

# Europe and Global Imbalances: Comment

Paolo Pesenti

Federal Reserve Bank of New York, NBER and CEPR

May 2007

This paper fills an important gap in our understanding of the implications of global rebalancing. The focus is on Europe, usually the innocent (and marginal) bystander in the debate on current account adjustment. The key message of the paper is that a global hard-landing scenario would have comparatively smaller wealth effects in Europe than in other parts of the world, but its implications for European real and financial markets would be highly asymmetric across countries.

To some extent there is a risk that this paper will be judged more on the basis of its methodology than its bottom line. But it is worth emphasizing that its general direction of analysis is fully convincing, and the basic message pervasive. At a very minimum, readers will find value added in the detailed quantitative projections presented here, estimates that represent the benchmarks against which any future investigation will be compared.

For most analysts, current and future trajectories of global imbalances basically represent a tale of two regional blocs: the US on the borrowing side, *vis-à-vis* a constellation of net lenders typically identified with emerging Asia and the oil exporters. According to the conventional wisdom, Europe (and Japan, for that matter) have relatively little to do with the dynamics of

world saving gluts or investment shortages. And in those rare cases in which Europe is mentioned in the context of the debate, its role is confined to two main issues. First, it is argued that European structural reforms would help to spur world growth and allow the US to spread the “economic engine” burden over a larger set of importer countries. Second, as long as rebalancing requires a dollar adjustment in effective terms, the more limited is exchange rate flexibility in emerging Asia, the stronger needs to be the appreciation of the European currencies against the dollar (an argument that some — including myself — find misleading but others consider self-evident: it all depends on whether the extent of dollar adjustment is taken as an exogenous *datum* rather than as an endogenous variable).

The paper has something to say about these issues, as the role of structural reforms is investigated in the so-called “policies” scenario, and limited exchange rate flexibility in emerging Asia is incorporated in all simulation analyses of European currencies. But the paper covers broader ground, as it considers a series of rebalancing scenarios in the global economy, some involving a smooth macroeconomic adjustment, some characterized by sharper movements in asset prices, and investigates thoroughly the role of trade and financial linkages between Europe and the rest of the world.

The paper does not develop its own simulation model. Instead, it follows a “hybrid” approach. It starts by considering current account scenarios obtained by using the Global Economy Model (GEM), the multi-country model developed at the International Monetary Fund. Next, it uses these scenario projections as a kind of “conditioning assumption” to forecast paths of financial variables and valuation effects excluded from GEM. The assessment of capital gains and losses is carried out by accounting for data on financial asset composition in 2005 and projecting gross inflows and outflows over time, in such a way that net flows are consistent with the GEM simulations. The

shares of currency denomination are assumed to remain constant over time. This approach allows to tackle issues left virtually unexplored in the literature, such as the quantitative implications of wealth effects in the process of current account and exchange rate adjustment in Europe.

Is this approach successful?

I am not sure I can be an impartial judge, as I have quite a few vested interests here. I share with Douglas Laxton the main responsibility for the design of GEM, and I have been directly involved in elaborating some of the aforementioned rebalancing scenarios, which first appeared in a series of research papers and in the IMF's World Economic Outlook. From my (biased) vantage point, what the authors do is very clever. Of course, it is also slightly problematic. Ideally, macroanalyses of wealth effects and asset prices should be designed with an eye to analytical consistency, modifying the simulation model as appropriate to incorporate new elements and desired features (or, perhaps, should rely on a new model *tout-court*). But this strategy is bound to be highly costly given time and resource constraints, and — frankly — it is unclear whether at the end of the day the net gains relative to the hybrid approach would be sizable enough.

There are very good reasons to adopt the GEM projections as a starting point. Because of its general-equilibrium structure, GEM guarantees the internal coherence of the simulations, both at the intratemporal level (thanks to its integrated system of balance of payments accounting across countries) and the intertemporal one (solvency/sustainability considerations, consistent expectations, etc.). Far from embracing theoretical unorthodoxies, GEM is a representative model within its class (a medium-scale, multi-country, multi-sector dynamic macroeconomic model), and its properties and calibration are similar to most outstanding policy evaluation models, including SIGMA at the Board of Governors, NAWM at the European Central Bank, etc..

Also, GEM has been designed to incorporate satisfactory solutions to a large array of analytical problems arising in multi-country macromodels. As an example, consider the choice of long-term elasticity of import substitution. As mentioned in Section 3.B, high values for this elasticity are inconsistent with macro evidence, but low values are inconsistent with trade/micro studies. According to the GEM steady-state calibration this elasticity is relatively high (2.5). The paper states that “as a result, the adjustment in real effective exchange rates associated with reduced external current account imbalances is generally smaller relative to other model-generated estimates in the literature”. But this needs to be clarified: in fact, GEM’s analytical framework includes specific real rigidities (in the form of import adjustment costs) that reduce the effective import elasticities in the short term, allowing for realistic projections of short-term swings in international prices. It is true that the implied paths for real exchange rates in the GEM scenarios are less exorbitant than the ones implied by some back-of-the-envelope calculations or small-scale model exercises in the literature. Whether this is a pitfall of GEM, or rather a desirable feature, can be debated. It is perhaps worth highlighting that the GEM-based projections are qualitatively consistent with event studies on the limited role of real exchange rates in rebalancing episodes in industrialized countries (see e.g. Freund and Warnock, 2007).

Having said that, there is no question of course that some features of the GEM scenarios are open to improvement. For instance, Japan and the Euro area are lumped together in one regional bloc. Partially this reflects limits to the technology of GEM at the time the scenarios were elaborated. Partially it can be argued that Europe and Japan overlap to some extent in key structural characteristics — low productivity growth, very low inflation (or deflation), and structural rigidities, particularly in the labor market. But in the two regions the pattern of net asset accumulation may turn out to

be rather dissimilar going forward, and a more disaggregated analysis would be useful. Also, some of the scenarios may be strongly affected by assumptions about policy responses, in particular the weights assigned to inflation and output gaps in the description of the policy rules in the different country blocs. And, of course, the structure of international financial markets embedded in GEM is far from sophisticated, although the vast majority of open-economy dynamic stochastic general-equilibrium models share similar simplifying assumptions.

If there is a reason for concern about the methodology of the paper, this stems from the fact that the projected paths for exchange rates are assumed to be invariant to the specification of the scenario analysis, thus to the characteristics of the asset markets. To clarify this point, consider two models, one with valuation effects (e.g., with gross assets and liabilities denominated in different currencies) and the other one without. Assume that in both cases the dollar adjusts to generate a path for the trade balance consistent with sustainability. Consider a fall in the external value of the dollar today. Without valuation effects, there is no change on impact in the value of US net debt. The trade balance must improve over time to be consistent with sustainability, and further dollar depreciation after the initial jump may be required. But if valuation effects are considered, the fall of the dollar today reduces the US net debt position on impact, possibly by a sizable amount. Thus, future trade balances need to improve by less without jeopardizing solvency. In this case, the dollar is expected to depreciate less relative to the trajectory predicted by the alternative model.

The point is that if we take the exchange rates projections generated by a model without valuation effects (such as GEM) and use them without any modification to predict the extent of valuation effects, the estimated capital gains and losses may be biased upward. In fact, if we had used the correct

model with valuation effects from the very beginning, the simulated degree of currency volatility would have been endogenously lower relative to the baseline projections, other things being equal.

A related problem with the approach of the paper is that it is not possible to assess how sensitive are consumption and investment behaviors to the estimated wealth effects. In fact, the methodology of the paper allows for no feedback from asset price changes to macroeconomic variables.

These methodological issues notwithstanding, my feeling is that the key results of the paper are quite robust. It is worth summarizing them briefly.

The US mostly gains from valuation effects, while the rest of the world (including Europe, but especially China and Japan) suffers extensive capital losses under the disruptive scenario. A disruptive scenario implies capital losses, partially offset by capital gains in the banking sector. The weakening of the dollar reduces the value of European-owned dollar-denominated claims, although wealth effects are comparatively smaller than in Asia. This is because the trade channel is of limited importance (for most European countries the direct weight of US and Asia in trade is relatively small, with the partial exceptions of Ireland and UK). Also, the level of dollar exposure (and vulnerability to hard landing in currency markets) is relatively small for most countries in the euro area. As most countries have negative net debt, global rebalancing with higher interest rates would raise the cost of leveraging almost anywhere in Europe.

However — and this is possibly the most pervasive part of the paper — there is considerable heterogeneity in the macroeconomic responses within Europe. For Italy (and Austria, Finland, Greece, Portugal) exposure is relatively low. For France, Germany (and Belgium), the degree of exposure is intermediate. Exposure is high in Ireland, Luxembourg, the Netherlands, but especially outside EMU, in countries such as the UK and Switzerland.

And there is dispersion in size (and sign) of current account balances and net asset positions.

The bottom line is that a global hard landing would represent an asymmetric shock in Europe, requiring bilateral real exchange rate movements through inflation differentials or, more likely, cyclical slowdowns in debtor countries such as Spain and Central Europe relative to surplus countries such as Germany. Outside the euro area, there would be scope for bilateral exchange rate adjustment. In Central Europe this may well lead to a tension between need for adjustment and desire to maintain stable exchange rates. Global adjustment and increased risk aversion may reduce capital flows to European countries outside euro area. Although it is difficult to gauge the effective implications (and implied risks) for saving/investment behaviors in Europe, there is little disagreement on the validity and robustness of these conclusions.

## References

- [1] Freund, Caroline and Frank Warnock, 2007. “Current Account Deficits in Industrial Countries: The Bigger They Are the Harder They Fall?”, in Richard Clarida (ed.), *G7 Current Account Imbalances: Sustainability and Adjustment*, Chicago, IL: University of Chicago Press, pp. 133-162.