy is far from stable and has a tendency to generate crises endogenously. On the other, we have a failure of the neo-liberal response to the previous crisis of capitalism in the 1970s. Assumptions that unfettered capitalism could obtain ex post justification through rising wages and relatively high levels of employment, have not been justified. Strategies of incorporating labour, and building alliances between the ruling class and the middle classes, through the financial system and its liberalization have similarly been found wanting.

## II. The Political Economy of Macroeconomic Imbalances

In most orthodox accounts, Greece's problem is largely seen in terms of something that is home made – fiscal profligacy and a falling private savings ratio, both reflecting a country that was consuming more than it was earning. Thus, since entry into the euro area, the fiscal deficit has been persistent and rising (Figure 1), as has the deficit on current account (Figure 2). However, there is another aspect to the story that has to do with growing divergences in the performance of different countries within the euro area.

Figure 3 shows current account positions as a percentage of GDP in 1999, 2007 and 2008[7]. It illustrates that since the formation of the euro area there has been a tendency to divergence. Greece is not alone in experiencing a growing deficit – this was also true of Portugal, Spain and Malta. At the same time, countries such as Germany and the Netherlands, had significant, persistent and growing surpluses. Overall imbalances have been both persistent and worsening. Effectively what we have is a regional version of the global imbalances between the US and Asia. The problems of Greece, and indeed, Spain and Portugal, have to be seen within the context of severe demand imbalances within the euro area.

Germany has a long tradition, stemming from the second world war, of being sceptical of Keynesian economics and of not relying on demand management techniques. Since the beginning of monetary union, if not before, and, more particularly, over the last few years, it has not

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[7] Note that 2007 and 2008 are shown because the timing of the impact of the crisis in euro area countries varied – since the crisis has caused a cyclical decline in the size of current account imbalances, it could give a misleading impression of a structural correction of imbalances whereas in fact it is just a cyclical phenomenon.

generated demand domestically. Rather it has had a policy of repressing wages (Lapavitsas et al, 2010)[8] and its strong export performance, and current account surplus, has rested on demand generated either within the monetary union by other countries or outside the monetary union.

This policy is reflected in inflation differentials between euro area countries. Germany, as a country not generating internal demand, had low price (and indeed wage) inflation. The Southern countries, now commonly referred to as the PIGS (where the 'I' is either Ireland and/or Italy), as countries generating internal demand have had higher price (wage) inflation. Figure 4 shows the differential between individual countries' inflation and that of the euro area average in each year from 1999 to 2006. We can note the consistently positive inflation differential in the PIGS and compare that to the consistently negative inflation differential in Germany. Given the low level of inflation in the euro area in general, it is quite impressive for a country in each year for 8 years consecutively to have had inflation below that low average. This has been reflected in rising competitiveness and growing current account surpluses as Figure 3 illustrates.

By contrast, the PIGS, have traditionally been deficit countries and this phenomenon has intensified since the formation of monetary union. The credit dependence which Germany has proudly avoided at home has effectively been exported abroad (Rajan, 2010); with German banks playing a leading role. German surpluses were lent to the PIGS who generated

[8] Lapvitsas et al (2010) also show that this export performance is not based on any remarkable productivity or efficiency gains within German manufacturing, or indeed, any impressive levels of investment.

demand, leading to higher inflation, real appreciation and current account deficits. And of course post-crisis, it is the deficit countries which feel the pressure – since they are the ones that rely on external financing to continue to keep demand above income (or growth above potential). The surplus countries face no such pressure (since they simply save more). Yet without the demand created by the deficit countries, the surplus countries would find their growth severely curtailed since they are unable to generate demand domestically.

As can be seen from Table 1, first column, the German current account as a percentage of GDP has been increasing. This is reflected in the German trade account (second column). The third column shows the net trade in goods (not services) between Germany and the PIGS (where the 'I' in PIGS refers to Ireland). In 2007, German net exports of goods to the PIGS (goods exported by Germany to the PIGS minus goods imported by Germany from the PIGS) were equivalent to 1.43% of German GDP. This represented over 17% of Germany's trade account surplus (fourth column). If we include Italy, and thus talk about the PIIGS, the evidence becomes stronger. The net trade in goods between Germany and the PIIGS amounted to some 2.24% of GDP in 2007 (fifth column), accounting for 27.5% of Germany's trade account surplus. This is clear evidence that Germany has been benefiting from the demand generated by the PIGS/PIIGS.

In general, Germany depends quite heavily on demand generated within the rest of the European Union. In 2007, when the trade account was 8.15% of GDP, some 4.44% of GDP (ie 63.4% of the trade account surplus) originated in Germany's surplus arising from its export of goods to other

EU countries over its imports from EU countries. So if Greece and the other PIGS had not been growing during this period, Germany's growth (which is largely export based) would not have been as healthy.

The present stance of euro area (as expressed in the Eurogroup or the Commission through their handling of the current sovereign debt crisis in the euro area) is that the deficits of the PIGS are primarily a problem for them – reflecting their lack of competitiveness, their tendency to consume more than they produce and their inability to generate higher rates of **potential** growth as would be warranted by real convergence. They therefore need to adjust.

Yet this is a one-sided simplification. The problems of the PIGS are simply another manifestation of the asymmetric pressure for adjustment that exists on deficit countries in any kind of monetary system where exchange rates cannot change. It was recognised by Keynes in the Bretton Woods negotiations[9]. He argued that it would be important for the fixed exchange rate system to generate a means by which surplus countries would be forced to adjust and not just deficit countries. Deficit countries are always forced to adjust primarily by markets because they are the ones requiring the finance. Either they devalue or, and this is the only policy available in a monetary union, deflate. Surplus countries face no such pressure. They simply diversify their portfolios by investing their excess savings abroad.

[9] See Bordo (1993) for an extensive account of the debate between Keynes and White over the asymmetry of adjustment question.

This pressure on deficit countries raises two issues. First, it generates a deflation bias inherent in any system where only deficit countries adjust – such systems will always face a lack of demand. This was Keynes' original point. However, a second issue has to do with the role of a liberalised and globalised financial system. Providing finance to deficit countries for significant periods of time leads to a growing potential for instability, as was evident with respect to the imbalances between the US and Asian economies, notably China, which were a major contributing factor to the most recent economic crisis. The persistence of such macroeconomic imbalances surely challenges any belief in the stabilising properties of the market economy assumed by orthodox economists.

This is what is now happening in the euro area. The PIGS are told to undertake the policies necessary to restore their competitiveness. Effectively this amounts to a period of strong disinflation for the PIGS. This has already begun with the announcement of wage cuts and budgetary contraction in Ireland in 2009. Subsequently, Greece, following strong speculative pressure in its government bond markets, from late 2009, finally gave into pressure to adopt and EC-ECB-IMF stabilisation programme in early May 2010. Once again, this includes reductions in wages and strong fiscal consolidation. As if strong domestic deflation was not enough, other euro area countries started to follow suit and not just Spain and Portugal (mid-May 2010) but also the UK, Italy and, even, Germany itself (announced June, 2010).

Thus, Greece now finds itself in a position where it has to deflate its way out of its debt problem while at the same time the rest of Europe is also deflating. Not only is no-one asking Germany (or the Netherlands) to help

with the intra-euro area adjustment by reflating, something which would, of course, make the amount of deflation required in the PIGS much less, but Germany and the Netherlands are fiscally consolidating themselves. Neither the nuanced changes changes stemming from commission viz lending to member states, nor the buying of government bonds in secondary markets by the ECB, measures announced as part of the pan-European rescue package agreed on weekend of 8-9 May, add up to a change of stance. Rather, they are presented as the need to protect surplus countries' investment abroad (in other euro area states). They do not challenge the fundamentals of monetary and fiscal policies, nor do they allow for coordinated macroeconomic policy on the basis of union-wide conditions, nor do they admit the need for a large union-wide budget to allow for both redistribution and the operation of automatic stabilisers.

The correction of the deficit by deflation is difficult even in normal circumstances – one needs to suppress demand significantly to get wages and prices to fall. But such falls in wages and prices could lead to a Keynes effect and/or a Fisher effect. Private demand slumps even further when the expectation is that prices will fall further (the Keynes effect). Falling prices causes the real value of debt to rise, which can lead to bank failures and further rounds of deflation. In short, deflation has a tendency to feed on itself and very soon the economy can sink into depression.

Indeed, for the PIGS, the problem is even deeper. The real exchange rate appreciation that they have been experiencing (because of higher inflation – see Figure 4) has generated a cumulative loss of competitiveness. Even once competitiveness has been restored, they will still face the fact that the cumulative loss has not been recouped. For that to happen, the period

of deflation would have to continue beyond the restoration of competitiveness so that the cumulative loss during the uncompetitive time is offset by a cumulative gain during a period where the PIGS are highly competitive (Dornbusch, 1982).

The consequence is clearly stagnation in the European periphery; but, given its importance in generating demand, there could be stagnation in the euro area as a whole.

**III.**

The analysis so far has pointed to the external roots of the Greek crisis and suggested that within the context of the present economic and financial architecture of the EU, and the general macroeconomic stance of its largest economy, namely Germany, the PIGS face severe problems of competitiveness even under normal economic circumstances, let alone in the present conjuncture. Such an eventuality has been persistently ignored by both the majority of orthodox European economists and the political forces of the centre-left and centre-right that converged in their support of neo-liberal policies over the last twenty years or so. The promise of both groups was that liberalization of financial, product and labour markets would unleash the dynamism of market forces and entrepreneurship to such an extent that real convergence would readily follow nominal convergence. State intervention at the national and supra-national levels was supposed to play only a supportive role in such a process, mainly in overcoming market and entrepreneurial fetters, but also in responding to market failures in certain restricted areas (infrastructure, education, training and so on).

However the goals set out in the Lisbon process for employment and unemployment were very far from being achieved even before the onset of the world economic crisis in 2008 [refs]. But neither this failure, nor the world economic crisis itself, has been enough to initiate new thinking, let alone policies in a different direction. Rather the dominant response of elite policy-makers within Europe, and their political sponsors, has been two-fold. On the one hand, there has been a tendency to restrict the lessons of the crisis to its financial aspects, as if the whole episode could have been avoided if the greed of financial traders had been restricted, and financial markets better regulated.[10] On the other, the dominant response has assumed that the failure of European economies can be put down to the fact that neo-liberal policies did not go far enough; evidence, if evidence be needed, of the basic Kuhnian conjecture that empirical evidence alone is rarely sufficient to change a paradigm.

In the case of Greece modernizers in both the leading parties have argued that the root of the Greek fiscal crisis lies in the workings of a clientelistic state, riddled by special favours to "sectionalist" interests, especially strong trade unions in the public sector, corruption, intransparent procedures and so on. The argument has been that this has not only fuelled fiscal imbalances, but also acted as a fetter on private sector initiatives, thereby contributing to Greece's competitiveness problems.

[10] Even here the response has been feeble. After the initial panic, when more radical regulation of international financial markets seemed to be on everyone's agenda, hopes of a coordinated response at the global level have receded. Individual countries have proceeded with their own initiatives, but there is a growing consensus that not enough has been done to prevent future episodes of financial crisis [refs Stiglitz, Krugman etc].

Even on its own terms the above account is problematic. For one thing the rise in the public deficit and debt is a more complex issue. Any account that does include at least some of the following items must be considered partial: the attempt by modernizing governments to reduce taxes on capital; the socialization of the debts of private sector firms; the extravagant military expenditures; the costs associated with the organization of the Olympic games; the support given to private sector banks after the crisis; [more/facts?? Eg how much tax rate on profits went down under PASOK, size of military budget, estimated costs of Olympics etc]. In modernizing accounts, under-theorized to put it no stronger, bankers, constructors, military procurers and a host of other groups are rarely addressed as sectional interests.

None of the above is to be taken as a denial of the importance of issues to do with the clientelistic state, corruption and so on. But as suggested in section I, modernizing accounts often assume what remains to be proved. The hidden assumption is that without a meddling, corrupt and clientelistic state the forces of the market and entrepreneurship would have raised productivity, enhanced competitiveness and put the Greek economy on a higher, and crucially more sustainable, growth path. The supply response of a liberal economy is simply taken as a given.

It is the latter that has been challenged by heterodox economists since at least the 1990s. Before entry into the common currency, the argument was that the focus should be on real convergence and not just nominal. It was argued that the process of economic convergence was removing

important policy instruments from the state[11], and that within EMU nation states would have to find functional equivalents if they were to be able to compete effectively. But after EMU the policies stemming from the commission continued to narrow the options for nation states (Gibson and Tsakalotos, 2006), not only with the insistence of tight macroeconomic policies, but also in limiting industrial policy as well. To take another example, financial liberalization, which often took the form of promoting the market-based Anglo-Saxon model system over a German or Japanese model, was more geared to commercial lending rather than the needs of the real economy[12]. After 2001, Greece's accession date, heterodox economists persistently argued that a liberalized financial system, large scale infrastructural works, primarily geared to upgrading Greece's road networks, construction and the Olympic games did not add up to a sustainable development policy.

Important consequences can be derived from the above with respect to the critique of the clientelistic state. In particular one can argue that the line of causation in the modernizing accounts is faulty. For at issue is the ability of a more liberal economy, for a country like Greece, to

[11] Interestingly this was common ground with many PASOK economists in the 1980s. Thus Yannis Stournaras, a central figure in the run up to Greece's entry into the common currency, had in the early 1990s expressed concern about this loss of state policies [Stournaras, 1992, pp.121-3]. Some twenty years later, as chief economist of the industrialists' think tank (IOBE), he was more likely to be calling for more liberalization as an industrial policy in itself.

[12] See Gibson and Tsakalotos (2003) on the issue of financial systems and the real economy. For a more general critique of financial liberalisation, see Gibson and Tsakalotos (1994), where it is argued that there are good grounds for thinking that fully liberalised financial markets may not provide the best framework for the promotion of dynamic efficiency and competitiveness necessary for real convergence. These arguments suggest that some forms of directed credit, specialised development banks, etc could play an important role in an economy and should not *a priori* be labelled "financial repression".

provide its legitimization by result. That is not to say that the Greek economy is a dependent one, or that it cannot have strong capitalist sectors in banking, shipping, food-processing and elsewhere. Rather the issue is whether the benefits of such a model can provide enough employment, rising incomes, and a sufficient taxable base for adequate social services. Not necessarily for the whole society, but which capitalist society has ever even aspired to that? But enough to incorporate let us say, as was commonly argued in the 1980s, a two-thirds of society. And this has yet to be proved.

In this context there is another way of looking at the problem of clientelism and corruption. Rather than seeing them as obstacles to a liberal economy, in the Greek context they may be an essential component of such an economy. As figures 5 and 6 show, Greece's deficit problem is more a result of a crisis in revenues than high expenditure[13]. Public sector employment (Figure 7)[14] as a means of compensating for low social transfers (Figure 8), a lax attitude to collecting taxes (as is evident from low tax revenues compared to other EU countries in spite of similar tax rates, Figure 6), evasion of social insurance contributions, "legal tax" evasion by Greece's over 900,000 private firms[15], and much more can be seen as an attempt to tie in the interests of capitalists to those of the middle class and sections of the working class. The US, the UK, but also it seems economies such as Spain which has a much larger private than public debt problem, used the financial system for similar purposes.

[13] There is a question, as we argued above, of how effective is the expenditure that does occur.

[14] Insofar as the number of employees is reflected in compensation of employees in the public sector which, of course, conflates prices (wages) and quantities. However, as is well known, figures on the total number of employees in the public sector do not exist.

[15] The term has been introduced by Stathakis [ref?]

Greece, and no doubt other economies, has its own functionally equivalent mechanism. After 2008 all such mechanisms are in crisis, and this provides yet another fault line, together with the existence of macroeconomic imbalances and an unstable financial system, that has not been sorted out post-crisis (Rajan, 2010).

Such an account is also better able to come to terms with Greece's political crisis that has accompanied, perhaps predated, the economic one. At its heart the issue is one of a crisis of representation. As elsewhere, the convergence of centre-left parties to a belief in the major tenets of neo-liberalism has led to severe tensions with their economic base. Increases in unemployment, poverty and inequality are all evidence of a major rift with the post-war social democratic consensus. The interests of the working class are no longer adequately represented, and what is more, this convergence makes it difficult even for leftist parties to claim that they can break the consensus and push for higher wages, better pensions or improved employment rights. The decline of votes for both centre-left and leftist parties, the rise of the extreme right, and a general alienation with the political process itself should be seen in this light.

PASOK is no exception, its recent electoral victory notwithstanding (Tsakalotos, 2008). Wages shares in Greece are in long-term decline (Figure 9) and the "value" of the minimum wage (one aspect of how well-off are low wage earners, Figure 10) has been falling. But the severity of the political crisis after adoption of the Memorandum of Understanding between Greece and the EC-ECB-IMF (the so-called troika) can be put down to the fact that now the alliance with those sections of society that

have benefited from the clientilistic state is being abruptly challenged. The policies of restoring competitiveness through wage deflation, of cutting social services and public investment, of disengaging public commitment to the pension system are likely to lead stagnation at best, and to a deflationary cycle at worst, for many years to come. Given that we have precious few historical precedents of economies reducing their debt burden without growth, it is difficult to see how the legitimization of the economic policies pursued will come about.

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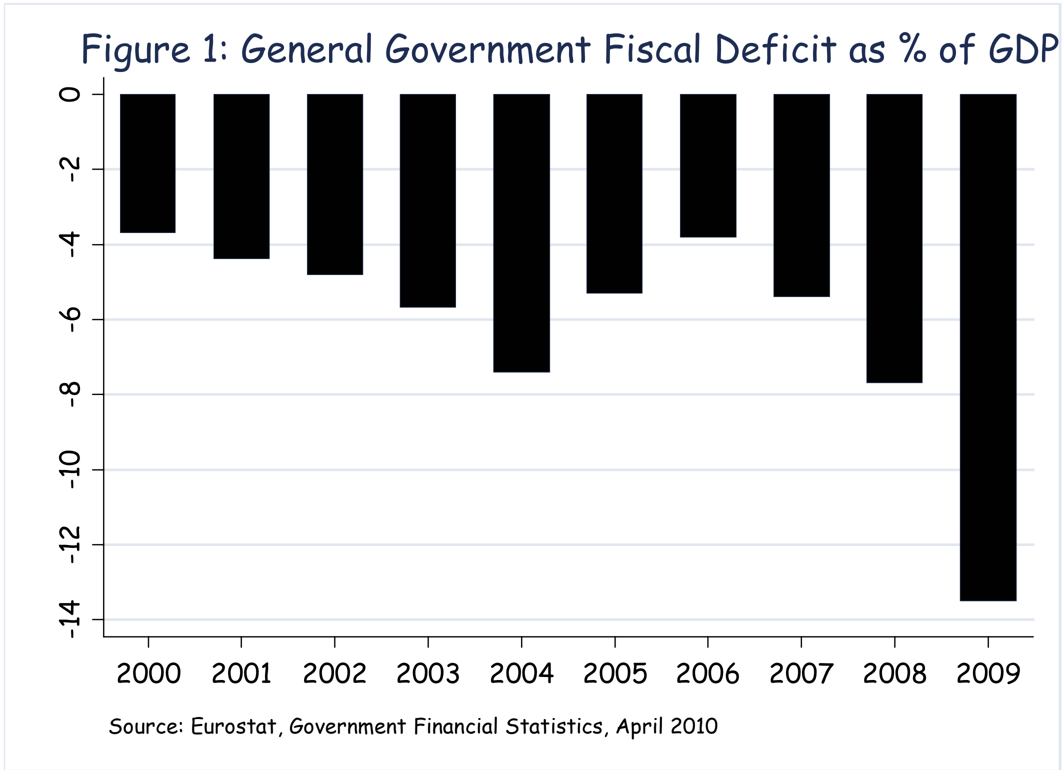


Figure 1: General Government Fiscal Deficit as % of GDP
0
-2
-4
-6
-8
-10
-12
-14
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: Eurostat, Government Financial Statistics, April 2010

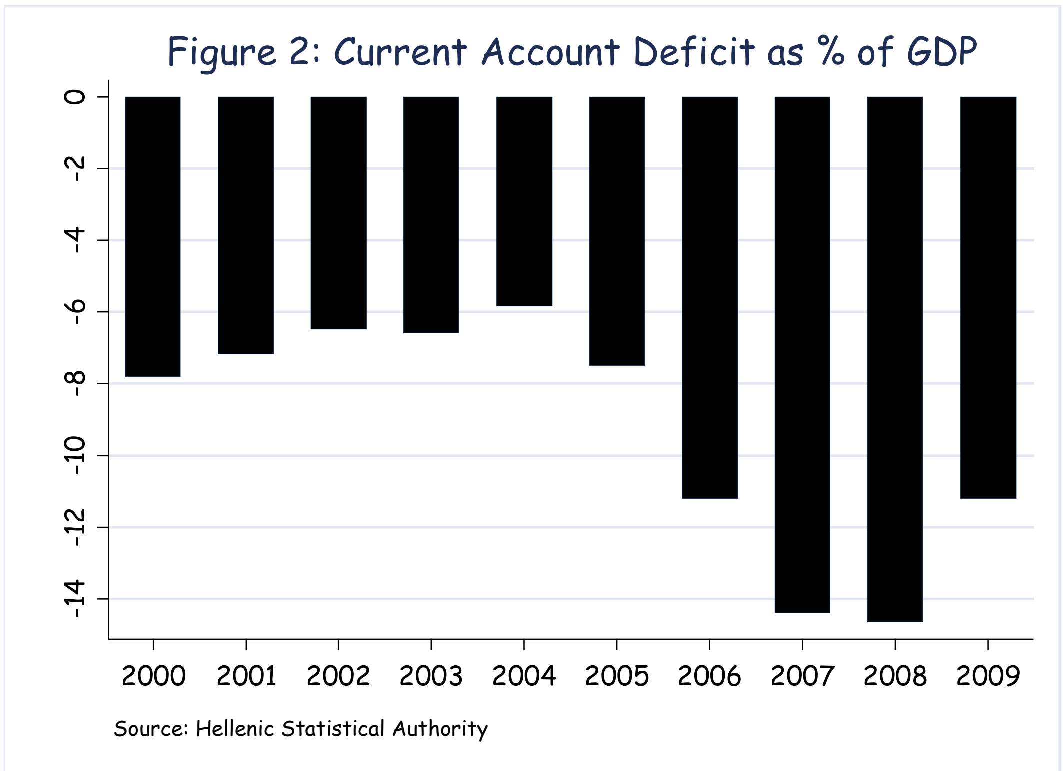


Figure 2: Current Account Deficit as % of GDP
0
-2
-4
-6
-8
-10
-12
-14
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: Hellenic Statistical Authority

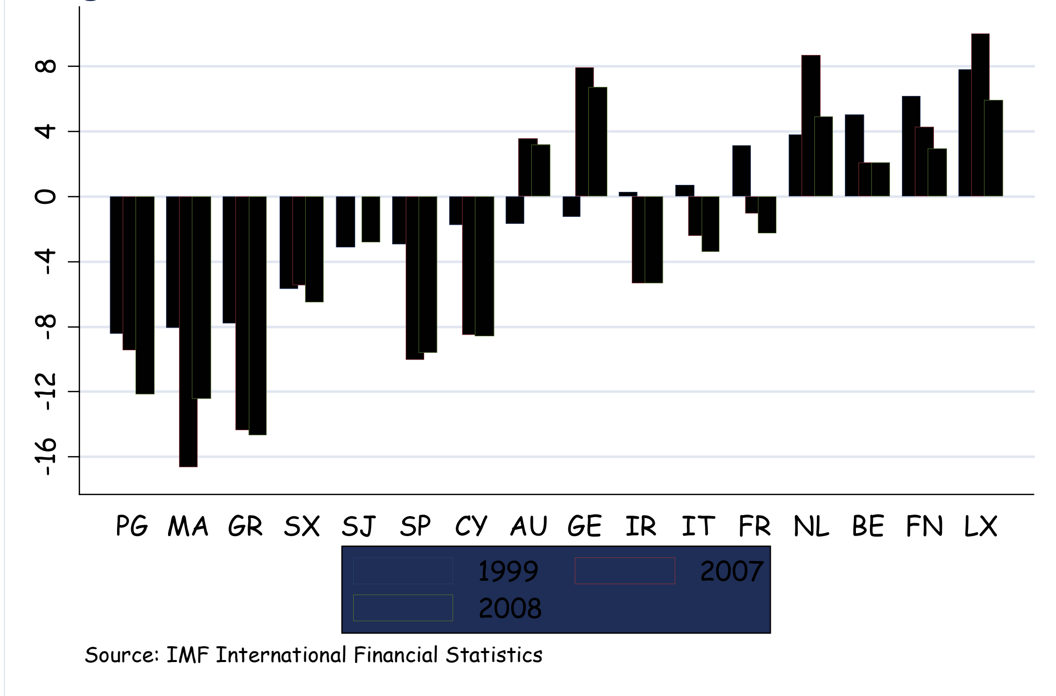


Figure 3: Euro Area countries: current account (% of GDP)
8
4
0
-4
-8
-12
-16
PG MA GR SX SJ SP CY AU GE IR IT FR NL BE FN LX
1999
2007
2008
Source: IMF International Financial Statistics

Figure 4: Deviation of national inflation rates from euro area inflation rates

Source: Deutsche Bundesbank, Monthly Report, June 2007

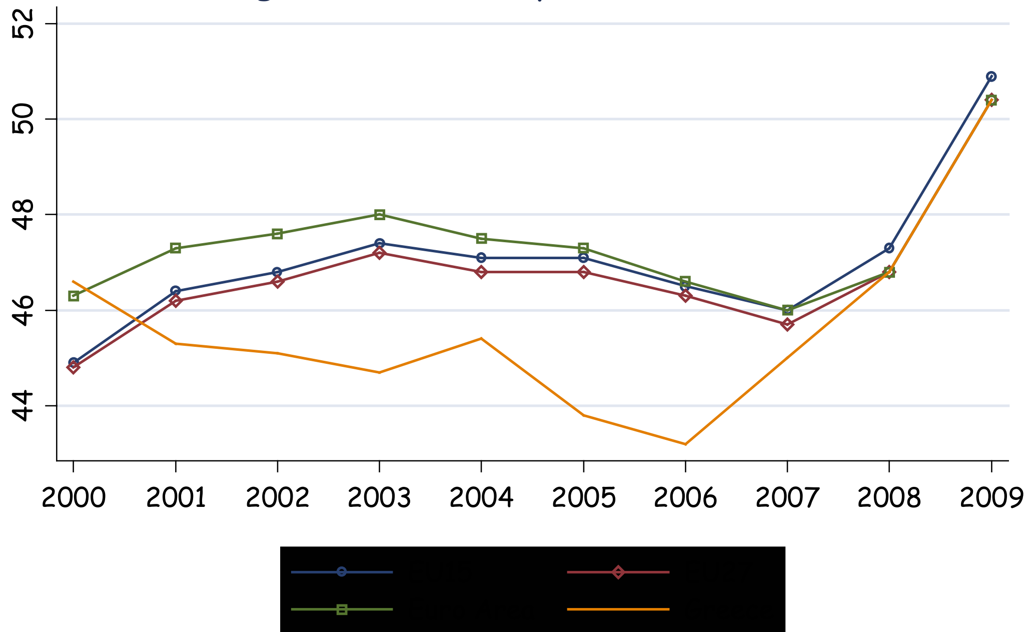


Figure 5: Total expenditure (%GDP)
52
50
48
46
44
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: Eurostat, Government Financial Statistics, April 2010

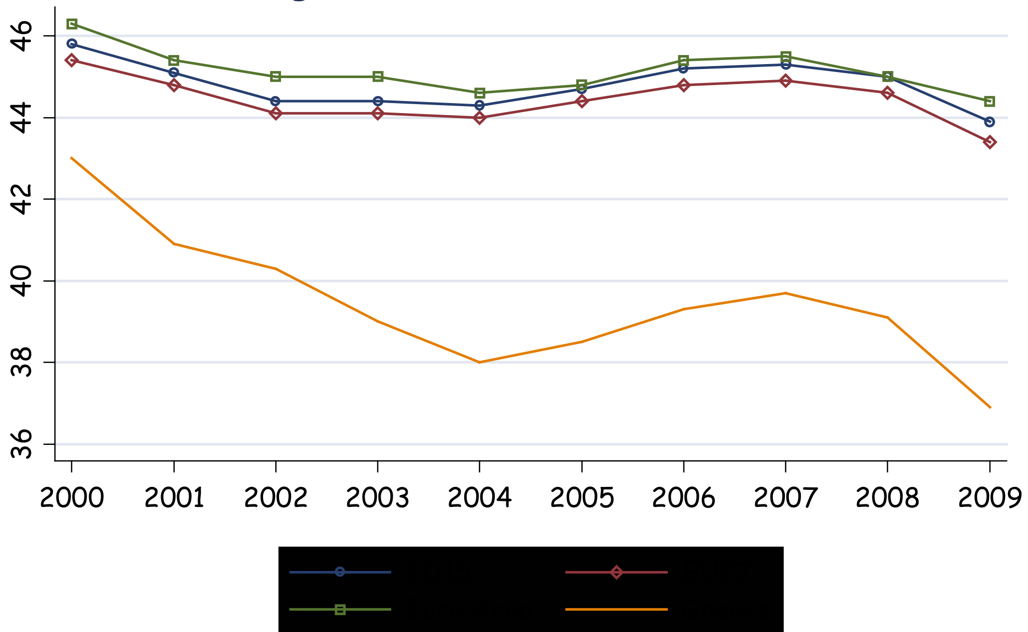


Figure 6: Total revenue (%GDP)
46
44
42
40
38
36
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: Eurostat, Government Financial Statistics, April 2010

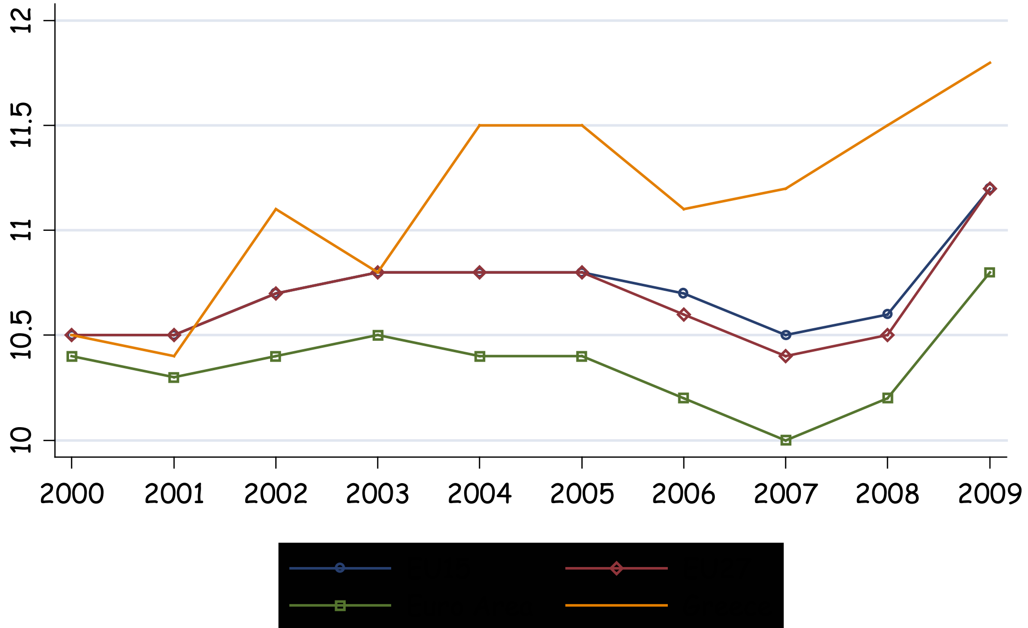


Figure 7: Compensation of employees (%GDP)
12
11.5
11
10.5
10
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: Eurostat, Government Financial Statistics, April 2010

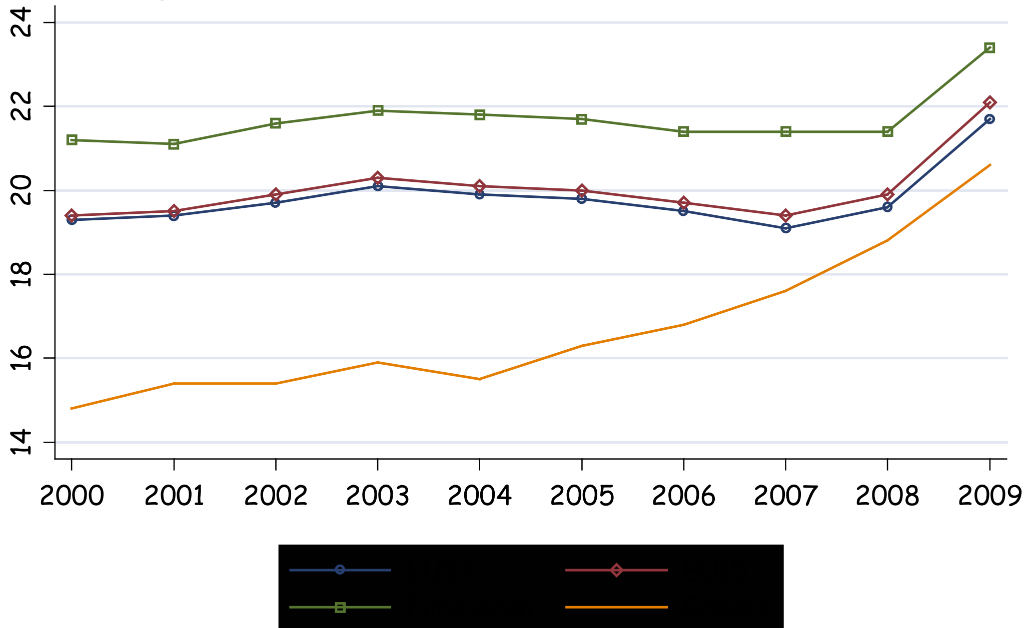
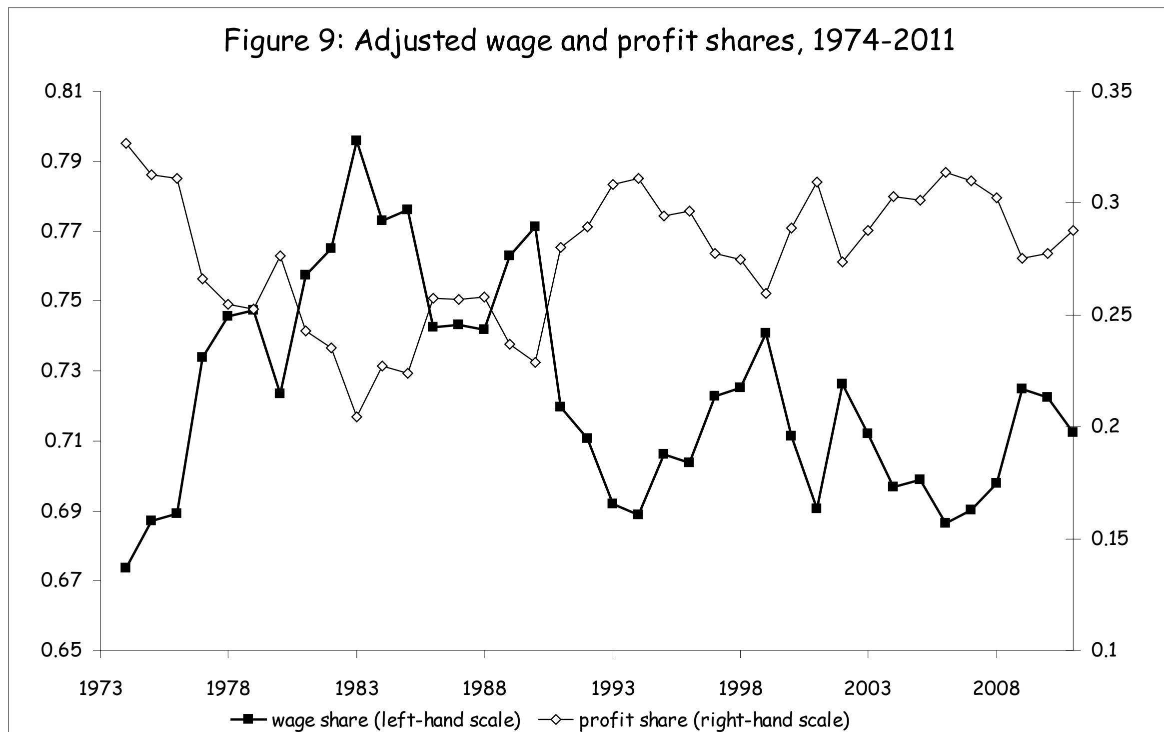
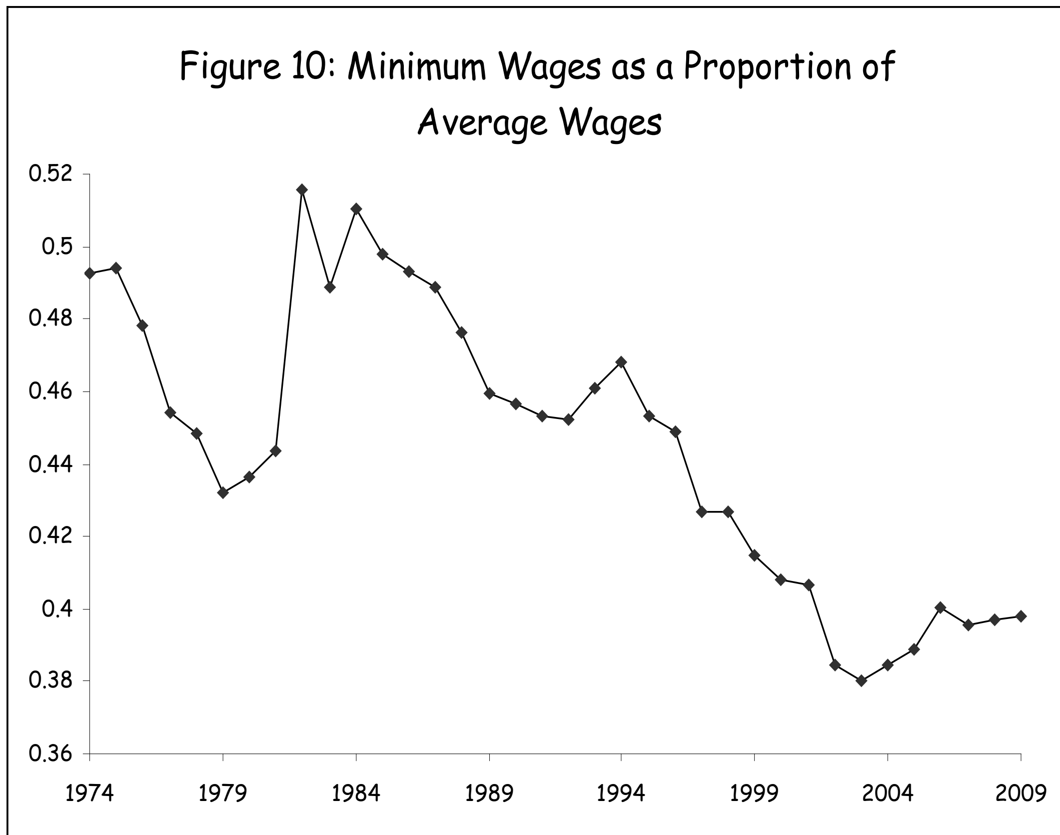


Figure 8: Social benefits and transfers (%GDP)
24
22
20
18
16
14
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: Eurostat, Government Financial Statistics, April 2010




Source: own calculations from AMECO database and National Statistical Service of Greece. The 2007 figures are based on estimates from Eurostat.

Note: Wage shares are calculated using the compensation of employees (adjusted for the self-employed by imputing a wage using average wages across the economy for the self-employed) as a percentage of gross value added. Profit shares are gross operating profits (minus the imputed wages of the self-employed) as a percentage of gross value added.




Source: Bank of Greece, Bulletin of Conjunctural Indicators and AMECO data base (average wages are calculated as compensation per employee (gross); minimum wages are for blue collar workers (assume 25 working days per month and 14 months per year).

| Table 1: Importance of PIGS in German trade | | | | | | |
|---|---|---|---|---|---|---|
| | German current account (%GDP) | German trade account (%GDP) | German trade with PIGS (% of German GDP) | Percentage of German trade account surplus originating in trade with PIGS | German trade with PIIGS (% of German GDP) | Percentage of German trade account surplus originating in trade with PIIGS |
| 1999 | -1.26 | 3.21 | 0.29 | 9.00 | 0.54 | 16.96 |
| 2000 | -1.70 | 2.92 | 0.31 | 10.46 | 0.74 | 25.32 |
| 2001 | 0.02 | 4.62 | 0.22 | 4.66 | 0.78 | 16.83 |
| 2002 | 2.04 | 6.23 | 0.46 | 7.39 | 1.11 | 17.81 |
| 2003 | 1.92 | 5.93 | 0.51 | 8.65 | 1.21 | 20.37 |
| 2004 | 4.66 | 6.78 | 0.71 | 10.54 | 1.51 | 22.24 |
| 2005 | 5.12 | 6.93 | 0.90 | 12.95 | 1.74 | 25.05 |
| 2006 | 6.52 | 6.78 | 1.19 | 17.58 | 1.96 | 28.92 |
| 2007 | 7.92 | 8.15 | 1.43 | 17.52 | 2.24 | 27.46 |
| 2008 | 6.69 | 7.31 | 1.21 | 16.60 | 1.81 | 24.82 |
| Source: IMF, International Financial Statistics and Direction of Trade Statistics | | | | | | |

Table 2: Germany's trade with EU

| | German trade account (%GDP) | German trade with EU (%GDP) | Percentage of German trade account surplus originating in trade with EU countries |
|---|---|---|---|
| 1999 | 3.21 | 2.82 | 87.80 |
| 2000 | 2.92 | 2.84 | 97.31 |
| 2001 | 4.62 | 3.19 | 69.10 |
| 2002 | 6.23 | 4.17 | 66.84 |
| 2003 | 5.93 | 4.57 | 77.13 |
| 2004 | 6.78 | 5.61 | 82.78 |
| 2005 | 6.93 | 5.92 | 85.42 |
| 2006 | 6.78 | 4.28 | 63.19 |
| 2007 | 8.15 | 5.17 | 63.40 |
| 2008 | 7.31 | 4.44 | 60.77 |

Source: IMF International Financial Statistics and Direction of Trade Statistics