The European Debt Crisis, Exchange Rate Angst and the Prospects for Rebalancing[1]

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In this brief note, I will focus on the implications of the European debt crisis for the rest of the world. Of course, the impact will depend on how effectively the governments of the Euro Area deal with the political and economic challenges they face. I will assume for the sake of argument that the governments will be able to implement measures that calm the financial markets by shrinking incipient budget deficit to GDP ratios, but these measures will not be able to fully mitigate the tendency for capital to seek a safe haven in US dollar denominated assets. That scenario informs my outline of the implications for global rebalancing.

The Euro, the Dollar and East Asian Currencies

As the euro has plummeted against the US dollar, there's been concern that efforts to rebalance the global economy will face increasing headwinds. This worry is only added to by the already widening US trade deficit. In this post, I don't want to dispute the difficulty of effecting global rebalancing. It was already a difficult task, even before the euro area's recent debt-related travails. What I do want to do is to put the recent exchange rate movements in perspective. My three observations are as follows:

- The euro is a relatively small component of the US trade weighted exchange rate.
- The persistence of exchange rate movements is important in determining the impact on trade flows.
- Rebalancing was never going to be effected by exchange rate re-alignments alone.

To elaborate on the points, first consider a graph of the dollar/euro exchange rate expressed in units of USD per EUR.

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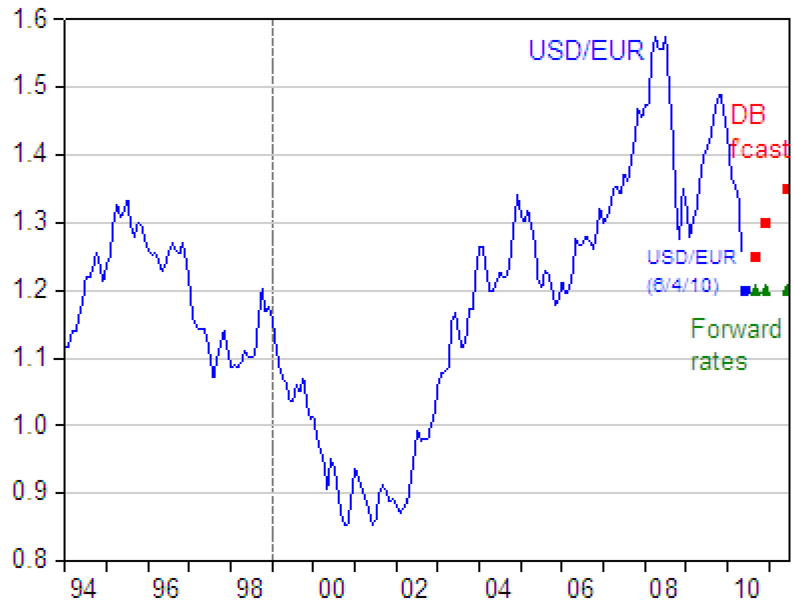

Figure 1: USD/EUR exchange rate, monthly averages (blue line); synthetic euro before 1999M01. USD/EUR exchange rate on 6/4/2010 (blue square), Deutsche Bank forecasts as of 6/4/2010 (red squares) and forward rates (green triangles). Source: Federal Reserve Board, Deutsche Bank, *Exchange Rate Perspectives*, June 8, 2010.

Clearly, the euro has declined precipitously since late last year. As of June 4, the USD/EUR rate was 1.2 and has recently risen to 1.237 by June 25. While forward rates (which have little predictive power, and usually point in the wrong direction) imply no change, the Deutsche Bank forecast is for strengthening against the dollar, rising to 1.35 USD/EUR in a year's time. That's just one forecast, and given the uncertainties regarding the resolution of the euro area's fiscal problems, one doesn't want to put too much stress on it. On the other hand, forecasts by forex market participants tend to cluster together.

A second point is that movements in the dollar/euro rate don't necessarily correlate with movements in the dollar. In fact, despite the euro's depreciation, the dollar has exhibited much less movement on a real, trade-weighted, basis. This is shown in the next figure.

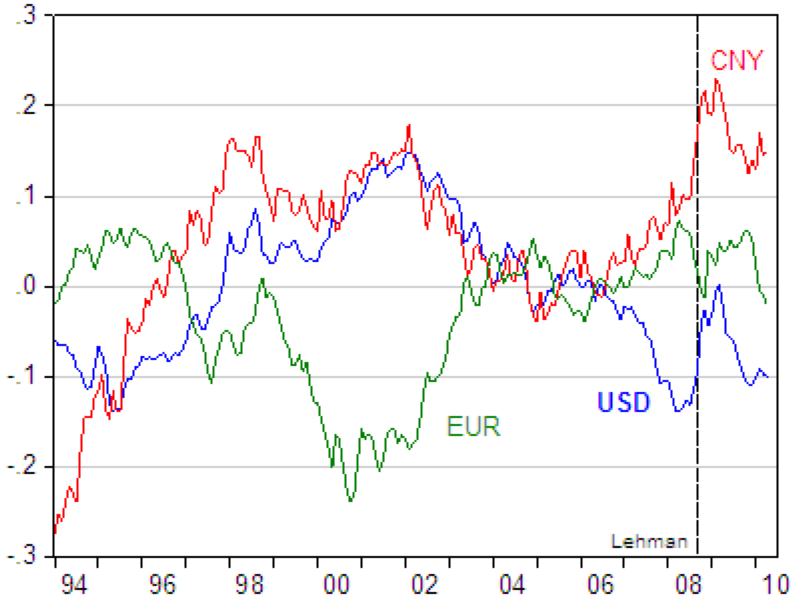

Figure 2: Log broad trade weighted real USD (blue bold), CNY (red) and EUR (green). Source: BIS and author's calculations.

The data on this graph only extend up to 2010M04. The USD in nominal terms, on a broad basis, has appreciated by 2.8% (log terms, not annualized) in May. Still, that puts into perspective the fact that the USD is roughly where it was on the eve of the Lehman collapse.

The big question in my mind is the persistence of the euro's weakness, and the dollar's (relative) strength. Deutsche Bank forecasts a 10% depreciation in the DB US trade weighted dollar (10.7% in log terms) in one year's time. If the euro area is able to relatively quickly calm the financial markets, and the Fed does not yield to pressures to exit quickly from quantitative easing, then this forecast may very well come to pass.

What does euro depreciation on a trade weighted basis imply? The conclusions will depend critically on the model, and the auxiliary assumptions. An old-style, large-scale, macroeconomic model, incorporating some newer econometric tweaks, suggests some (positive) impact on aggregate Euro area output, and particularly modest impacts on the United States. (Obviously, the impacts will be distributed unevenly across the Euro area).

Table 11. 10% euro depreciation

Percentage deviations from baseline

	Years after shock				
	Year 1	Year 2	Year 3	Year 4	Year 5
UNITED STATES					
GDP level	-0.1	-0.2	-0.2	-0.3	-0.3
Inflation	-0.1	-0.1	-0.1	-0.2	-0.3
Interest rates (basis points)	-10	-20	-30	-45	-50
Current account (% GDP)	0.1	0.0	0.0	0.0	-0.1
Japan					
GDP level	0.0	-0.1	-0.2	-0.3	-0.4
Inflation	-0.1	-0.1	-0.1	-0.1	-0.2
Interest rates (basis points)	-10	-20	-20	-35	-50
Current account (% GDP)	-0.1	-0.2	-0.3	-0.4	-0.4
Euro					
GDP level	0.7	1.3	1.7	1.8	1.6
Inflation	0.3	0.7	1.0	0.9	0.9
Interest rates (basis points)	85	165	220	210	200
Current account (% GDP)	0.3	0.2	0.5	0.8	1.0
GDP level					
Other OECD Europe	-0.2	-0.3	-0.4	-0.5	-0.5
Other OECD	-0.3	-0.4	-0.4	-0.4	-0.3
Total OECD	*0.1*	*0.2*	*0.2*	*0.2*	*0.1*
China	-0.1	-0.1	-0.2	-0.4	-0.4
Other non-OECD Asia	0.2	0.0	-0.2	-0.2	-0.2
Non-OECD Europe	0.7	0.7	0.5	0.2	-0.1
Other non-OECD	0.5	0.5	0.2	0.1	0.0
Total non-OECD	*0.3*	*0.3*	*0.1*	*-0.1*	*-0.1*
World	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*

Table 11 from Herve et al. (2010). Simulations for quasi-exogenous 10% depreciation in trade weighted euro. Assumes a Taylor rule for monetary policy in all regions, and endogenous fiscal rule.

Further note in Figure 2 that the Chinese yuan, interestingly enough, is pretty close to a trend line drawn from 2005m07 to 2010m04. Which is not to say it is at equilibrium, or that more appreciation wouldn't have a salutory effect on the Chinese and global economies (Cheung, Chinn, and Fujii, 2010).[3]

An Optimistic or Realistic Scenario?

It might appear to some that I am inordinately optimistic. I prefer to think of the *revision* to my outlook as being realistic, in the sense that I never thought that rebalancing the global economy would be particularly easy. Rebalancing was going to require expansionary fiscal policy in the Northern Euro area countries, structural changes in China that would reduce aggregate private

[3] I'm focusing on the Chinese yuan, in part because what happens to it will determine what happens to many of the other East Asian currencies.

saving, and reallocation of production and spending in America that we have yet to see in a sustained fashion.[4] In all this, I viewed exchange rate movements as important dimensions of the adjustment process; but it is important to not overstress what exchange rates can do. My recent work on US trade elasticities suggests that the exchange rate impact on trade flows is pretty small; even for the long run, it is difficult to obtain elasticities in excess of unity, especially for imports (Chinn, 2010). This finding highlights this point that in rebalancing, growth effects, and composition of GDP effects, might be of comparable importance to relative price changes effected via exchange rates.

The one major question I see in this scenario is whether the European governments will try to cut government deficits in the short term, rather than tackling the long run problems of pension and health care problems. In this respect, I agree that concentrating spending cuts and tax increases in the next couple of years will making global rebalance more difficult, without solving the fundamental problems of fiscal solvency. To the extent that the resulting stagnant growth makes it more difficult to sustain political support for fiscal consolidation, that seeming "discipline" will be counterproductive.

References

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[4] For more details on the required actions, see Chinn, Eichengreen and Ito (2010). Frieden (2010) discusses the political economy aspects, which suggest even more pessimism.