

European monetary union, competitiveness and nominal exchange rates

Comment to Charles Wyplosz¹

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The interesting paper by Charles Wyplosz challenges one of the orthodox mainstream interpretations of the Euro crisis. This must be welcomed as it is becoming increasingly clear that the policies derived from orthodox analyses do not work.

Wyplosz's critique focuses on the conventional argument that 'internal imbalances' in the Euro Area were caused by excessive inflation leading to losses of competitiveness, slow growth and unsustainable budget deficits. The policy conclusion is then that austerity is necessary to restore competitiveness in the south. Wyplosz does not question the harmfulness of imbalances, but he argues that they are not so much caused by domestic inflation dynamics or excessive wages increases in the crisis countries but rather by the strength of the nominal euro exchange rate. This hypothesis fits in nicely with the emerging debate about currency wars.

In order to prove his case, Wyplosz first shows that conventional measures of unit labour costs do not estimate competitive distortions correctly because they are based on time indices with arbitrary base years rather than on equilibrium relations. He therefore proposes to measure competitive positions with respect of each country's average long run unit labour costs and finds that the initial distortions, which occurred after the start in monetary union, have largely disappeared during the recent crisis. He then proceeds to analyse the drivers behind these distortions and finds 'that the main cause of southern real appreciation is not inflation differentials but a nominal appreciation', or to be more precise, 'countries that did not cut relative labor costs in the face of a strong appreciation of the euro – or in the case of Spain, did not cut enough labor costs in the face of a very strong appreciation – are those that suffered competitive losses'. By contrast, Germany and other northern states did reduce labour costs even more than warranted by the euro exchange rate, thereby causing an 'asymmetry problem'.

This raises the question, why the south has not adjusted more. Wyplosz's answer is that positive domestic demand shocks caused by lax fiscal policy (Greece, Portugal) or credit booms (Ireland, Spain) have prevented wages from falling more before 2009, but the negative shocks since 2009 have corrected this distortion. Wyplosz summarises that the asymmetry problem could be hard to treat in monetary union, but European labour markets are more flexible than frequently thought. Hence, 'the conclusion should not be that a monetary union among sovereign countries is impossible.' Rather it may turn out 'that monetary unions are more robust than hitherto believed'.

I agree with these conclusions, but I believe that the case is even stronger than put by Wyplosz. His argument hinges on his evidence of flexible European labour markets. I am not fully convinced by this, as I will show below, but there are other mechanisms that have kept the Euro Area from falling apart in the crisis. Let us first

¹ Charles Wyplosz, 2013. Eurozone Crisis and the Competitiveness Legend. *Asian Economic Papers* 12 (2) - forthcoming

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look at these mechanisms and then find ways to determine equilibrium unit labour costs and measuring competitiveness.

Monetary union as a payment union

Wyplosz correctly points out that 'there is a sharp qualitative difference between fixed exchange rates and a currency area'. Indeed: a monetary union is not a fixed exchange rate area; it is a payment union. This means that a currency area is the territory where credit contracts are extinguished by transferring the legally defined and generally accepted currency. The central bank provides this currency (a liability in its balance sheet) as liquidity to the banking system. *Ipsa facto*, the central bank - as the bank of banks - is the lender of last resort. This is, of course, as true for the ECB as for any other central bank, and by fulfilling this function the European Central Bank has prevented the collapse of the euro. It is this function of the ECB as provider of liquidity to the banking system that makes the Euro Area robust and it implies also that the central bank sets the domestic budget constraint for the economy. In this respect, the Euro Area functions exactly as any other payment union, such as Switzerland, Canada or the United States. In other words, from a monetary point of view, the Euro Area is a 'country' and not its constituent member states.

A fixed exchange rate regime functions differently, because in international monetary relations different currency areas are different economic 'countries'. In order to make a payment, domestic money must be exchanged against foreign currency at a fixed price. This requires access not to credit from the central bank, but to foreign currency. Hence, the external budget constraint is the amount of foreign exchange reserves accumulated by the central bank. These foreign reserves are recorded as *assets* in the central bank's balance sheet and not, as domestic money, as a *liability*. It is, therefore, a category mistake to mix up the domestic banking reserves, which guarantee that the banking system remains liquid, and foreign exchange reserves, which ensure the convertibility of domestic into foreign currency. European monetary union is therefore in no way comparable with Bretton Woods, which had the purpose of fixing exchange rates between different currencies, just as no one would compare the United States with a fixed exchange rate regime between states.

In a monetary union payment flows are a closed system.³ A member state's deficit in intra-Euro trade is financed by credit by the banking system. This credit can be either generated locally and refinanced by the central banks or local borrowers may borrow from non-local banks by drawing on savings from other regions. As a consequence, a shortfall of regional capital inflows to finance a trade deficit is matched by regional outflows of currency. This payment mechanism sustains monetary union. It allows member states running large trade imbalances in the short run, which may actually be a sign of market efficiency,⁴ but in the long run the outflow of money will depress the region unless it generates conditions that attract investment.

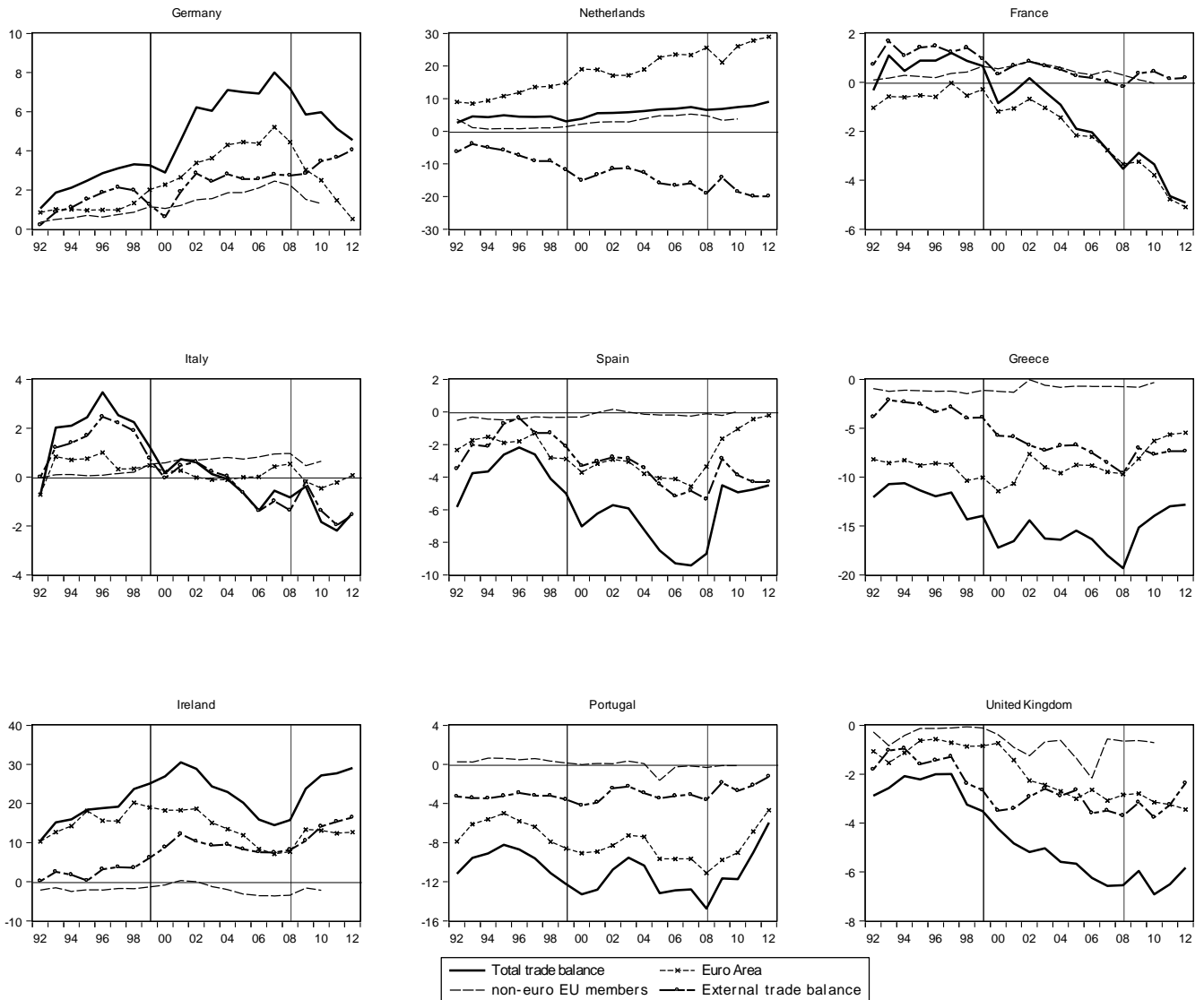
The role of competitiveness

³ Thus, regional imbalances are recorded by the flow of funds between sectors and regions, and not by national current account statistics, which have lost the important function of signalling whether "a country" is able to pay back its foreign debt. Only the Euro Area has 'foreign' debt or reserves. Even if one considers member states in the Euro Area as "foreign", the problem of *foreign reserves* does only exist with respect to the outside world. Within the currency area debt is extinguished by making payments in the same currency. For flow-of-funds analysis in the Euro Area, see Collignon, 2013.

⁴ See Blanchard and Giavazzi. 2002; Buiter and Gourinchas Brookings. 2002.

The possibility of 'rotating slumps' (a term coined by Olivier Blanchard) is why regional competitiveness remains an important issue in monetary union. However, measuring competitiveness by trade-weighted real exchange rates, which amalgamate intra and extra Euro Area trade, is confusing the picture. As can be seen by Figure 1, the trade performance by Euro Area member states is very mixed. Only Germany and Ireland have positive trade balances in intra and extra European trade. In addition to these two member states there are also Austria, Estonia, Finland and France who earn the foreign currency which is spent by the other member states. By contrast, other than Germany and Ireland only the Netherlands, Belgium and Slovakia have positive trade balances within the Euro Area. The Euro crisis has reduced net exports from Germany into the Euro Area, but not into the rest of the world, signalling that lack of demand from crisis countries is harming German exports. This is mirrored by the improvements of intra-Euro Area trade balances of the southern crisis member states (Spain, Greece, Ireland, Portugal and to a lesser degree in Italy). The Netherlands achieve huge trade surpluses in Europe, but deficits in the rest of the world. France, by contrast, accumulates trade deficits in Europe and roughly balances its external trade. These data show a differentiated picture of trade performance that reflects the efficient allocation of resources in a single market with a single currency. There is no need to for each member state to balance trade with all regions in the world. It is therefore necessary to distinguish between competitiveness *within* the currency area and *between* different currency areas and this distinction has significant implications for defining the equilibrium of unit labour costs.

Figure 1. Intra and Extra European Trade Balances



An alternative definition of equilibrium unit labour costs.

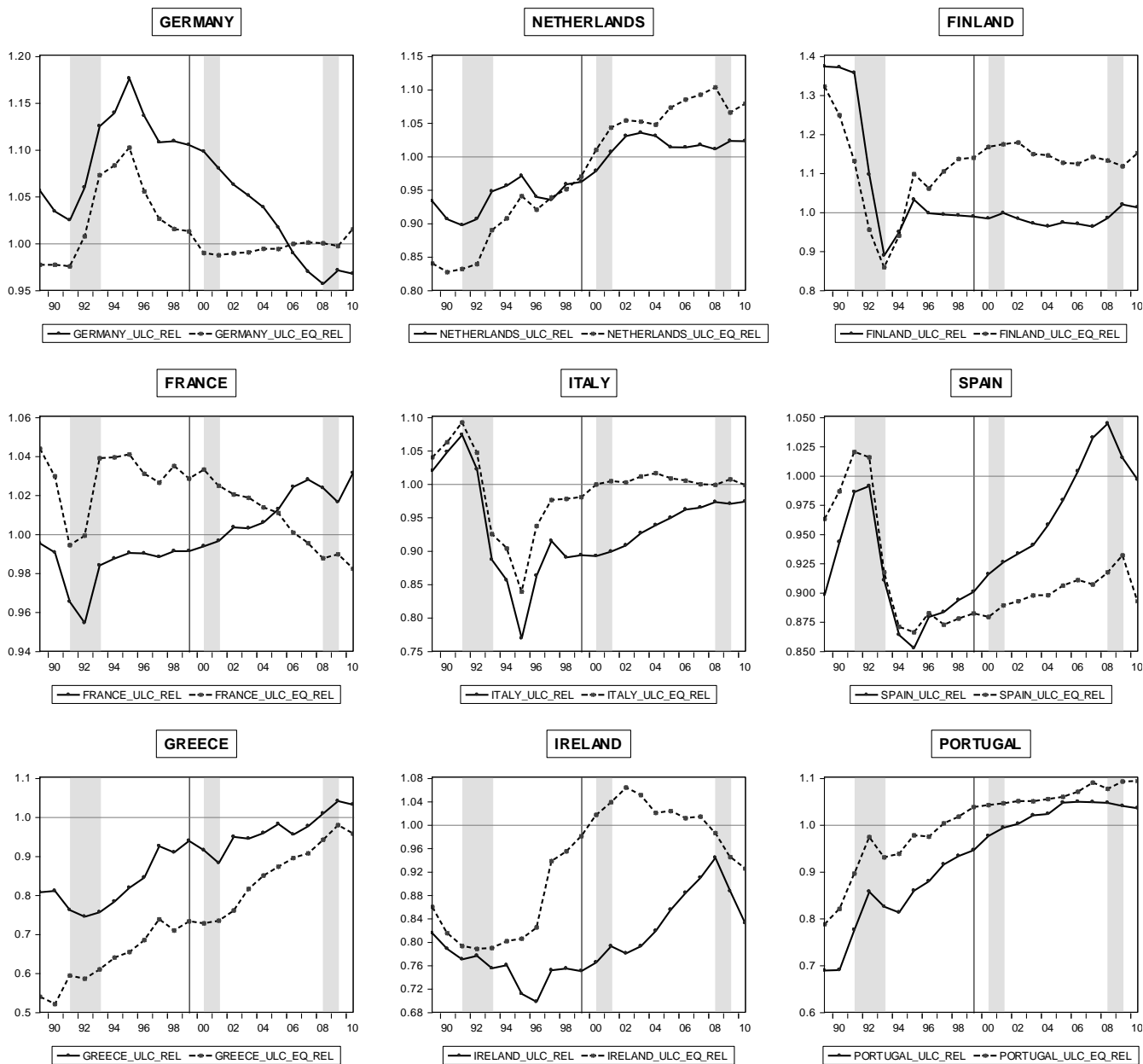
Wyplosz has rightly criticised the use of conventional unit labour cost (ULC) indices as arbitrary. They say nothing about differences in relative cost *levels* in the base year, i.e. if the economy started from an undervalued or overvalued position. To judge whether this is the case, one needs to establish a benchmark for relative unit labour cost *levels* and not of rates for *change*. Unfortunately, Wyplosz’ device of using a long run average as benchmark is also arbitrary and lacks theoretical foundation. I will present here an alternative indicator.

If competitiveness matters for attracting investment and generating growth, our benchmark for measuring it should be the rate of return on capital. A region is competitive if capital is able to earn a decent return, which depends on prices, wages and labour and capital productivity.⁵ Taking the Euro Area as a benchmark, the relative return on capital in different member states would indicate whether labour costs are overvalued or

⁵ For a full explanation see Collignon 2012. Raw data underlying the figures in this comment are from the European Commission’s AMECO data base, unless indicated otherwise.

undervalued. Figure 2 shows the levels of *equilibrium unit labour costs*, calculated under the assumption that the return on capital in a given member state is equal to the Euro Area average (punctuated lines), and compares them to the actual values (solid lines). The vertical shadows indicate the ERM crisis in the early 1990, the dot.com bubble crisis in 2000-1 and the recent Global Financial Crisis after the Lehman bankruptcy. European monetary union started official on 1 January 1999. The equilibrium level of unit labour costs is neither constant nor necessarily close to parity (the horizontal line), because capital productivity has changed and/or because inflation differentials or wage settlements have modified profit margins. All these factors influence the return on capital.

Figure 2. Equilibrium and actual unit labour costs levels relative to Euro Area

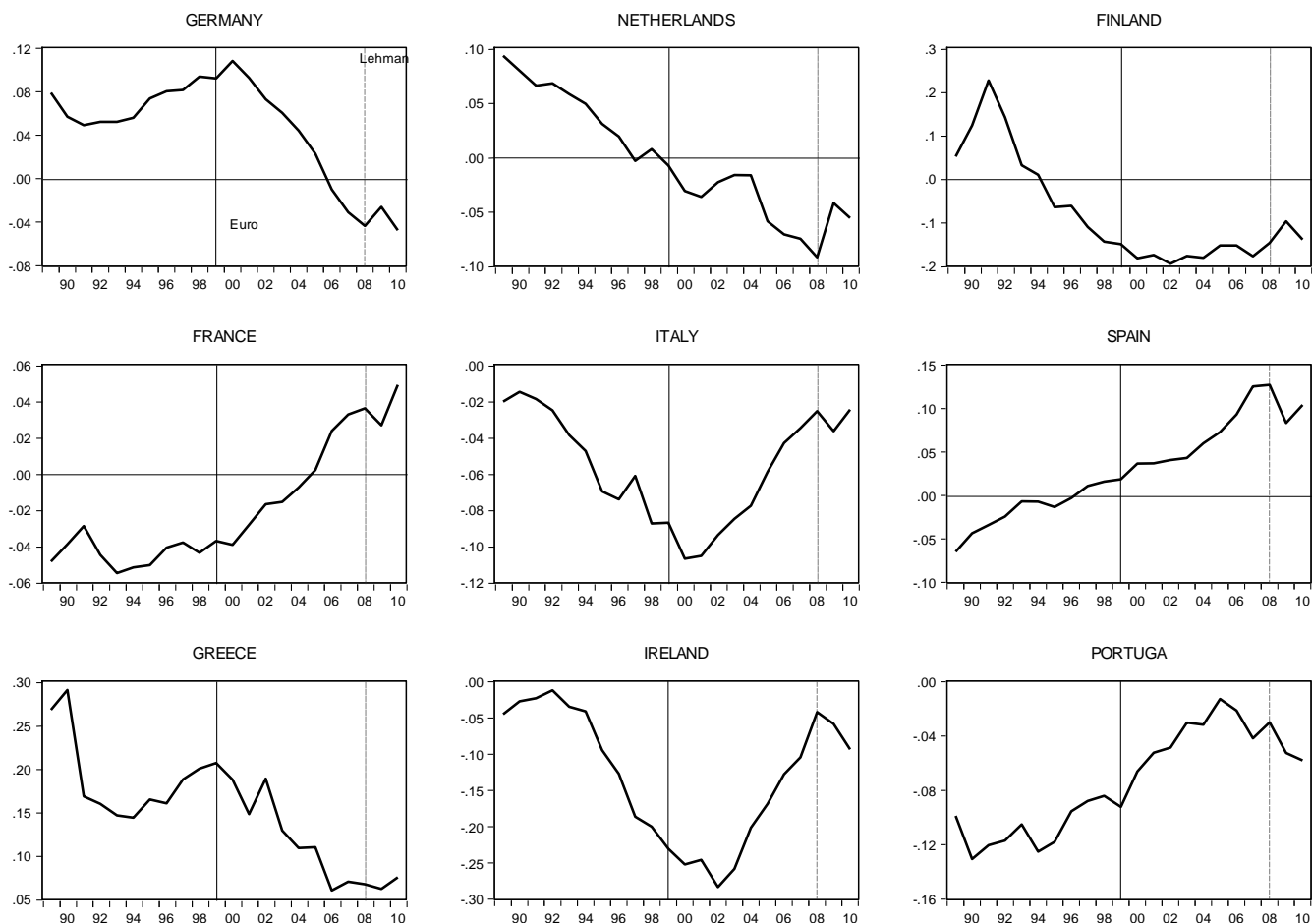


Northern member states are generally undervalued. In Finland this undervaluation goes back to the crisis years in the early 1990s, in the Netherlands it started around the time of monetary union in 1999, and in Germany it occurred with the Schröder labour market reforms. France has moved from undervaluation to overvaluation, Italy has lost competitive advantages and is now close to equilibrium. In the crisis countries, Spain is hugely overvalued, Greece less so, but Portugal and Ireland are still undervalued.

A quick way to see changes in the positions of competitiveness levels is by taking the difference between the actual and equilibrium unit labour costs relative to the Euro Area for a particular country. Figure 3 summarises this information into a single *Competitive Index*. The zero line indicates that at these unit labour cost levels the average return on the capital stock in a given member state is equal to the Euro Area. An *index number* above

the zero line represents an overvaluation. For example, 0.1 means that the ULCs of a member state would have to fall by 10 percent in order to ensure a national return on capital equal to the Euro Area average. An *increase* in the index is equivalent to a *loss* of competitiveness.

Figure 3. Competitiveness index for Euro Member States



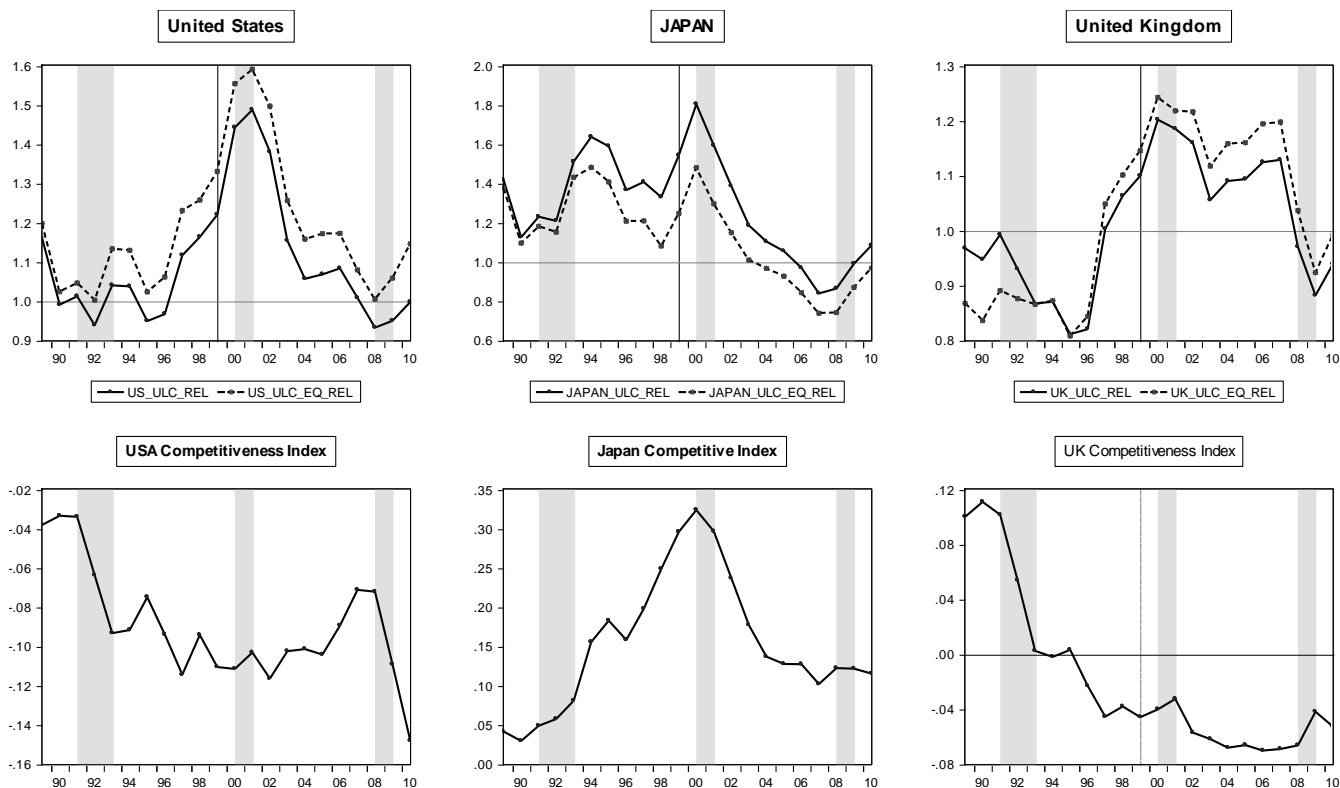
The movements reveal very different behaviour in unit labour costs. Although the crisis in 2008 has had an impact on cost levels in most countries, a durable adjustment toward equilibrium levels can hardly be observed anywhere. I am therefore less optimistic than Wyplosz as far as labour market adjustment in the Euro Area. The Euro Area would need to reform its wage setting mechanisms in order to accelerate convergence of Unit labour costs to equilibrium levels.

International competitiveness

Competitiveness between different currency areas is affected by nominal exchange rates, which change the level of relative costs and prices. However, from the point of view of our competitiveness measure, what matters is how these changes translate into relative returns on capital. Because changes in the exchange rate affect prices and costs simultaneously, the impact of nominal rate changes on our competitiveness index is less dramatic than relative price changes, which Wyplosz discusses against the background of purchasing power parity theory. The reason is that, say, a devaluation affects the marginal rates of return, while our index measures the average return on an economy's total capital stock. Over time, asymmetric adjustment may take place, depending on whether foreign prices respond to a domestic undervaluation or how quickly domestic costs rise with higher import prices. These adjustment effects will then show up in our competitive index. We can therefore use the same methodology to measure competitiveness between different currency areas as between regions in monetary union, but we must convert foreign nominal values into euro values.

Figure 4 shows that the United States have had a quasi-permanent competitive advantage relative to Europe, and Japan a lasting disadvantage. The effect of exchange rate variations is ambivalent. The nominal exchange rate has shifted price and cost levels simultaneously to a substantial degree in the trans-Atlantic relation, but before the financial crisis competitiveness as measured by relative rates of return has not changed significantly. This is different for Japan, where the improvement in competitiveness started with the weakening of the yen, while the financial crisis has not affected competitiveness relative to Europe. The UK has reduced its overvaluation after exiting from the European Monetary System in 1992, but it has lost this advantage during the recent crisis despite a weakening of the pound.

Figure 4. Non-Euro Area countries

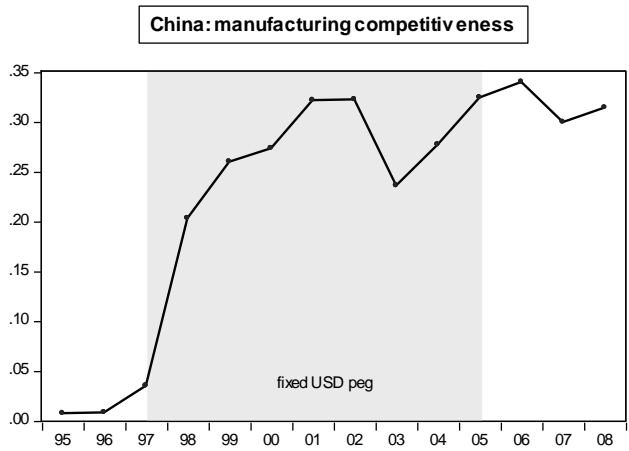
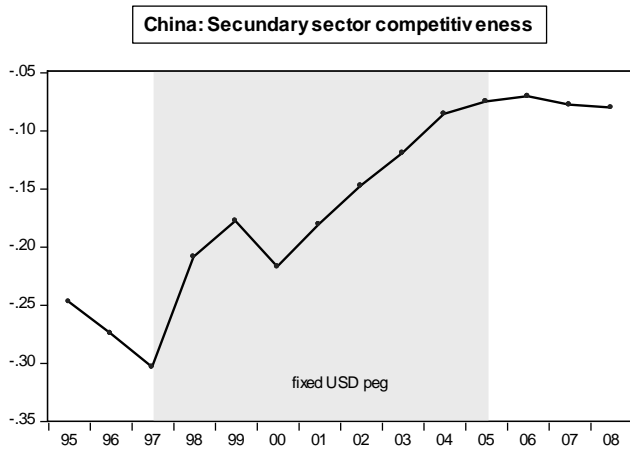
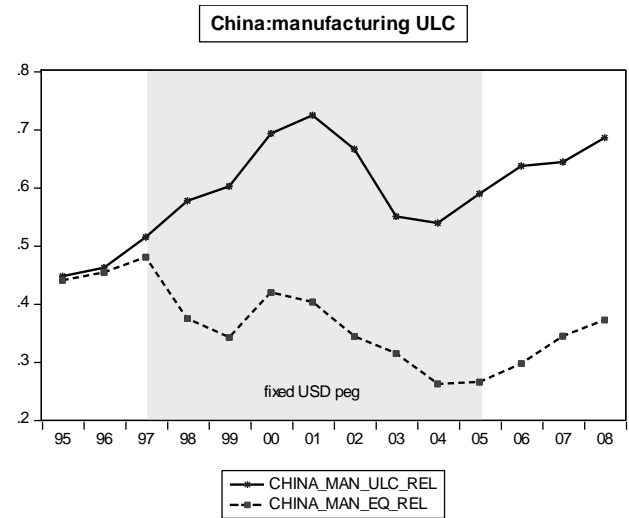
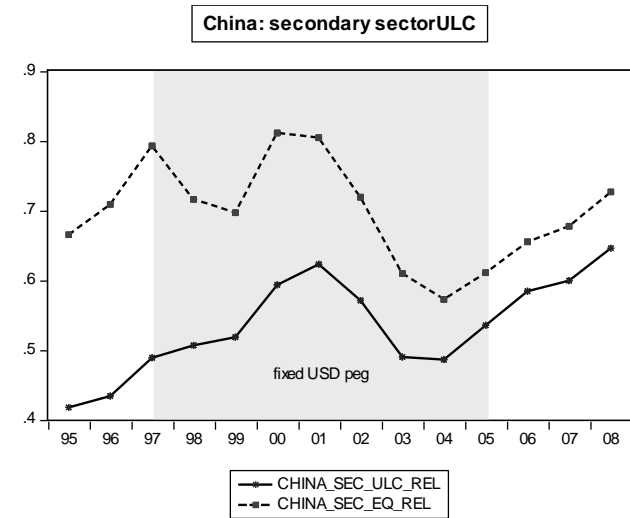


Finally, we try to assess the competitiveness of China relative to the Euro Area. This is more difficult because the data from China's Statistical Year Book are not fully reliable and comparable with AMECO data. A significant unknown is the productivity in agriculture. We have therefore calculated the competitive index for the secondary sector and for manufacturing.

With the economic reforms in the 1980s, China's exchange rate was strongly devalued relative to the dollar and in 1995 the exchange regime was unified. In 1985 nominal unit labour costs in manufacturing were nearly 60 percent higher than in Europe; ten years later they were only 44 percent of the euro-level. While this nominal undervaluation is dramatic and certainly a source of complaints about wage dumping, Figure 5 shows that at least for the manufacturing sector they represented an equilibrium position in 1995 because capital productivity was so much lower in China. For the secondary sector as a whole, unit labour costs were undervalued by 30 percent.

However, since the mid-1990s, competitiveness has deteriorated, especially during the years of the hard fixed USD-peg. Since then, the secondary sector competitiveness index has stabilised at around 7 percent below the equilibrium, while the manufacturing industry seems to operate with labour costs 25 percent too high. These results are surprising. These losses of competitiveness are largely due to deteriorating capital productivity caused by the over-accumulation of capital. Thus, assuming that the data are correct, one may conclude that this contradictory evidence may at least indicate that the Chinese currency is not really undervalued relative to the euro and therefore even less with respect to the US dollar. However, given that Japan is overvalued to the euro and even more so to the USD, China may be undervalued against the yen, its main economic partner.

Figure 5. China's ULC competitiveness



Source: China Statistical Yearbook

Conclusion

This comment has supported the idea that European monetary union is economically more robust than often thought, but it questions the evidence that this resistance is mainly due to improved labour market flexibility. If equilibrium levels for relative unit labour costs are derived from the assumption of equalised returns on capital, we find significant distortions between Euro member states and also between countries with flexible exchange rates. The policy implication is, of course, that exchange rate management is less important for improving competitiveness in Europe than productivity developments for labour and capital and the adaptation of wage bargaining systems.

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