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Competitiveness, Adjustment and
Macroeconomic Risk Management in the
Eurozone

Peter Spahn

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Competitiveness, Adjustment and Macroeconomic Risk Management in the Eurozone*

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Abstract

Gaps in competitiveness, rooted in economic as well as in political factors, characterise post-war European economic history. The eurozone experience showed the emergence of large current account imbalances. The peculiar mixture of financial markets integration and national cycles in wages and prices gave rise to severe macroeconomic instability. The Swan Diagram is used to analyse alternative adjustment policies. Although there are signs of convergence in wage costs, the overall picture of EMU remains somewhat gloomy, requiring the decision between full political union or a renewed gold standard.

Keywords: Currency union, euro crisis, current account imbalances, wage policy, Swan diagram

* Contribution to Jean Monnet Conference "The Euro and the Struggle for the Creation of a New Global Currency: Problems and Perspectives in the Building of the Political, Financial and Economic Foundations of the European Federal Government" University of Florence, May 2013

Introduction

In recent years, the European Monetary Union (EMU) seemed to be trapped in a mix of government debt and banking crises, but the core problem within the eurozone is a gap of competitiveness. Economies and administrative systems differ in their abilities, in their efficiency to cope with upcoming economic and social challenges, and in their innovative strength to discover feasible solutions. Thus, the problem of competitiveness cannot be reduced to a comparison of wages and labour productivity growth, it entails also the dimension of governance quality, and the willingness of interest groups and the society at large to contribute to a reliable, cooperative atmosphere of trust, which in the long run is indispensable for economic prosperity.

Nominal exchange rate changes are a possible tool for coping with this kind of efficiency gaps, and they were used throughout the post-war period in Europe. This paper thus starts with a flashback to the European system of fixed, but adjustable exchange rates, and continues to elucidate patterns of macroeconomic divergence in constellations where nominal interest rates converge, but wage and price inflation does not. The next step is an illustrative description of the development of competitiveness gaps in the eurozone, before finally a simple macroeconomic model is used as a framework to discuss various adjustment policies. The conclusion points to the necessity of making a crucial decision in the eurozone: either to proceed to a fiscal and banking union, or to retreat to a system resembling the gold standard where each member country looks after itself.

Looking back to the EMS

The European Monetary System (EMS) established a parity grid of fixed exchange rates for various reasons: promoting the long-term aim of European union, facilitating business planning, and supporting national disinflation policies. This rather ambitious program could not be realised completely. A key problem was a slow but steady divergence of some countries' competitiveness, a problem which has a long tradition in Europe. *Figure 1* shows the path of unit labour costs, as a proxy for competitiveness, in selected EMS economies.¹ These costs are measured in terms of constant currency (euro), i.e., *after* taking into account various realignments that proved to be necessary in the 1980s (*Figure 2*).

¹ Spain entered only in 1989.

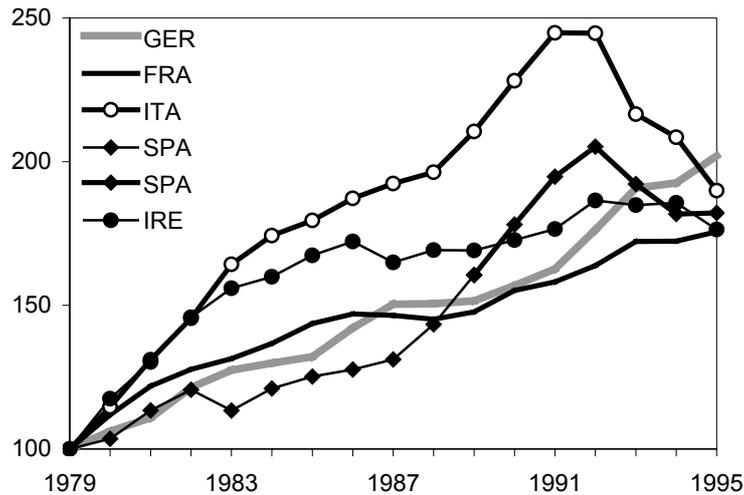


Figure 1: Unit labour costs, measured in euro, 1979=100 (data source: Ameco)

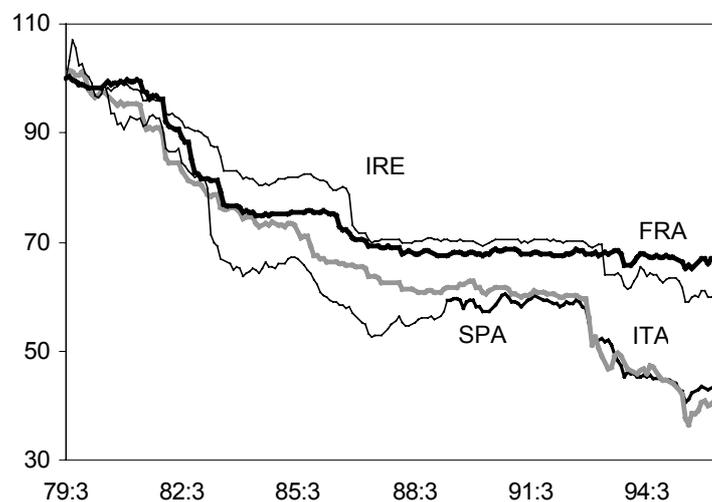


Figure 2: DM exchange rates, 1979:3 = 100 (data source: Bundesbank)

After 1987, policymakers decided to ban realignments, in order to enhance the credibility of the disinflation device "no devaluation", and to prepare for the already envisaged European Monetary Union. It can be seen from *Figure 1* that Italy's disadvantage grew very large until 1992; thus there was a substantial relief through the following realignment. France, after some large devaluations in the first half of the 1980s, appeared as a rather strong economy, with regard to productivity and inflation, in the early 1990s. Because unemployment was large at the same time however, speculation focused on the franc, which can be explained by the "second generation" exchange-rate crisis theory (Obstfeld 1995; Spahn 2001: 157-60). Germany's position worsened after her currency union with the former GDR in 1990. This historical event turned out to be a heavy burden, growth remained low, and unemployment high. It took more than a decade before the famous labour market reforms in the early 2000s were implemented,

in order to increase competitiveness.

The upshot of this cursory look into past data is that the competitiveness issue loomed large in European monetary policy. For reasons that are difficult to detect in retrospect, the issue seemed to be set aside during the preparing and strategic debates on EMU, and also in its final design. Whereas the Stability and Growth Pact stipulated restrictions for national fiscal policy, presumably wage formation was regarded as a market phenomenon, and thus hard to control, and productivity clearly was beyond at least a short-term regulative approach. An explanatory hypothesis for the neglect of the issue is the use of the image of a common market in Europe where national economies show up as competitive suppliers. Accordingly, it is natural to believe in the emergence of a common price level (or rate of inflation). Individual firms, and thus also national unions, have to adjust their market claims to equilibrium values. Even if productivity should continue to diverge, nominal wages, in order to avoid unemployment, will be guided by market forces onto a path that allows to maintain employment.

Macroeconomics of member countries in a currency union

Market relations and macroeconomic dynamics turned out to be different from the above image. The state of competition on the common goods market was strongly affected by the coincidence of a perfectly integrated capital market, which let national nominal bond yields converge² (*Figure 3*), and a hardly integrated EMU labour market, where wage formation still depended on national macro variables such as supply and demand relations in the domestic economy and, most of all, on domestic inflation expectations.

Figure 4 shows the macroeconomic position of a typical "southern" EMU member country (e.g. Spain). The policy of the ECB contributed to the convergence of nominal interest rates on the euro capital market by accepting national government bonds as collateral in commercial banks refinancing operations, without differentiating between their country of origin (Buiter/Sibert 2005). Different national rates of inflation provided for real interest spreads in the eurozone that drove national macroeconomic cycles in a diverging pattern (Landmann 2012; Whelan 2013). High inflation implied low real interest rates that favoured further increases of demand, production and employment; accordingly, wage growth was spurred, which closed the vicious cycle (indicated by the bold arrows) by propelling further

² Also the European banking system acted as a large hub shifting capital from northern to southern eurozone economies (Obstfeld 2013).

inflation. The combined effect of vigorous demand and, relative to neighbour countries, rising prices resulted in current account deficits.³

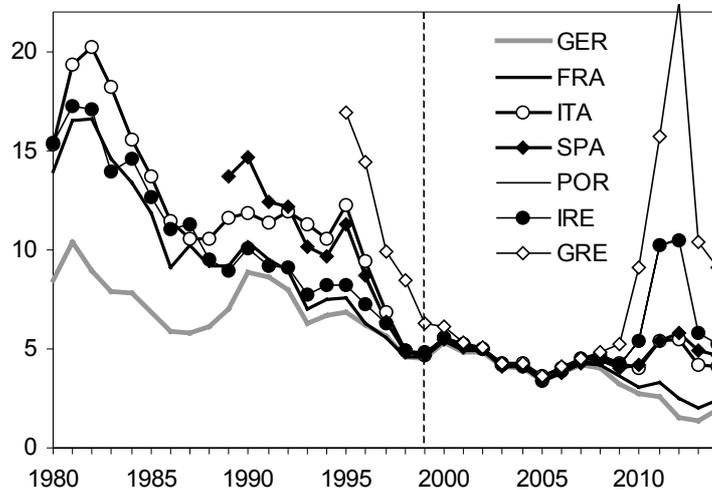


Figure 3: Capital market nominal interest rates in EMS and EMU (data source: OECD Economic Outlook)

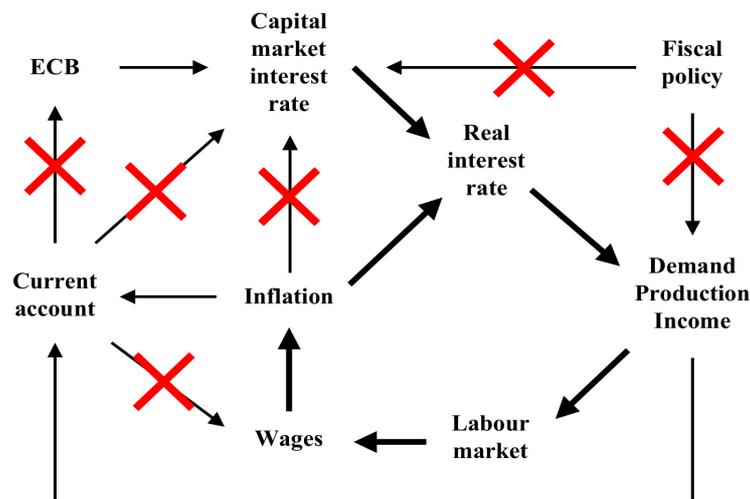


Figure 4: Broken stabilisation links in EMU member country compared to a stand-alone country

Compared to a stand-alone country in a fixed-exchange-rate regime, several stabilising transmission channels were missing. Long-term interest rates did neither respond to national inflation nor to a worsened current account balance; usually also a national central bank stiffens the course of its interest rate policy in case of mounting trade deficits, but the ECB was

³ Only after the outbreak of the euro crisis, the European Central Bank (2012) acknowledged the importance of the procyclical real interest effect, whereas it was downgraded in the 2000s.

neither responsible nor able to execute this task. These deficits also did not stop nominal wage increases in times of strong domestic boom; thus the unions got the wrong signal that a deterioration of competitiveness seemed to bear no problem. Of course, fiscal policy should have been used more actively for stabilisation purposes, e.g., Spain should have run a more tight fiscal policy during the boom years.

However, southern eurozone countries were reluctant to dampen the unfolding boom because increases of output and employment were exactly what was expected from EMU membership. Also it should be emphasised that loose fiscal policy was no active driver of strong demand growth, but rather private consumption and investment (*Figure 5*). The worsening of the trade balance (*Ex-Im*) until 2008 thus reflected the rise of private expenditure relative to saving (*I-S*), not higher public spending relative to taxes (*G-T*). In a way, large current account deficits could be interpreted as a sign of a convergence process. Deficits were high in countries where GDP was still low (European Economic Advisory Group 2013: 59).

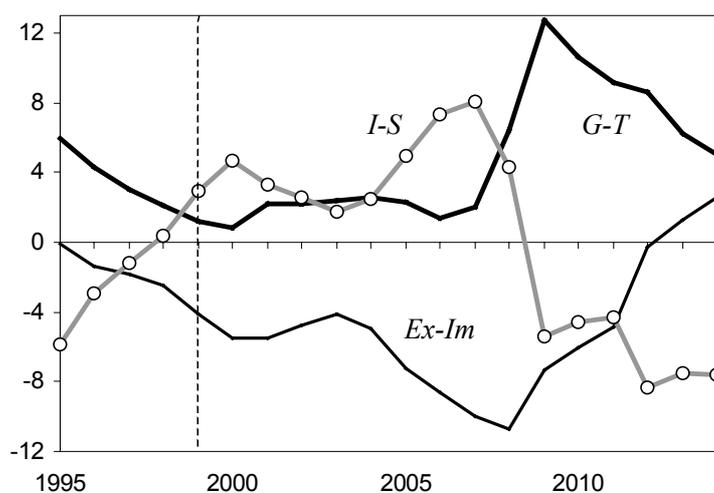


Figure 5: Sectoral accounts, relative to GDP, in GIPS countries: Greece, Ireland, Portugal, Spain (unweighted average, own calculation based on Ameco data)

Whereas the EMS has been interpreted as a disinflation-supporting arrangement, EMU was hoped to support development in emerging eurozone countries. It is well known that the establishment of EMU was not in line with standard wisdom of traditional optimal currency area (OCA) theory. Here, asymmetric demand shocks were seen to be the key problem. Therefore the recommendation was to admit only homogenous countries as members. Because trends in the eurozone were not compatible with these traditional views, a new OCA theory was propagated (Tavlas 1993; Mongelli 2008). According to the old theory, giving up

a flexible exchange rate was regarded as a loss as it precluded the use of national stabilisation policy. But the new approach appreciates the elimination of the foreign exchange market; the abolition of the balance-of-payment restriction allows countries to realise larger trade deficits. Additional resources then are available that can be used to spur domestic growth.⁴ Thus joining a monetary union seems to be particularly beneficial for backward countries; it is no coincidence that Greece and Portugal became members of the eurozone, but the risks of this membership soon became visible.⁵

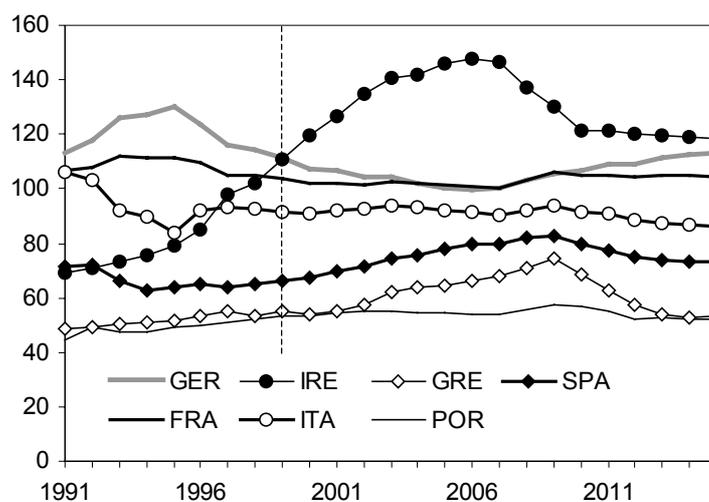


Figure 6: Gross domestic product at current market prices per head of population, EU-15=100 (data source: European Commission, Statistical Annex of European Economy, Autumn 2013)

The record of long-run development within the eurozone, measured by GDP per head, relative to EMU average, exhibits some interesting results (*Figure 6*). With one exception, the relative positions remained constant over the last two decades, where the big exception is Ireland; but also Ireland clearly experienced a bubble during the 2000s and was forced to a more moderate course afterwards. Again, Germany's problems after her reunification crisis are ob-

⁴ A further analytical background for this economic policy strategy is the intertemporal theory of the balance of payments, according to which foreign indebtedness is a temporary "input" of a rational capital accumulation strategy. From this perspective, mounting current account deficits in eurozone countries appeared to be in line with the optimisation calculus of a benevolent social planner (Fagan/Gaspar 2007).

⁵ "In theory, eliminating exchange rate risk and relaxing financing constraints should result in higher investment, widening current account deficits and higher productivity growth in the converging euro area countries [...]. However, most deficit countries face lower productivity growth in manufacturing compared with surplus countries, despite higher investment ratios and rapid productivity growth prior to the launch of the euro. [...] If temporary gains are misperceived as being permanent or if foreign borrowing is channelled into non-productive activities, external deficits may well turn out to be unsustainable" (Dieppe et al. 2012: 18, 52).

servable. There was a long decline, and in spite of the recent growth success, Germany has not yet regained the position it had acquired in the early 1990s. Greece did quite well in the 2000s, but now she has fallen back to the level of Portugal, a country that was not able to take profit from the favourable financial and macroeconomic conditions of the 2000s.⁶

Competitiveness and external imbalances

Nominal labour costs showed a marked divergence since the inception of EMU until 2008 (*Figure 7*). The path of the ECB inflation target should have constituted a benchmark for national nominal wage growth, controlled for national productivity growth. But with the exception of France, it did not. Macroeconomic demand forces encouraged vigorous wage growth in southern countries, particularly in the non-tradable goods sector.⁷ On the other hand, Germany, and to a lesser extent Austria (not shown in the graph), appeared to carry a trade war against its neighbours. Formally, she was free to do so, as autonomy of national economic policy ranks high in Europe, but a currency union cannot work properly if the leading country does not accept the common inflation target as a benchmark in wage policies (Bibow 2012).

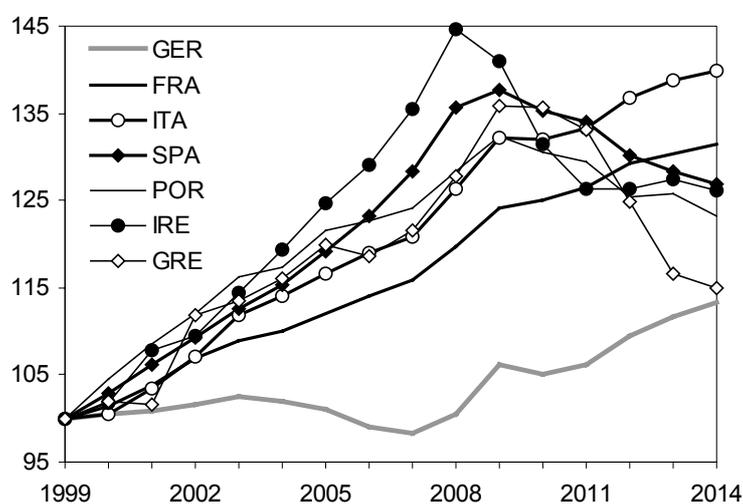


Figure 7: Nominal unit labour costs, 1999=100 (data source: Ameco)

⁶ A more detailed analysis of the Portuguese development is provided by Reis (2013). The general relation of catching-up and income distribution is explored by Bertola (2013).

⁷ "Large capital inflows raise the demand for nontraded goods. The supply of nontraded goods is relatively more inelastic than the supply of traded goods because nontraded goods cannot be imported and must be produced domestically. To satisfy the increased demand, producers of nontradables will increase production, given cost, only if the relative price of nontradables increases" (Schmitt-Grohé/Uribe 2013: 196).

Data of nominal unit labour costs show considerable adjustment after the crisis. Only in the case of Greece, this adjustment is primarily driven by wage reduction, whereas in other rescue program countries nominal wages remained constant after the onset of the crisis, or even continued to rise in spite of heavy employment losses (*Figure 8*). Unit labour costs nevertheless can decrease in case of labour productivity growth. Reservations with regard to unit labour costs as an indicator of competitiveness is grounded in the argument that particularly downward movements show only a distorted picture: closing down firms with the worst performance raises average productivity in the economy, but of course this does not reflect a fundamental improvement. Thus the progress of reducing unit labour costs in Greece and some other countries in recent years may be partly an illusion.⁸

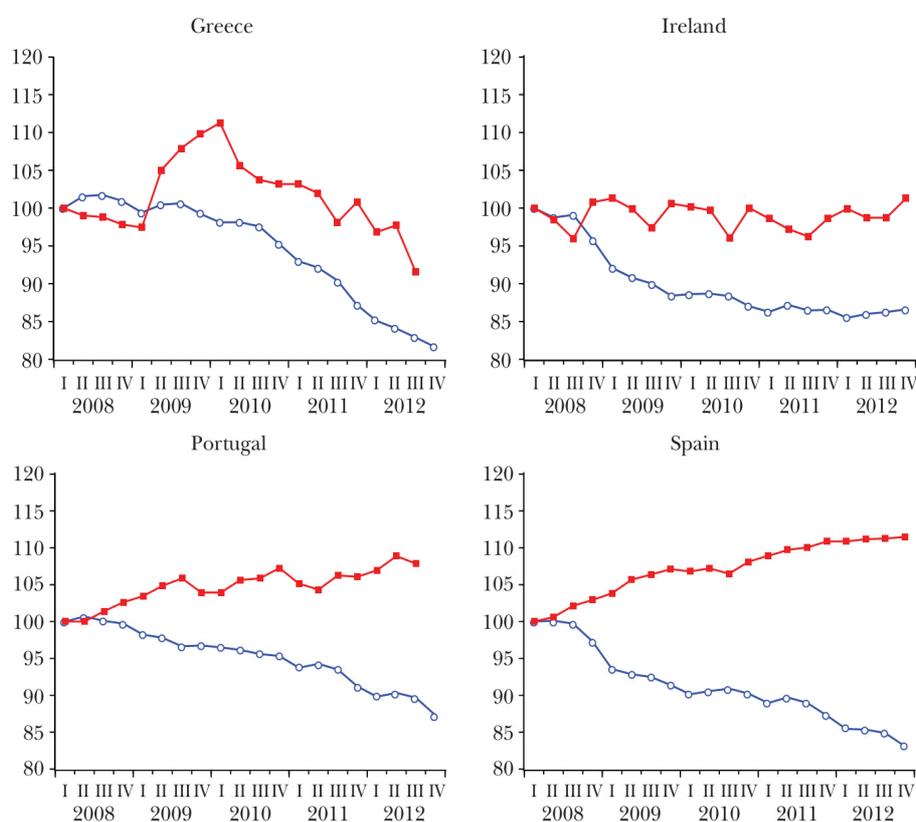


Figure 8: Average nominal wages and salaries (upper lines), and total employment (lower lines), 2008-12 (O'Rourke/Taylor 2013: 175)

A most important indicator that is less trapped by recession-induced distortions is the real

⁸ "The contribution of nominal wage growth to the adjustment in ULC has been particularly strong in Greece [...]. In contrast, in Ireland, Spain and Portugal, the largest contribution to improved labour cost competitiveness has come from increased average productivity, largely reflecting labour shedding in low productivity sectors" (European Central Bank 2013: 90).

exchange rate, calculated on a GDP or export-price deflator basis. Taking the latter version, it becomes clear that, perhaps with the exception of Ireland, there is not much progress (*Figure 9*). Wage moderation simply was not sufficient, or did not fully translate into relative-price adjustment, due to indirect taxation and sticky profit margins. Realignment needs still are estimated in the range from 10 to 30% (Sinn 2013) and also sectoral adjustments are required.⁹

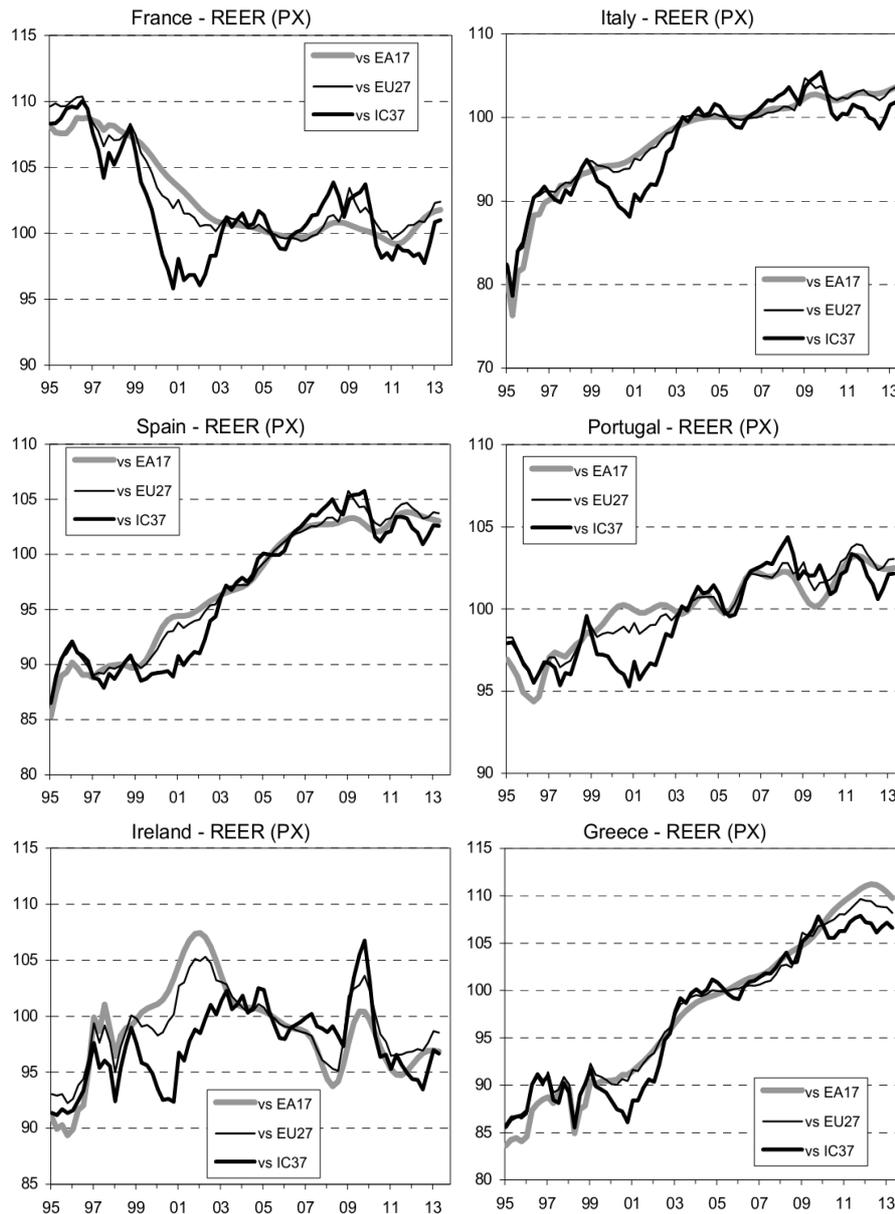


Figure 9: Export prices, relative to eurozone, EU and industrial countries at large (European Commission, *Price and Cost Competitiveness*, 2013/II)

⁹ "Nontradables are too expensive relative to tradables, preventing households from engaging in an expenditure switch away from tradables and toward nontradables. This expenditure switch is necessary to restore full employment in the nontraded sector" (Schmitt-Grohé/Uribe 2013: 202-3).

While it is true that nominal labour costs in principle are a major factor explaining the path of inflation, even diverging rates of inflation may just reveal that price levels are converging. Emerging countries typically have a lower price level than fully industrialised economies so that wage inflation in Greece and similar EMU countries may be of lesser concern, and indeed, price levels *have* converged in the eurozone to some extent. However, also non-price aspects determine a large part of tradable goods' attractiveness and the performance of an open economy in general. Competitiveness includes goods markets efficiency, technological readiness, business sophistication and innovation capabilities (Estrada et al. 2013; European Central Bank 2013). Many observers argue that southern eurozone countries in particular suffer from deficiencies in non-price competitiveness. This however implies in turn that the mentioned tendency for price level convergence is a bad message after all because price differences are needed to compensate for non-price disadvantages.

Hence doubts remain whether competitiveness really is improving at a rate that is sufficient to establish a macroeconomic equilibrium in the eurozone within a reasonable time span. A final piece of evidence is current account performance. Since the world economic crisis after the fall of Lehman, balances improved in all southern eurozone countries, with the notable exception of France (*Figure 10*).

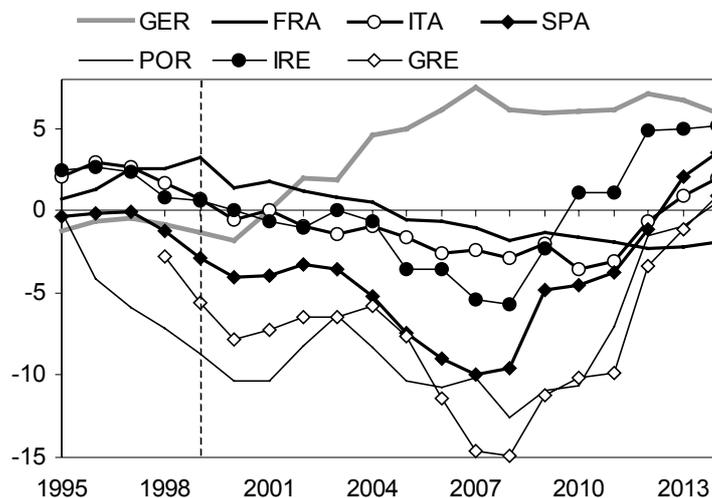


Figure 10: Current account balances, relative to GDP (data source: OECD Economic Outlook)

Unfortunately, this development does not indicate a strong recovery of these countries' market strength. Disaggregated data show that net trade-balance correction mainly came about by lower imports (*Figure 11*), which in turn is a consequence of the slackening of goods demand during the macroeconomic crisis (European Central Bank 2013); there is

hardly a trend reversal with respect to exports. This has an unpleasant implication: should internal demand growth resume due to a most welcome cyclical upswing, higher trade deficits would most probably return. Given the experience of the euro crisis, the question then is whether there will be enough private capital flows that stand ready to take the risk and finance current account imbalances.

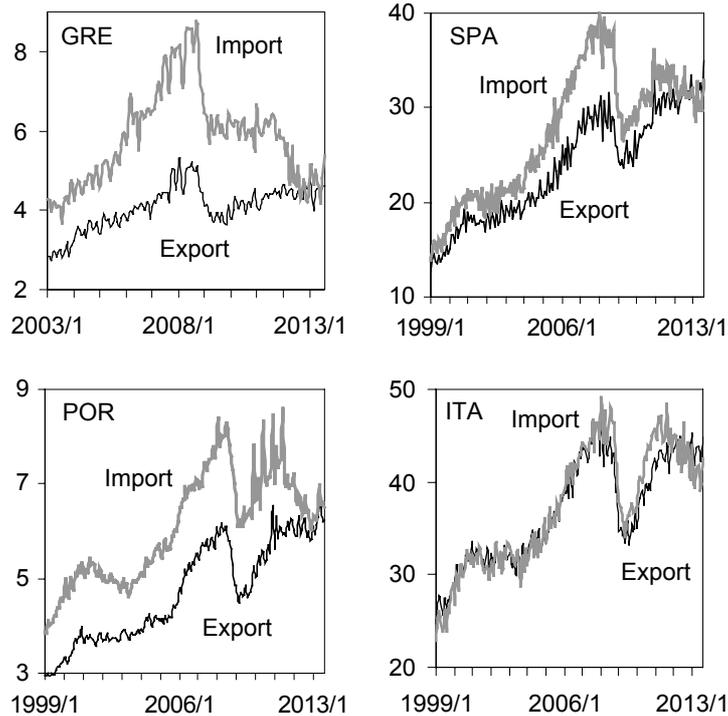


Figure 11: Goods, services and income payments, € bill, seasonally adjusted (data source: National Central Banks)

The limitations of austerity policies

After the outbreak of the crisis, fiscal austerity was imposed on nearly-defaulting countries, as a kind of reward for European rescue packages. It is obvious that budget policies should be orientated at the long-run aim of stabilising, and in some cases also reducing, government debt ratios. In the short run however, spending cuts and higher taxes impede macroeconomic recovery. But the key problem is that austerity is inefficient to solve the problem of divergent competitiveness. It gives no direct support to the position of domestic products in the euro-zone; a limited possibility is fiscal devaluation, i.e. the stipulation of lower social security contributions, compensated by higher indirect taxes (Dieppe et al. 2012).

Reform programs work in the right direction, but their impact will only be felt in years.

In addition, it is uncertain whether political pressure will allow them to be maintained. They cannot be sustained if the population fails to see the fruits of their sacrifices.¹⁰ Moreover, competing economies do not wait in the meantime, but also work to advance institutions and market structures. Thus it is questionable whether productivity growth and innovation gaps between northern and southern EMU countries will be closed in the foreseeable future, and at politically tolerable costs.

In a monetary union, wage policy in principle is the only available tool to attain the goal of improving competitiveness. As it stands, higher wages are necessary in Germany, and lower wages in southern economies. However the wage policy tool cannot be applied at will, maybe it is no policy tool at all, but only an imprecise wording of a market result. For the sake of the argument, assume that policymakers can give recommendations for group behaviour that determines the outcome of wage contracts. A political obstacle then is to dismiss people's anti-inflation preferences in the northern countries. The more difficult task is to bring about nominal wage cuts of, say, 5-10% in France, which some experts deem necessary. Whereas exchange rate realignments almost imperceptibly work to repair lost competitiveness in the tradable-goods sector, a policy of imposed wage restraint has to be broad in scope for fairness considerations, and meets large resistance.¹¹ And even if we really had enduring deflation in southern countries, firms would encounter difficulties in their balance sheets because the real value of debt would increase (Sinn 2013).

Rescue program countries in most cases suffered from a twin deficit with respect to fiscal and current account balances. The repercussions of the macroeconomic downturn on a world scale after the Lehman crisis, and the consequences of losses in price competitiveness, also added an employment deficit to the picture. Thus European policymakers ought to employ a multi-faceted macroeconomic risk management. The failure to contain government deficits is bound to rekindle the public debt crisis, a return of high current account deficits will renew financial markets' doubts of the countries' ability to stand their ground in the European Com-

¹⁰ "Before the euro, countries adjusted misaligned production costs by devaluing or revaluing their exchange rates. Fiscal austerity is a poor substitute. It works slowly, if at all, because elected governments are often reluctant to implement their promises – and may not feel bound by those of previous administrations (especially if they owe their victory to voters who are rebelling against years of belt-tightening with no evidence of renewed growth). Likewise, politicians are reluctant to adopt deregulation that eliminates state-sponsored special privileges" (Meltzer 2013).

¹¹ "The main difficulty arising from an internal devaluation through price and wage cuts is that it drives a country into a period of stagnation and mass unemployment, which undermines the stability of society and may lead to social unrest" (European Economic Advisory Group 2013: 63)

mon Market; and last but not least, enduring large unemployment entails the risk that the population in the eurozone countries lose their trust in the project of European integration.

*A framework for macroeconomic risk management: the eurozone Swan Song*¹²

If the reform process in southern EMU countries ought to take into account various constraints and targets, a framework for assessing possible adjustment steps is called for. A simple model that can serve this purpose is the well-known Swan Diagram (De Grauwe 1996: 48-56). It shows the macroeconomic constellation of a member country in a fixed-exchange-rate system (or currency union, for that matter), and thus visualises economic policy trade-offs.

Policymakers wish to keep two equilibria: full employment (or a zero output gap) along the Y^* line, and a specific trade balance value of the export-import gap $T^* = Ex - Im$, which ought to be sustainable in the long run, for simplicity it can be taken to be zero. Thus the bliss point E shows general equilibrium. On the abscissa, absorption $A = C + I + G$ measures the sum of consumption, investment and government spending (these variables are taken to move in an autonomous way, or depending on the rate of interest). The ordinate shows the real exchange rate $q = eP^f/P$ where the nominal rate e is fixed by assumption, but foreign and domestic price levels may respond to excess demand or supply on goods and labour markets (Figure 12).

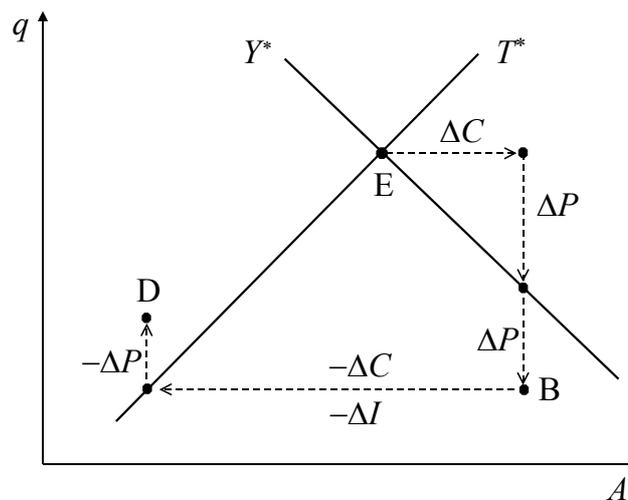


Figure 12: Swan Diagram of a eurozone member country

¹² This title is partly borrowed from Krugman (2002).

The Y^* line is downward sloping because a rise of autonomous internal goods demand A needs a compensation via lower external demand in order to avoid a positive output gap and overheating; note that $Y = A + T$. Net exports depend on the real exchange rate (but also on income at home and abroad). If nominal appreciation is no available option (as in EMU) domestic prices will rise so that net exports decrease due to a worsening of competitiveness. On the other hand, the T^* line has a positive slope because higher absorption also draws more goods from abroad (imports grow when domestic demand increases), and the previous trade balance level can only be maintained by means of real devaluation, i.e. a higher value of q .

The path of a typical southern eurozone country, say Spain, starts from equilibrium E¹³ and exhibits a credit-financed consumption expansion whereupon wages and prices rise. Due to peculiarities of labour markets and wage formation however, prices rise beyond the goods-market equilibrium line so that the economy ends up in a boom position B, with already some unemployment and a large trade deficit, resulting from income effects $\Delta Im = f(\Delta Y)$ and competitiveness effects $\Delta T = -f(\Delta P)$. The ensuing collapse of goods demand, shared by consumption and investment, produces a devastating reduction of employment; because of shrinking imports, the trade balance improves substantially, and the reversal of wage and price push may even give rise to a small trade surplus. Position D indicates a deep depression.

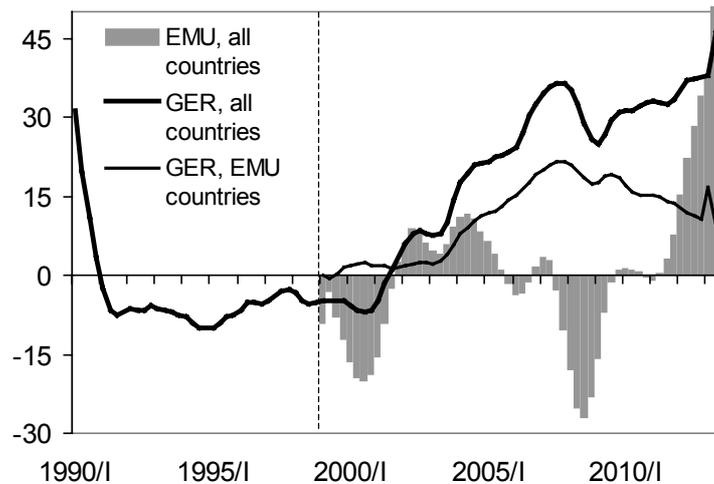
Whenever an economy is trapped in the deficit-unemployment region below the T^* and Y^* lines, policymakers face the trade-off whether to give priority to regaining balanced trade or full employment. If the only policy tool available is fiscal policy, one target can only be realised by reneging on the other. The dilemma is even worse if there are restrictions on the fiscal tool itself, e.g. limits for budget deficits. A country with a current account surplus thus might not be able to use the hypothetical small room for manoeuvre (given by the horizontal distance between the position D and the external-equilibrium line) and increase absorption by means of higher government spending or lower taxes, if the actual budget deficit already is "at the limit" set by EMU rules, or by fears that financial markets might respond to even temporary enlarged fiscal deficits by imposing higher risk premia on the countries' bond yields, which threatens the sustainability of government debt.

Under these conditions, closing the output gap must be achieved by private demand forces. In case of an indebted household sector and large unemployment, relief must come

¹³ We leave open here whether position E really denotes a labour market equilibrium or a state of structural unemployment. The following argumentation refers to employment changes *relative* to the starting point.

from strengthening investment demand.¹⁴ Finally, the time dimension must not be neglected. Closing a trade gap by demand restraint only provides no long-run success because a future recovery of demand growth will make trade deficits rise if no improvements can be achieved with respect to price competitiveness.¹⁵

Obviously, the position of a country like Spain might be improved with a little help from her European friends. Adjustment within the eurozone is much easier in case of a burden sharing where strong surplus economies aim for domestic macroeconomic expansion thereby providing support for their weaker neighbours. Germany is famous for her export surplus since decades.¹⁶ Without the German overall current account surplus, the eurozone would have shown a deficit since its inception, most probably the euro would have been weaker, helping countries like Portugal to survive in international competition. The German surplus vis-à-vis the eurozone countries also rose, but attenuated after 2008 when demand forced dwindled (*Figure 13*).



*Figure 13: Current account balances, quarterly values, moving average, € bill.
(data source: Bundesbank, ECB)*

¹⁴ This gives a hint to the still unsolved question of southern economies' bank balances. The topic of European Banking Union however is beyond the scope of this contribution.

¹⁵ "By compressing demand, fiscal adjustment reduces imports (the trade balance is recovering) and prices (the real exchange rate depreciates). But the trade balance improvement may not be sustainable if it only rests on a fall in demand. Conversely, an upturn in the trade balance carried by a sharp depreciation of the real exchange rate [...] can ease the burden of fiscal adjustment by reducing the contraction in demand. [...] The actual reduction of the current account deficit is therefore a poor measure of achieved competitiveness effort: imbalances may reappear as these countries will close their output gap" (Carton/Hervé 2013: 4).

¹⁶ The deficit during the 1990s was caused by the German currency union, and maybe misled European policymakers (and economists) to believe that the long-run German competitive advantage had eroded so that a European currency union would pose no severe problems.

Higher inflation in Germany, brought about by a nominal wage shock, is equivalent to a real devaluation of other EMU member countries; the position D moves upwards, increased net exports further improve the trade balance and let the economy approach the goods equilibrium line (*Figure 14*). But further repercussions produce a less advantageous outcome for eurozone countries: higher prices in Germany also impair her competitiveness towards non-EMU economies, at least if the euro exchange rate provides no compensation. Lower German exports then imply a loss of income which in turn entails lower goods demand from eurozone countries. Both the output and the trade-balance equilibrium lines of the Swan Diagram shift upwards; any given position D of a member country then is accompanied by a worsened current account and a larger negative output gap; the new overall equilibrium is point N.¹⁷

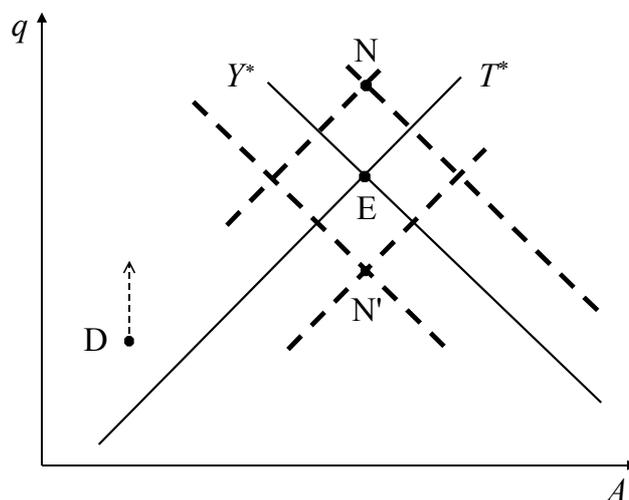


Figure 14: Swan Diagram, after foreign price increase and demand variation abroad

¹⁷ The algebra of the Swan Diagram can be stated as follows: Goods demand is given (in logarithmic terms) by $y = g - \beta r + t$, where output y depends on absorption, i.e. autonomous (including fiscal) demand g , the real interest rate r and its semi-elasticity β , and on net exports, i.e. the trade balance $t = \theta (y^f - y) + \tau q$. The latter is driven by the relative strength of goods demand in foreign countries and at home, and by the real exchange rate (as defined above in the text); Greek letters again denote positive elasticities. Inserting the trade equation into goods demand, and solving for the real exchange rate yields the equilibrium output condition

$$Y^* : \quad q = (\beta r - \theta y^f) / \tau - (1/\tau) g$$

where $\bar{y} = 0$ has been defined as the fixed full-employment output level. Likewise, the equilibrium trade balance condition can be found by substituting y in the trade equation, where $\bar{t} = 0$ was chosen as the target value:

$$T^* : \quad q = -\theta (\beta r + y^f) / \tau + (\theta/\tau) g$$

From both these equations, it is evident that a decrease (rise) of foreign income leads to a parallel upward (downward) shift of both equilibrium lines.

From the above it follows that a demand expansion in Germany does the trick: the equilibrium lines move downwards, with a new intersection point N'. Member countries take advantage of German income growth as their exports will increase. At the same time, German inflation (to be expected as a by-product) pushes position D upwards. Of course there is reason to doubt that a medium-scale fiscal expansion in Germany will completely solve the Spanish unemployment problem. Most probably additional imports in Germany will be drawn also from other competitive countries, but at least the induced adjustment in Spain has the appropriate sign. But a big question mark must be attached to the kind of price reaction. If a rise of domestic employment in southern countries quickly motivates strong nominal wage growth (this was the experience of the 2000s), the real exchange rate might appreciate and trade deficits ensue. This would pose a severe drawback for the southern countries' international investment position (*Figure 15*).¹⁸

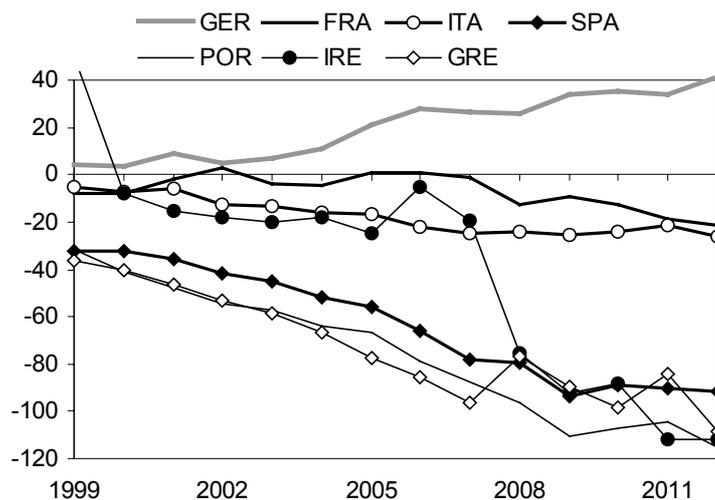


Figure 15: Net international investment position, relative to GDP (data source: Eurostat)

Where do we go from here?

We finally arrive at a list of policy tools. Wage policy is needed more than ever. But its efficiency is limited because of downward flexibility. Also wage setters receive wrong signals in a domestic boom that is financed through capital imports; because of strong domestic demand

¹⁸ "To bring the net external liabilities down from a level of 100% of GDP – which corresponds to the average NIIP reached in 2012 by the programme countries – to the sustainable threshold of 35% of GDP within 15 years [...], a positive current account balance of close to 3% per year would need to be maintained over the whole period" (European Central Bank 2013: 88).

wages will not react to the deterioration of competitiveness (this was the Spanish case). Thus wage guidelines are required. They might have their own problems, e.g., with regard to relative wages. But the key point is that wage guidelines have to be supported by fiscal demand management. This implies that we need more flexibility with regard to budget policies. The flexible use of tax and spending policies is indispensable for the proper functioning of a monetary union.

This in turn implies that problems of a high stock of government debt cannot be solved by adhering to a strategy of protracted consolidation, but have to be settled otherwise, perhaps by making use of levies on private wealth. Stock problems generally cannot be tackled by flow policies, e.g., by resorting to more saving. Some parts of public debt have to be written off, which has to be financed by wealth cuts on the part of private households. The 3% budget deficit rule, which despite some remarkable consolidations efforts (*Figure 16*) has not worked too well, should be substituted by a current account rule of around 5%, in both directions. The current account captures the sum of both public and private new debt, thus it is more efficient than just looking at government deficits.

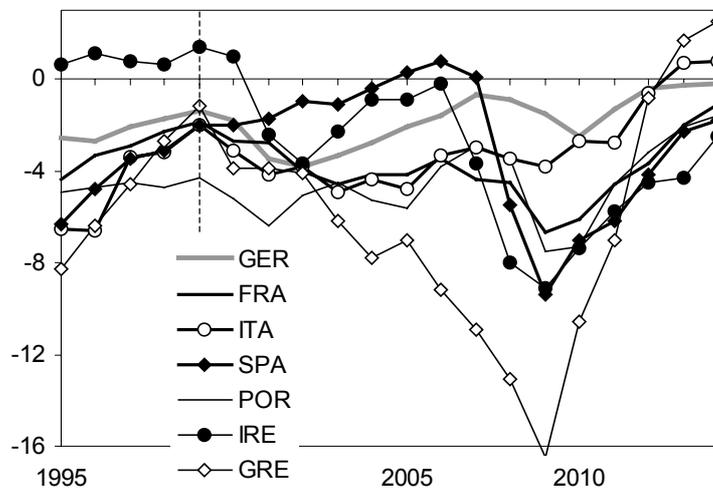


Figure 16: Fiscal balances (adjusted for cycle and one-offs), relative to potential GDP
(data source: OECD Economic Outlook)

Finally, the ECB might support stabilisation policies by employing different haircuts to national bonds that are used as collateral in the banking system's refinancing operations. Excess demand in a specific country will thus be dampened if the interest rate on government debt indirectly is increased. But in general, monetary policy should be oriented again at the eurozone level and should stop supporting national governments; this is a task of the ESM.

Voting rights in the ECB board do not allow capital market interventions that imply fiscal redistributions between member countries.

The prospects for long-term EMU reform rest on a crucial decision: either further steps are taken to proceed towards a true political union, particularly with respect to fiscal policy, or member countries should adapt to the rules of a gold-standard-alike system that also preserved political autonomy at the national level. In the latter case, a return to a hard no-bail-out rule would be feasible – under the condition that temporary leaves of troubled countries are permitted; this was the gold standard practice (O'Rourke/Taylor 2013). If not, the necessity of a substantial increase of wage flexibility has to be acknowledged.

Riots on the streets of countries like Greece show that people do not appreciate large downward adjustments of nominal wages, and even small cuts seem to be impossible to push through in countries like France. On the other hand, people, particularly from the northern countries, do not like regular fiscal transfers within the eurozone – to say nothing about wealth losses due to large bail-outs. But a choice between these three alternatives is to be made in this "Impossibility Triangle" of a currency union: you cannot defend a constellation of no wage flexibility, no transfers and no bail-outs.

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