# **Balance-of-Payments Adjustment** in the Eurozone

# Stefano Micossi

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# **Key Points**

This policy contribution describes the unresolved adjustment problems confronting the eurozone, and places them in historical perspective by comparing developments in key real economic variables under EMU with those observed under the Bretton Woods system. The main finding is that the eurozone is afflicted by a strong deflationary bias and that, therefore, under current trends, deep economic and social strains will continue to project a dark cloud over its future survival.

Under Bretton Woods, the United States opened its domestic market to pull in net exports of its main partners, invested to improve its productivity and provided ample liquidity to grease the expansion of trade and the payment system. Throughout the period, US domestic demand was growing buoyantly; after the mid-1960s, the appreciation of the real exchange rate of the dollar was amplifying the room for expansion in the rest of the industrialised world. Thus, altogether, it comes as no surprise that the Bretton Woods system displays the best real economic performance amongst all exchange rate systems on record.

The eurozone, on the other hand, has been anchored to a country with stagnating or slowly growing domestic demand, a sharply depreciated real exchange rate and little contribution of stable long-term capital flows to the financing of the current account deficits in the rest of the area. Total factor productivity growth has been stagnant throughout the area and there has been little market opening beyond manufacturing, the source of the German competitive advantage. The services markets have remained closed, especially for the very important network utility services (energy, transport and communications), which are still organised on a national basis under tight national protection (and often public ownership of service providers). This market segmentation has been a main factor in explaining the sizeable delays in the adoption of IT technologies and the productivity shortfalls in the eurozone and the European Union relative to the United States.

Stefano Micossi is Director General of ASSONIME, a business association and think tank in Rome, and member of the CEPS Board of Directors. He wishes to thank Daniel Gros and Franco Passacantando for useful comments, and Fabrizia Peirce and Alexandra D'Onofrio for outstanding research assistance. This note has been written for the CEPR project "Rebooting Europe – Step 2", coordinated by Richard Baldwin and Francesco Giavazzi and is published here with the kind permission of the CEPR.

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## 1. Incomplete monetary union under

History shows that - lacking an automatic balance-of-payments adjustment mechanism as under the gold standard - fixed exchange rate arrangements tend to break down under the attacks of financial speculation, but also that these attacks are encouraged by sustained divergences in prices, wages and productivity. Countries with higher inflation and lower productivity growth typically display persistent public-sector deficits and rising debt-to-GDP ratios, which on occasion have become the trigger of confidence crises and speculative attacks in financial markets.1

As a monetary union based on a single currency, the eurozone was supposed to be immune from these problems, as exchange-rate risks would vanish and payment disequilibria within the area would be smoothly offset by private capital flows (James, 2012). These expectations proved delusional: the sovereign debt crisis in the eurozone in 2010-12 started as a fully-fledged balance-of-payments crisis (Baldwin et al. 2015), prompted by the accumulation of large payment imbalances between its members and reflecting persistent underlying divergences in prices and costs.

This happened because monetary union did not eliminate market segmentation and nominal rigidities, while fiscal policies stayed national and continued to respond to national goals, with inadequate attention to the convergence requirements of monetary union. The problem was brought back to the surface by the Greek debt crisis, early in 2010, which later turned into a sovereign debt crisis of the entire periphery. This latter crisis undermined mutual confidence amongst the member states concerning the respect of budgetary rules and reintroduced, in

the eyes of private investors, a currencyredenomination risk. Hence, the eurozone has de facto reverted to a fixed exchange rate arrangement between different 'national euros', each one characterised by its own risk premium or discount; the traditional problems of fixed exchange-rate systems - adjustment, liquidity and confidence - have come back to haunt us. The confidence and liquidity problems are at present muted by the ECB bond-buying programme, but they are likely to re-emerge when the programme ends, if underlying imbalances in competitive positions and excessive public debt levels are not redressed.

This note describes the unresolved adjustment problems confronting the eurozone and places them in historical perspective by comparing developments in key real economic variables under EMU with those observed under the Bretton Woods system (henceforth BW). This comparison must of course be placed in proper context: while BW covered much of the world economy, the eurozone represents less than onefifth of world GDP and about one-quarter of world trade. And yet the comparison is useful to highlight the different effects of the two systems on participating countries.

The main finding is that the eurozone is afflicted by a strong deflationary bias and that, therefore, under current trends, deep economic and social strains will continue to project a dark cloud over its future survival.

#### 2. Persistent imbalances

When the eurozone started, Germany was still the "sick man of Europe", mainly reflecting the dramatic cost of reunification. The response was a prolonged period of wage moderation by unionised workers (Bofinger, 2015). combination with reforms that increased labour market flexibility and created special low-cost

prices in response to trade imbalances (or, in the more sophisticated version with central banks and capital flows, described by the Cunliffe Committee after World War I, via changes in money supply prompted by the conversion into national currencies of gold flows resulting from net trade balances; see Eichengreen (1996, pp. 25-26).

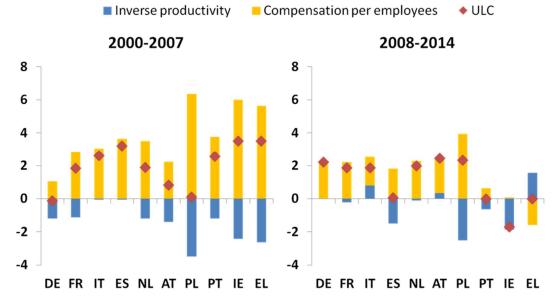
<sup>&</sup>lt;sup>1</sup> See Eichengreen (1996) for a history of the International Monetary System and Bordo (1993) for a historical overview of the Bretton Woods exchange-rate arrangements. Under the gold standard - the longest-lasting arrangement in modern history - the balance-of-payments adjustment mechanism came close to resembling David Hume's pricespecie flow mechanism, entailing an automatic correction of disequilibria through changes in gold reserves and relative



contracts (the 'mini-jobs') that today employ over 7 million people (Dustmann et al., 2014). The result was startling: from 1999 to 2008, unit labour costs (ULC) declined by 9% in manufacturing and stayed constant for the total economy, leading to a rapid re-absorption of unemployment and a stellar export performance.

Meanwhile, Germany's partners in the eurozone were generally experiencing UCL increases above the ECB inflation target of 2%, especially in the periphery, not least because of abundant credit flowing in from Germany and other 'core' countries following the vanishing of risk premia on peripheral borrowing.

Figure 1. Unit labour costs, labour productivity and labour cost (annual growth rates, %)



Note: Our updating of Graphs 5.16 and 5.17 from European Commission (2014) p. 90. Source: Eurostat for productivity and ULC; Ameco for compensation per employee.

The overall impact on unit labour costs vis-à-vis the main eurozone partners may be gauged from Figure 1: in the years preceding the financial crisis, all eurozone partners lost out heavily in their wage (and price) competitiveness relative to Germany. These losses were reversed in the ensuing years by the countries undertaking tough adjustment programmes to regain market access - i.e. Greece, Ireland, Portugal and Spain but not by the other partners, including France and Italy as well as other core countries.<sup>2</sup> This has happened in spite of the acceleration of the wage dynamics in Germany, where a (rather high) minimum wage has been introduced by law and

wage contracts have become more generous, as labour market conditions have tightened.

The upper quadrant of Figure 2 depicts the resulting evolution of real effective exchange rates (REERs) of eurozone partners: as may be seen, the peripheral countries display a large real appreciation, only partially corrected since the crisis, while the core countries (excluding Germany) display a moderate real depreciation. Germany stands out as the lower-bound outlier, with substantial real depreciation against all other eurozone members in the pre-crisis period barely reduced in the post-crisis years. <sup>3</sup>

fixed exchange rate in the face of the depreciating real exchange rate of Germany.

<sup>&</sup>lt;sup>3</sup> The figure includes the data for Poland: it shows the strong advantage enjoyed by a non-euro country that benefits from



<sup>&</sup>lt;sup>2</sup> The figure includes the data for Poland: it shows the strong advantage enjoyed by a non-euro country that could enjoy the benefits of low wages and rapid productivity increases, thanks to its flexible labour market and fresh access to the EU internal market, without suffering the constraints of a

In the middle quadrant of Figure 2, one finds the current account imbalances of eurozone members: the large deficit in the periphery closely mirror the ample surpluses in the core. It should be recalled that the inception of the euro opened the way to an almost fivefold increase in Germany's trade balance with eurozone partners between 1999 and 2007, which was the dominant component of its GDP acceleration in those years (and the slowdown in manufacturing in much of the periphery); and that the resulting surplus was only partially reversed (for about half of the total increase) in 2008-14.

After the crisis, deficits shrank abruptly with falling domestic demand, as peripheral countries entered deep recessions; the surpluses were largely reabsorbed in core countries with the notable exception of Germany and the Netherlands. In 2013-15, Germany's surplus has remained on average above 7 per cent of GDP, with its main counterpart shifting to emerging countries and, to a lesser extent, to the United States. This development seems underpinned by a trend increase in aggregate saving, notably by the corporate sector, and a trend decrease in investment, relative to GDP; in the meantime the public sector deficit was all but eliminated, adding to aggregate domestic savings.<sup>4</sup>

The lower quadrant of Figure 2 calls our attention to another important feature of the post-crisis eurozone system: after the crisis re-established the diversity of national currencies and the balance of payment constraint, domestic demand

and output growth in the rest of the eurozone fell below those observed in Germany (as reflected in the relative slopes of the curves in the figure). In the figure I have also reported the correlations between the current account balances in the core and the periphery – calculated over yearly levels and absolute changes: as may be seen, the values have turned from large and negative to large and positive, possibly confirming that core (German) surpluses are now "attracting" the current account balances of the periphery.<sup>5</sup> As intraeurozone trade typically represents some 50% of total trade of its members, the existence of trade with third countries may weaken, but not eliminate these interactions within the eurozone.

One wonders to what extent this may have become a structural feature of the eurozone: for countries that cannot correct their real appreciation relative to Germany, domestic demand and output growth cannot exceed that observed in Germany without pushing the against the balance-of-payments country constraint and eliciting prompt punishment by financial markets. The ECB provision of liquidity may offer temporary respite - as it has indeed done during the crisis (Micossi, 2015a) - but it cannot remove the constraint. On this, the European Commission (2015a) notes that "the current account improvements recorded in previous years were to a large extent noncyclical, since imports were reduced on a permanent basis as a result of reduced potential output in the non-tradable sector".



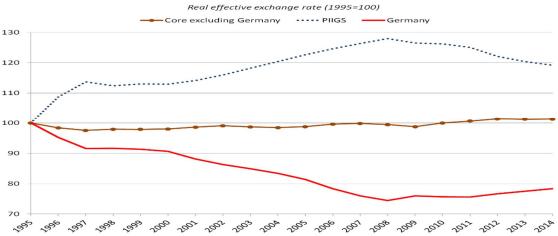
low wages and rapid productivity increases, thanks to its flexible labour market and fresh access to the EU internal market, without suffering the constraints of a fixed exchange rate in the face of the depreciating real exchange rate of Germany.

<sup>&</sup>lt;sup>4</sup> Various estimates seem to confirm that these developments are out of line with past analysis of the 'fundamental' determinants of the German current account balance, and therefore a substantial part of the surplus remains unexplained (European Commission, 2014). For one thing, the unprecedented and protracted slowdown in wages – required to save jobs from the impact of globalisation – flattened domestic demand through the first half of the past decade (lower quadrant of Figure 2); in the ensuing ten years

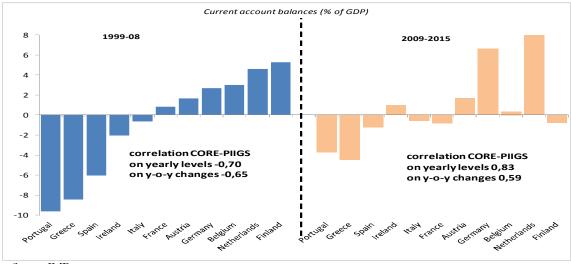
<sup>(</sup>to 2015), domestic demand increased by less than 1% per year, opening an unprecedented gap with GDP growth – filled by net exports – which may well explain the reluctance of investors to invest.

<sup>&</sup>lt;sup>5</sup> The reversal of these correlation signs was pointed out to me by Daniel Gros. On this, the European Commission (2015) confirms that "external rebalancing is ongoing, but progress has not yet translated into significant reduction in the stock of external debt, while large current account surpluses have not adjusted … implying a progressive growth in the stock of their external assets" (p. 15). This remains as an important factor of financial fragility.

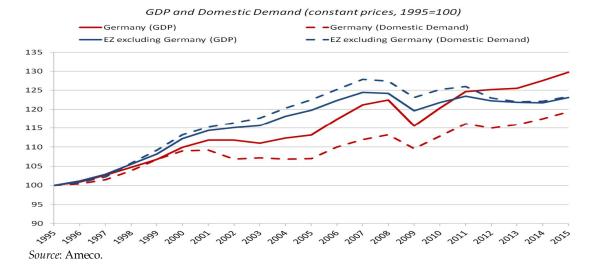
Figure 2. Real effective exchange rate, current account and domestic demand



Note: REERs deflated by unit labour costs in the total economy and computed with respect to EZ 18 trading partners. CORE countries are Austria, Belgium, France, Finland and the Netherlands. *Data source*: Eurostat.



Source: IMF.





In sum, Germany has emerged as a kind of real economic anchor of the eurozone, forcing its preference for high savings and slow growth of domestic demand onto the other members, where however this slow growth is incompatible with the need to reduce debt and reabsorb much higher unemployment and social distress. At the same time, very low inflation further compresses the margin for change in relative prices and wages.

Figure 3 casts further light on the depth and persistence of the divergence in fundamentals within the eurozone. The total factor productivity (TFP) developments are represented in the upper quadrant: as may be seen, while all eurozone member countries fall behind the United States. the inception of the euro has coincided with an adverse structural break in productivity in the periphery, with no visible sign of recovery as yet. Elsewhere (Micossi, 2015b), I have argued that lax financial conditions and the shifting composition of output towards non-tradables in the periphery, linked to real exchange-rate appreciation, may help explain developments. An indirect confirmation may be found in the data on the quality of institutions

(based on World Bank indicators), depicted in the middle quadrant of Figure 2: they show, after the start of the euro, a deterioration of key institutions that are relevant for economic performance everywhere, but even more strongly in the periphery. While a drop in government effectiveness may be due to some extent to the dramatic cuts in public expenditure required by austerity, there is no reason why the preservation of the rule of law, the control of corruption or the quality of regulation should have worsened in response to the financial crisis. A large weight in these results for the periphery is attributable to Italy.

The third quadrant of Figure 3 displays debt-to-GDP ratios for Germany, the core and the periphery of the eurozone. Public-debt ratios diminish in Germany and Ireland, but are still increasing in many countries.<sup>6</sup> For highly indebted countries, the apparent weak effect on inflation of the ECB's quantitative easing (QE) and the inability to agree on common policies capable of raising real economic growth above the current meagre numbers portends renewed financial turbulence, with smaller cushions to cope with it.

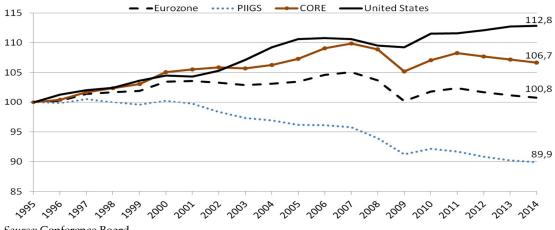
with EU institutions entails a fresh cut of the public sector deficit of some 4.5 percentage points of GDP, in a country that has already lost a quarter of its output since the financial crisis struck. This was the price to be paid to gain approval of the new rescue package in the German Bundestag, but has hardly improved the credibility and sustainability of eurozone policies.



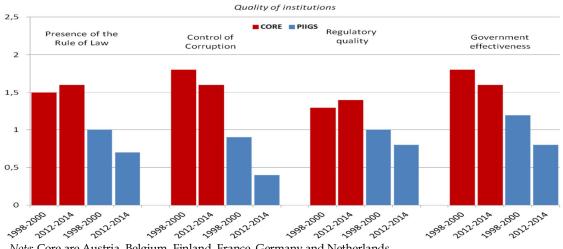
<sup>&</sup>lt;sup>6</sup> Debt ratios stand above 120% in three countries (Greece, Italy and Portugal), at 197% in Greece (where each bout of austerity has only raised the level higher, despite private creditors' write-offs of €100 billion), above 100% in Belgium and Ireland, and close to 100% in France and in Spain, where they are still rising. That Greece cannot honour these debts and that some kind of debt relief will again be required is obvious; and yet the current adjustment programme agreed

Figure 3. TFP, quality of institutions and public debt



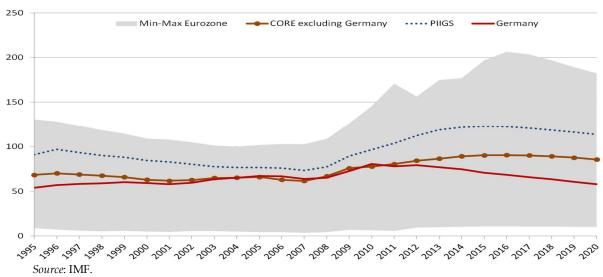


Source: Conference Board.



Note: Core are Austria, Belgium, Finland, France, Germany and Netherlands. Source: World Bank. Our updating and reclassification of the figure from Boltho & Carlin (2012).

General government debt (% of GDP)



# 3. Comparing the eurozone with Bretton Woods exchange-rate arrangements

The BW fixed exchange-rate system differs from the eurozone in many important features, including the fact that the former offered a way out of parity changes when confidence problems made financial stresses unendurable, while that option does not formally exist in the latter (although the prospect of Grexit has been repeatedly invoked in the European Council in the heat of life-and-death negotiations over the Greek adjustment programme, and markets have no doubt taken notice). Moreover, in the former system, liquidity creation was in the hands of the central bank providing the reserve currency, the US dollar, while in the latter it is in the hands of an independent institution governed by a Committee (the ESCB Governing Council) deciding by and large by consensus. Thus, the former system was open to excessive liquidity creation, which destroyed confidence and eventually broke the system (Triffin, 1978; Meltzer, 1991), whereas in the latter, confidence was shattered to the breaking point by the possibility that the ECB would not be allowed to intervene as a lender of last resort in distressed sovereign debt markets (De Grauwe, 2013; Micossi, 2015b).7

A feature common to the two systems is that the adjustment burden falls more on the deficit country when liquidity is scarce, and on the surplus country when liquidity is abundant (Meltzer, 1991; Bordo, 1993). In any event, neither

system has been able to establish a functioning adjustment mechanism to correct competitive imbalances based on an agreed burden-sharing between surplus and deficit countries (Bordo, 2014).

But there are other features of the two systems worth comparing, notably including the balance of economic benefits from participation in the system. In this regard, a first feature to be stressed concerns the structure and evolution over time of the balance of payments. In both systems the centre country displays on average a current balance-of-payments surplus; however, under BW the surplus was shrinking over time, thus generating a positive demand stimulus for the other participants (Bordo, 1993); in the eurozone, the opposite has been true, as has been described. Moreover, under BW the current payment surplus was offset by massive official aid flows in the 1950s (the pre-convertibility phase, up to 1958), and equally massive private direct investment flows in the 1960s (the convertibility phase).8 These flows played a paramount role in fostering the post-war reconstruction and then rapid catching up in technology and productivity.

This contrasts sharply with the experience of the eurozone, where direct investment by Germany in the rest of the area, and especially the periphery, has been subdued up to the crisis, close to nil after the crisis struck and capital markets became fragmented by vanishing confidence in the periphery. Thus, the

<sup>&</sup>lt;sup>8</sup> Under BW, full convertibility of national currencies into US dollars and gold for current balance-of-payments transactions was established at the end of 1958; countries maintained the right to impose restriction on capital flows, which were indeed repeatedly resorted to when pressure on existing parities built up strongly. Thus, the convertibility phase of BW lasted from the end of 1958 to the severance of the link between the US dollar and gold in August 1971, and the fixed parity system eventually broke down in early 1973 (Eichengreen, 1996; Meltzer, 1991).



<sup>&</sup>lt;sup>7</sup> In the eurozone, the first-line escape valve when one of its members comes under attack by financial markets is the existence of a payment clearing system, the Target system, that provides open-ended financing of payment imbalances, as long as national banks have eligible collateral to bring to the ECB. During the sovereign debt crisis, private capital flows vanished and the interbank payment system came close to collapsing. The ECB then acted to provide ample financing facilities to distressed banks, leading to the emergence of ample Target debtor and creditor balances (Bordo, 2014; Sinn & Wollmershäuser, 2011).

counterparty to ballooning current surpluses was portfolio investment out of the area.<sup>9</sup>

Three indicators of the real economic impact of the two exchange-rate systems are presented in Figure 4 (over the respective time horizons of existence):

- 1. In the upper quadrant, it may be seen that the real exchange rate of the centre country was always relatively more undervalued in the eurozone than under BW, entailing a persistently stronger competitive pressure on other participants in the system.
- 2. In the middle quadrant, one can see that the United States always maintained under BW a negative real net trade balance (here depicted as a ratio to domestic demand, to highlight its aggregate impact), while in Germany there has been a swelling surplus depressing demand in the rest of the area.
- 3. In the lower quadrant, one can see the relative evolution of labour productivity in the two areas, with the United States losing ground in favour of its partners throughout the existence of those arrangements, and Germany (slowly) gaining ground throughout.<sup>10</sup>

In sum, under BW the United States opened their domestic market to pull in net exports of their main partners, invested to improve their productivity and provided ample liquidity to facilitate the expansion of trade and the payment

system. Throughout the BW period, US domestic demand was growing buoyantly; after the mid-1960s, the appreciation of the real exchange rate of the dollar was amplifying the room for expansion in the rest of the industrialised world. Thus, altogether it comes as no surprise that the BW system displays the best real economic performance amongst all exchange rate systems on record (Bordo, 1993).

The eurozone, on the other hand, has been anchored to a country with stagnating or very slowly growing domestic demand, a sharply depreciated real exchange rate and little contribution of stable long-term capital flows to the financing of the current-account deficits in the rest of the area. Total factor productivity growth has been stagnant throughout the area and there has been little market opening beyond manufacturing, the domain of the German competitive advantage. The services markets have remained closed, especially for the very important network utility services (energy, transport and communications), which are still organised on a national basis under tight national protection (and often public ownership of service providers). This market segmentation and persistent protection of national oligopolistic structures in network services and network utilities has been consistently identified as a main factor in explaining the sizeable delays in the adoption of IT technologies and the productivity shortfalls in the eurozone and the European Union relative to the United States (Timmer et al., 2010).

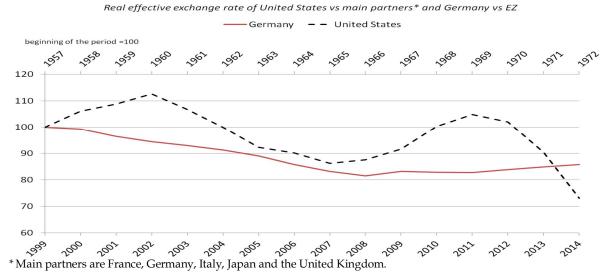
Onference Board data on total factor productivity are only available starting in 1990. For this reason, the comparison of productivity in the lower quadrant of Figure 4 is based on labour productivity – which amplifies the relative gains of US partners, owing to stronger labour substitution in the presence of more rapid labour cost increases relative to the United States.



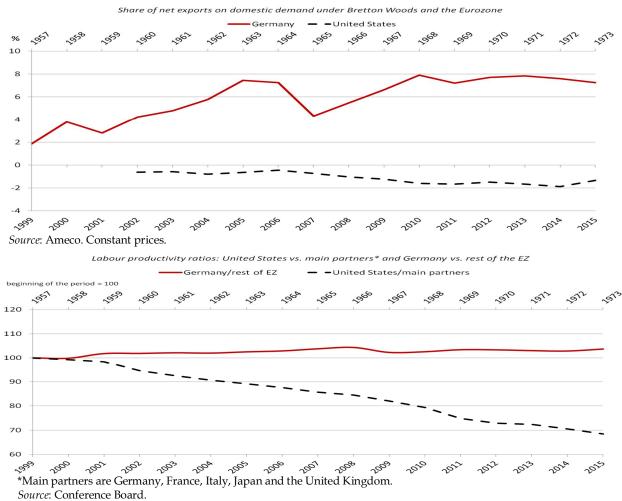
<sup>&</sup>lt;sup>9</sup> According to the European Commission (and other observers), these investments abroad have yielded dismal returns, also due to massive losses on derivative positions (see European Commission, 2014, Box 4.1, p. 72). Busse & Gros (2016) have challenged this view – mainly based on the observed discrepancy between the cumulated current accounts of Germany and its net international investment position (NIIP). They argue that the NIIP is incorrectly measured, while the returns on net foreign investments in the balance of payments have risen in recent years (to some

<sup>[2]</sup> percent of GDP or, according to their estimates, to about 4.5% on average over the NIIP.

Figure 4. Real effective exchange rates, net exports and labour productivity under Bretton Woods and in the eurozone



Source: Eurostat for Germany, relative to the rest of EZ. Bordo (1993) and US Bureau of Labor Statistics for the United States, computed as the average of main partners' bilateral real exchange rates ULC adjusted.





#### 4. **Concluding remarks**

The evidence discussed in this note raises some questions relevant for the long-term sustainability of the eurozone. The system seems unable to generate sufficient growth and inflation to place excessive public debt on a credible reduction path. It does not seem to have a functioning adjustment mechanism to reabsorb existing competitive imbalances; their correction solely through domestic deflation policies in deficit/debtor countries would worsen an already dismal growth performance and possibly soon hit a hard wall of political and social resistance. Under these trends, one cannot exclude that at some stage a new financial shock may hit a highly indebted country - possibly when the ECB's bond-buying programme will come close to its end - while discussions on an effective risk-sharing mechanism remain stalled in a climate of deep mutual mistrust.

The eurozone is not condemned to this doomsday scenario and could be lifted from this unsustainable path by appropriate policies, but these would require choices that its members seem at present unwilling to make.

On the one hand, it is imperative to raise the growth path of the eurozone economy, and the ECB expansionary policies may not suffice to this end. There is an urgent need to raise public and private investment in Germany and elsewhere, to improve material and immaterial infrastructures where the European economy has been falling behind (IMF, 2014). The ultra-low level of longterm interest rates offers ample opportunity to borrow and invest long-term at attractive returns. The Juncker plan (European Commission 2015b) may be of help in this regard. However, a significant increase in private investment will not be forthcoming without a major market-opening initiative by the European Council and the Commission - which brings me to the second horn of a strategy to rescue the eurozone from its eventual demise.

The eurozone (and the European Union) needs aggressive market opening in services, which is the area where it has been systematically lagging behind the United States in GDP productivity growth, and which holds the promise of generating significant income and jobs. There is an especially urgent need to open Europe's network utility services to competition and cross-border integration, which would attract substantial private investment from all over the world for the consolidation of the fragmented and inefficient energy, transport and communications industries in the area. Over the longer period, the eurozone should aim to achieve a full integration of labour and capital markets, which is the only way to finally eradicate market segmentation and competitive imbalances from its economy.

All of this is predicated, of course, on the hypothesis that budgetary and structural reform policies in the eurozone member countries will be kept on a course of improving convergence in fundamentals.



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