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**Global Imbalances in the Financial Crisis and the International Monetary System**

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**The financial crisis and its macroeconomic roots**

Even though the crisis caught a large part of the economics profession by surprise, this was not because economists and policy makers had entirely failed to notice the growing elements of vulnerability in the foundations of the global economic expansion. Before the crisis, many of them had identified the risk of a hard landing for the US economy, but in most cases they saw it as originating in the unsustainable US current account imbalance, which might eventually lead to a disorderly dollar depreciation. As it turned out, the trigger of the global financial crisis and its proximate causes were essentially financial in nature, and originated in a specific segment of US financial markets.

However, I don't think that the fundamental sources of vulnerability for the world economy had been wrongly identified. Even though the proximate causes of the crisis lie in previous financial excesses, I would suggest these would not have developed to the same extent had the macroeconomic environment not been characterised by large saving-investment imbalances, very low interest rates and asset price misalignments. These factors created enormous stress for a US and global financial system in which innovations and regulatory failures had progressively introduced serious structural flaws. It may also be argued that the complacency on the part of risk managers and financial supervisors that allowed financial vulnerabilities to grow unchecked owed much to the climate of general optimism that those macro conditions supported. And when we look at how a local financial crisis propagated rapidly across markets, not just in industrialized countries but globally, and then triggered a global recession, it is also clear that only a much broader set of interrelated factors – macroeconomic as well as financial – could have generated a crisis of these proportions.

Over the 10-15 years that preceded the crisis, it was already possible to identify a number of signals of macroeconomic stress, which interacted with financial system flaws to build up very significant, although at the time partly hidden, financial fragilities<sup>1</sup>:

- the dramatic fall in US households' saving rate, from around 7 percent in the early 1990s to close to zero in 2005-2007;
- a very large increase in US and global liquidity, also reflecting the generally accommodating US monetary conditions;
- the widening of global imbalances, recognised as unsustainable already in the late 1990s;

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<sup>1</sup> A more extensive discussion of these macroeconomic developments can be found in a previous paper presented this spring to a G20 Workshop (see I. Visco, “The global crisis: the role of policies and the international monetary system”, in G20 Workshop on the Global Economy, *Macroeconomic causes of the crisis: Key lessons*, Mumbai, India, 24-26 May 2009, pp. 60-80, available at [http://www.g20.org/Documents/g20\\_workshop\\_causes\\_of\\_the\\_crisis.pdf](http://www.g20.org/Documents/g20_workshop_causes_of_the_crisis.pdf) ).

- an enormous increase in official reserves, largely concentrated in emerging Asia and the oil exporting countries, which mostly pegged their currencies to the US dollar;
- very low levels of global long-term interest rates and asset price volatility after 2003;
- a sequence of asset price bubbles, in the United States and globally, most notably the dot.com equity bubble of the late 1990s, followed by an unusually synchronised global housing price boom.

Essentially, these disequilibria reflected rapid and sustained growth in final demand, especially consumption demand, in the United States, financed by over-borrowing, and ultimately by borrowing from abroad. This happened against a background of abundant saving in the rest of the world, especially in Asia; excess savings at the global level tended to compress real interest rates to abnormally low levels when compared to average GDP growth.

If the United States served as a sort of “consumer of last resort,” other large advanced and emerging economies implicitly or explicitly followed an export-led growth strategy, which is difficult to maintain indefinitely but also difficult to abandon.

## **2. The role of policies**

Policies had a non-negligible role in sustaining this pattern of unbalanced growth. To illustrate their role in building up the conditions that eventually led to the global recession, a recapitulation of the sequence of events that have marked the last ten to fifteen years, condensed in the following six statements, might be useful:

- 1) Around the mid-1990s, the acceleration of US productivity associated with the ICT revolution and the increase in household net worth due to rising equity prices determined a first upward shift in private sector propensities to invest and to consume.
- 2) The US monetary policy stance generally accommodated the hype in the “new economy” in the late 1990s; by historical standards it was particularly easy for a prolonged period after the bursting of the dot-com bubble.
- 3) By sustaining US domestic demand, the hype in the “new economy” and the expansionary monetary (and fiscal) stance contributed to an unsustainable widening of the US external imbalance, compensated by growing imbalances of opposite sign in the external positions of major emerging economies, especially after the Asian crisis of 1997-98.
- 4) A number of Asian and oil exporting countries that pegged their currencies to the US dollar accumulated very substantial official reserves. The investment of these in US Treasury paper contributed to lower long-term interest rates.
- 5) Low interest rates triggered a search for yield which, by squeezing risk premiums, tended to make financial conditions even more favourable for a broad range of borrowers. Low perceived risk, abundant liquidity and credit expansion, as well as regulatory failures in some markets, helped feed the house price bubble.
- 6) Eventually, global supply reached bottlenecks in the form of commodity supply constraints, US monetary policy was gradually tightened, and house prices peaked. At that point, the large risk exposures that had accumulated in the financial system suddenly became apparent, precipitating the turmoil.

As it is clear from this brief and very simplified overview, two central elements of the story are: (a) an overly expansionary US monetary policy, which permitted a long expansion of consumer spending financed by growing indebtedness; (b) the choice by China and other emerging countries

to follow an export-led growth strategy supported by pegging currency to the US dollar, resulting in the accumulation of large official reserves.

Both policies were attractive in the short run, but ultimately unsustainable in the long run. In order to understand what allowed them to be maintained for such a long time we need, first, to review the conceptual setup that has been used to frame and to assess monetary policy choices, including the role (at best a secondary one) assigned to asset price and financial stability among the responsibilities of central banks. Secondly, we have to reassess the functioning of the existing international monetary system, asking in particular why it did not effectively induce the correction of the imbalances and promote policies conducive to the orderly functioning of the world economy.

### **3. The limits of the existing policy setup**

#### **3.1 Monetary policy**

It has been convincingly argued that as a result of the success achieved by macro-stabilisation policies and of structural changes in the responsiveness of aggregate supply (also as a result of globalisation), inflation expectations are now much better anchored, and episodes of excess creation of liquidity and credit tend to be reflected primarily in asset price bubbles, rather than in increased consumer price inflation.

The task of monetary policy in this context is not necessarily easier. Because asset price cycles tend to be associated with large changes in indebtedness and add to financial vulnerabilities, they can pose significant risks to financial stability, and therefore interfere with the achievement of macroeconomic stability.

The relevant question is probably not whether monetary policy should *target* more than just consumer price inflation – it probably could not, with just a single policy instrument – but rather whether it should *react to information on* asset price misalignments and financial imbalances in the context of a flexible inflation-targeting (or equivalent) framework. The standard answer to this question – that asset prices and financial imbalances will normally be taken into account insofar as they impinge on the central bank’s objective of price stability – is not very satisfactory in practice. Such frameworks rely on forecasts, whose precision can only decline as we move to more distant time horizons. The models we use to interpret economic data and to set policy are particularly lacking in the treatment of asset prices. In particular, we do not know enough about the effects of asset price misalignments and related imbalances, and also econometric estimates have trouble capturing rare “extreme events”. Many of the effects associated with asset price imbalances are, anyway, likely to be highly non-linear and complex.

Although there is a growing consensus that central banks need to monitor risks to financial stability and to take them into account in the conduct of monetary policy, we still lack a theory of how this can be done in practice. Trying to balance such risks, whose potential size, shape and time horizon are extremely uncertain, against the other, more standard sources of risks to price stability involves a particularly difficult kind of trade-off. To improve the terms of this trade-off it is essential to proceed decisively with the reforms of financial regulation and supervision already outlined by the Financial Stability Board and the Basel Committee. The aim of these reforms is to correct the serious incentive distortions revealed by the crisis and, in this way, to make financial systems both more resilient and less pro-cyclical. Important gains in the direction of addressing the

twin objectives of price and financial stability not only with the instruments of monetary policy can probably be achieved by developing macro-prudential policy tools.<sup>2</sup>

### **3.2 The international monetary system**

The US monetary expansion and China's exchange rate pegging could be maintained for so long because they were mutually reinforcing. Demand from US consumers helped sustain China's (and other countries') export growth. At the same time, an elastic supply of cheap imports from Asia helped keep inflation low in the United States, encouraging the Fed to maintain an easy monetary stance. And the investment of emerging economies' official reserves in US Treasuries contributed to compress long-term yields both in the United States and globally. All this fed global liquidity and rising asset prices.

The countries that pegged their currencies to the dollar effectively imported US monetary policy, regardless of whether it was appropriate for domestic conditions. This fuelled liquidity and credit expansion, also because of difficulties in sterilizing the effects of the accumulation of official reserves, and tended to feed booms in domestic asset prices and investment.

Other surplus countries also had a responsibility in allowing the imbalances to grow. In Japan, long delays in facing up to the structural problems of the financial sector caused a prolonged stagnation of demand. In Germany and other European countries the labour market reforms introduced in recent years, in the absence of equally forceful reforms in product markets, have largely translated into stagnating wages and weak domestic demand.

Even though the imbalances were not sustainable, there was no effective mechanism – market-based or activated by multilateral surveillance – to induce a correction. On the one hand, by pegging their currencies to the US dollar, surplus countries managed to avoid pressure to adjust. On the other hand, the role of the US dollar as the international reserve currency (the “exorbitant privilege”) implied that the United States could finance persistent current account deficits without coming under market pressure, as long as the surplus countries were willing to accumulate dollar assets. Having US external liabilities denominated in dollars and international assets mostly in foreign currencies had the additional advantage that the US net investment position improved when the dollar depreciated.

Although the international monetary system based on the “dollar standard” has not been performing some of its essential functions, it is by no means clear what could replace it. All those that have been mentioned – a supranational currency like the SDR; a tripolar system based on the dollar, the euro and an Asian currency – face very substantial difficulties.

Underlying all this is the fact that the international monetary system that emerged after the demise of Bretton Woods is a “non-system”, driven by the revealed exchange rate preferences of the individual countries, with a very weak multilateral surveillance, despite recent attempts to strengthen it. The regime of fixed exchange rate pegs was never replaced by one of generalised free floating, but instead gave way to a hybrid system. In practice, throughout the last 35 years, the exchange rate policies of a majority of countries have been marked by widespread “fear of floating”, with large foreign exchange intervention. This fear is not at all surprising, since large

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<sup>2</sup> A broad and lively debate on the design of such tools has recently developed. See, for example, the paper by C. Borio on “Implementing the macroprudential approach to financial regulation and supervision” (published in *Banque de France Financial Stability Review*, September 2009), the discussion paper by the Bank of England (“The role of macroprudential policy”, Discussion paper, November 2009) and the report of the Warwick Commission on International Financial Reform (*The Report of the Second Warwick Commission Report: In praise of unlevel playing fields*, November 2009).

exchange rate fluctuations driven by capital flows can be highly disruptive in a world that is increasingly integrated economically and financially<sup>3</sup>.

## 4. The main challenges ahead

### 4.1 Correcting global imbalances and fostering sustainable growth

Whatever the shape of the future system, an urgent task – to be addressed as soon as the economic situation improves – is correcting existing imbalances.

The fundamental macroeconomic imbalances that lay at the root of the financial crisis are not being righted by the consequent global recession. At present, the rise in US private sector saving and the sharp fall in investment, partly offset by a larger public sector deficit, appear to have narrowed the US current account deficit from 5.3 per cent of GDP in 2007 to 2.6 per cent in 2009, as projected by the IMF. However, most of the reduction is due to cyclical, not structural, factors; the effect of lower oil prices should also be seen as essentially cyclical (Figures 1 and 2).

Moreover, exchange rate movements have not generally supported the correction of imbalances. The dollar first depreciated until July 2008, then appreciated by 20 per cent in effective terms until March 2009, as the turmoil engendered demand for dollar liquidity and large capital flows out of emerging markets sought a safe haven in US Treasury securities. Those flows were then reversed as investors' flight to safety abated and the financial situation normalised, and the dollar has accordingly started depreciating again, returning approximately where it was in July 2007 (Figure 3).

What happens as the world economy comes out of the recession depends largely on what drives the recovery: if it is an expansion of demand in the surplus countries – including not only emerging Asia, but also Japan and some European countries – some real correction of imbalances is possible; but if the world again relies on US consumers as the primary source of demand growth, then imbalances will widen once more.

There is now a growing awareness of the importance of rebalancing global demand in order to achieve a more sustainable pattern of growth. The joint statement released in September of this year following the G20 summit in Pittsburgh acknowledges that: *“ensuring a strong recovery will necessitate adjustments across different parts of the global economy, while requiring macroeconomic policies that promote adequate and balanced global demand as well as decisive progress on structural reforms that foster private domestic demand, narrow the global development gap, and strengthen long-run growth potential.”* However, it is still not evident how (and whether) each country will in fact implement such shared understanding.

In China, a shift toward greater reliance on domestic demand – and particularly consumption – will require increased public spending on health and social safety nets, which can encourage a lower precautionary saving, as well as reforms in the governance of public enterprises.

In Europe, potential output needs to grow faster so as to allow for higher growth in domestic demand without jeopardizing price stability. Japan similarly needs to boost productivity and domestic demand. In both regions, this will clearly be a substantial challenge, requiring a renewed emphasis on structural reforms.

If economies were able to achieve a major rebalancing of global demand from deficit to surplus countries, while allowing for a full and sustainable recovery of world economic growth, exchange rates would probably have to move as well, reflecting such structural adjustments. But unless the shifts in underlying saving and investment flows are sufficiently large and sustained to

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<sup>3</sup> See also, on these issues, I. Visco, “The global crisis: The role of policies and the international monetary system”, cit.

make a substantial contribution to the correction of imbalances, the expectation may grow that a large exchange rate correction of the US dollar against the currencies of surplus countries will eventually be required. This could trigger disorderly exchange rate movements.

Such a scenario would pose a very difficult challenge to the countries, such as China, that have accumulated large quantities of official reserves, predominantly in US dollars. However, continuing to peg their currencies will only postpone the day of reckoning, while increasing the potential capital losses.

This dilemma is exacerbated by the fact that a country that acted alone in allowing its currency to appreciate would stand to lose significantly in terms of trade competitiveness. This is a classic case in which collective action, if feasible, would be welfare-improving. It might take the form of a cooperative agreement among Asian surplus countries for some kind of joint “managed currency appreciation”. The boost to domestic demand (and the associated real appreciation) would have to be large enough to ensure a significant correction of imbalances.

But we also need a mechanism to maintain orderly exchange rate movements while the rebalancing of global demand is carried out.<sup>4</sup> The solution is unlikely to consist in simply asking the countries with dollar peg regimes to shift abruptly to full exchange rate flexibility. Equally unrealistic would be its polar opposite, a “world currency”, which would require a very high degree of price and wage flexibility. I think that pragmatic solutions based on intermediate regimes, such as target zones or bands and currency baskets, should not be dismissed out of hand.

#### ***4.2 Exit strategies: supporting the recovery without creating new sources of financial instability***

At present, the main priority of monetary and fiscal policies in all advanced countries and in many emerging ones is still to support the economic recovery by offsetting the weakness in private consumption and investment demand and the effects of financial sector de-leveraging. However, the focus of the policy discussion has already shifted to the issue of when and how to unwind the exceptional monetary and fiscal stimulus. In fact, policy makers are well aware that such exceptional measures, if maintained too long, could become new sources of instability.

One source of risks is the huge accumulation of public debt, which could potentially lead to a higher cost of borrowing if markets were to become concerned about its sustainability. The IMF has estimated that government debt in G-20 countries will reach 118 per cent of GDP in 2014, and that lowering it to 60 per cent by 2030 would require an improvement in structural primary balances by 8 percentage points of GDP (Figures 4 and 5).<sup>5</sup> Achieving shifts of these proportions will involve tough policy choices. In particular, facing the challenges posed in most countries by the projected rise in age-related expenditures can no longer be postponed. Only by committing now in a clear and credible way to a path of budgetary consolidation can governments preserve the flexibility they deem necessary in the short term.

The other risk is that a protracted period of very low policy interest rates and abundant liquidity may end up fuelling new asset price bubbles, thus building up the conditions for the next crisis. There is growing concern that this may already be happening, although the evidence so far is mixed:

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<sup>4</sup> See also, on this and other challenges ahead, I. Visco, “Challenges to international cooperation in the wake of the global crisis” (intervention at The Italian Chamber of Commerce and Industry in the UK XXXI Annual Conference on “A new approach to global economic and social growth”, London, 16 October 2009, available at <http://www.bis.org/review/r091021e.pdf>). On the reform of the international monetary system, I would also refer to the recent IMF paper, “The debate on the international monetary system”, by I. Mateos y Lago, R. Duttgupta and R. Goyal (SPN/09/26, November 2009).

<sup>5</sup> IMF, “The state of public finances. Cross-country fiscal monitor: November 2009” (SPN/09/25, November 2009).

- In advanced economies, markets for equities and other risky assets have staged a stunning recovery since March. As regards equities, there is not yet clear-cut evidence that this has gone too far, based on the indicators usually watched to assess asset valuations. However, this depends crucially on how strong we expect the economic recovery to be, and there is still considerable uncertainty on that. An equally striking shift in attitudes toward risk seems to have occurred in corporate bond markets, where risk spreads have narrowed substantially even though default rates are continuing to rise.
- In the case of prices of raw materials the evidence of overvaluation is, at the moment, rather scant. Yet, pressure on prices may rapidly grow – as it did in 2008 – once world demand returns to a more sustained pace of growth.
- In my view, the risk of an excessive creation of liquidity feeding bubbles in financial and real asset prices is significantly greater in emerging economies, many of which have been receiving large capital inflows. Controlling the effects of such inflows on domestic credit and asset markets is especially difficult in those countries that, by choosing to peg their exchange rate, import the monetary policy stance from abroad even though it may not be appropriate to domestic conditions (Figure 6).

This raises two difficult questions. The first is whether the timing and speed of monetary exit strategies should be contingent on developments in asset markets. If the latter were to signal that abundant liquidity is feeding new speculative excesses while the economic recovery is not yet firmly established, a trade-off could potentially arise between macroeconomic and financial stability. The second question is to what extent, if any, monetary policy in the United States should be conducted taking into account the fact that it is also exported to emerging economies with pegged exchange rates, such as China. In earlier times this question could have been easily dismissed, since the feedback effects of the induced monetary expansion abroad on the US economy and its financial system were second-order. Now, however, this is no longer the case, as witnessed by the key role played by global macroeconomic interactions in the genesis of the crisis, as I have outlined above.

You will probably recognize that these are – in slightly different form – the same two issues that I put at the centre of my analysis of how macroeconomic policies helped create the conditions that led to the crisis. The fact that we are still grappling with them as we come out of the global recession suggests that they are largely unresolved. This shows how delicate and important is the continuation and effective enhancement of the international economic policy cooperation so forcefully advocated within the G20 process.

Figure 1

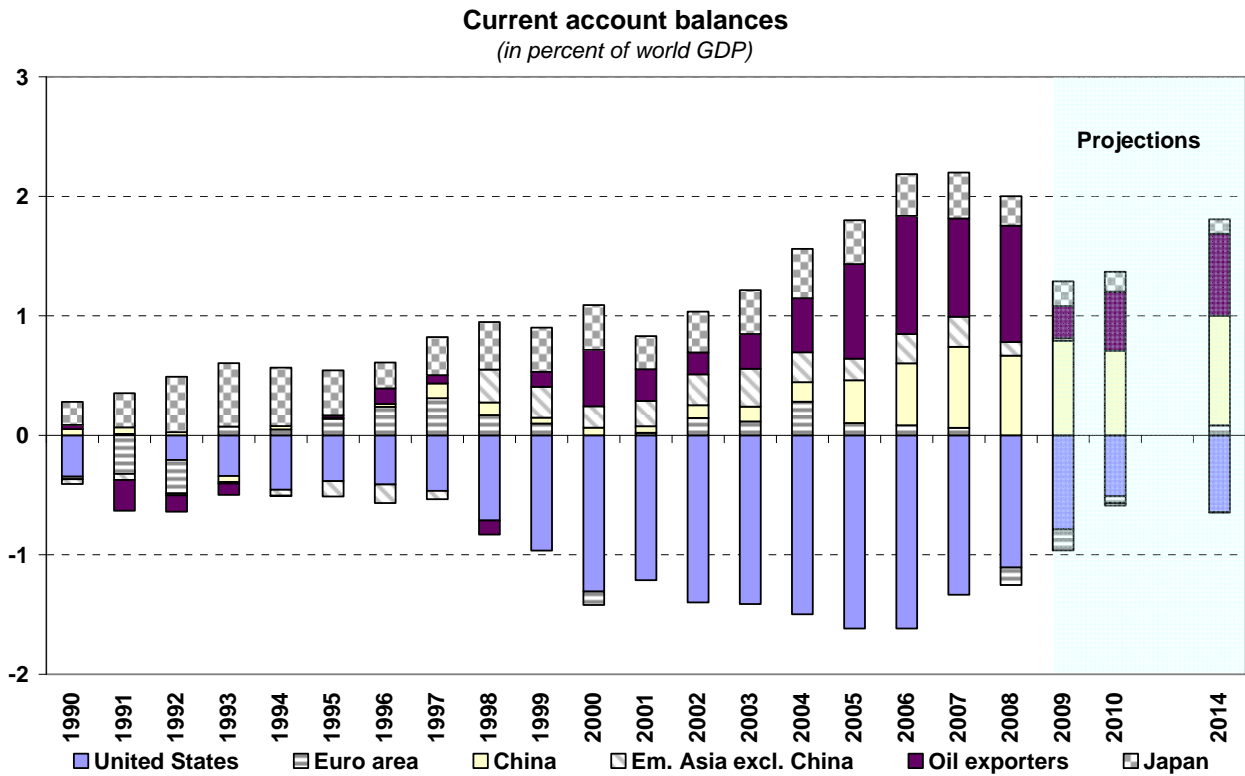


Figure 2

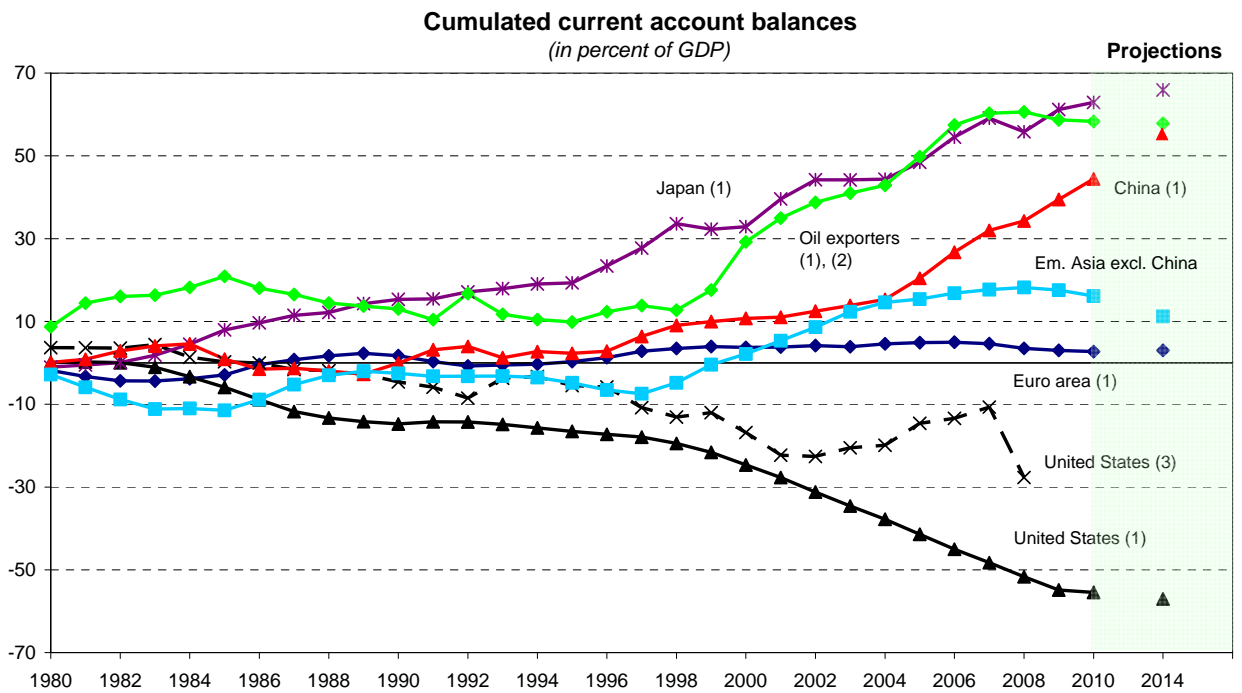


Figure 3

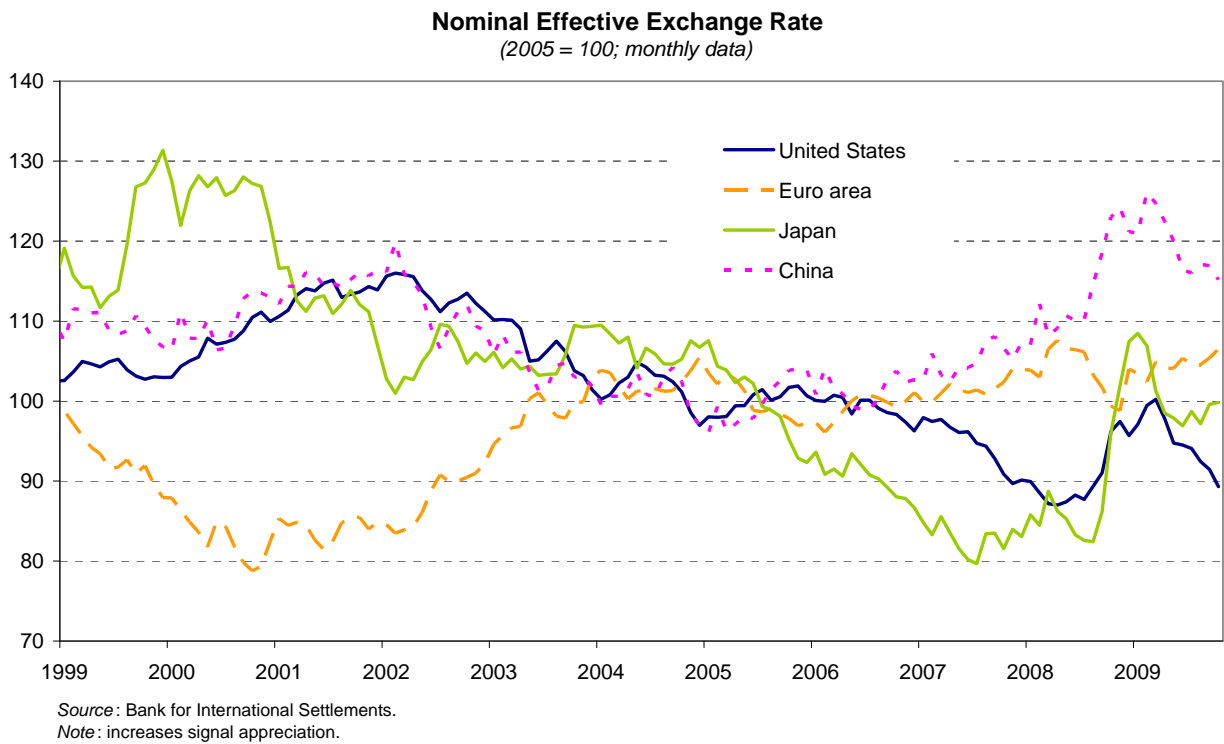


Figure 4

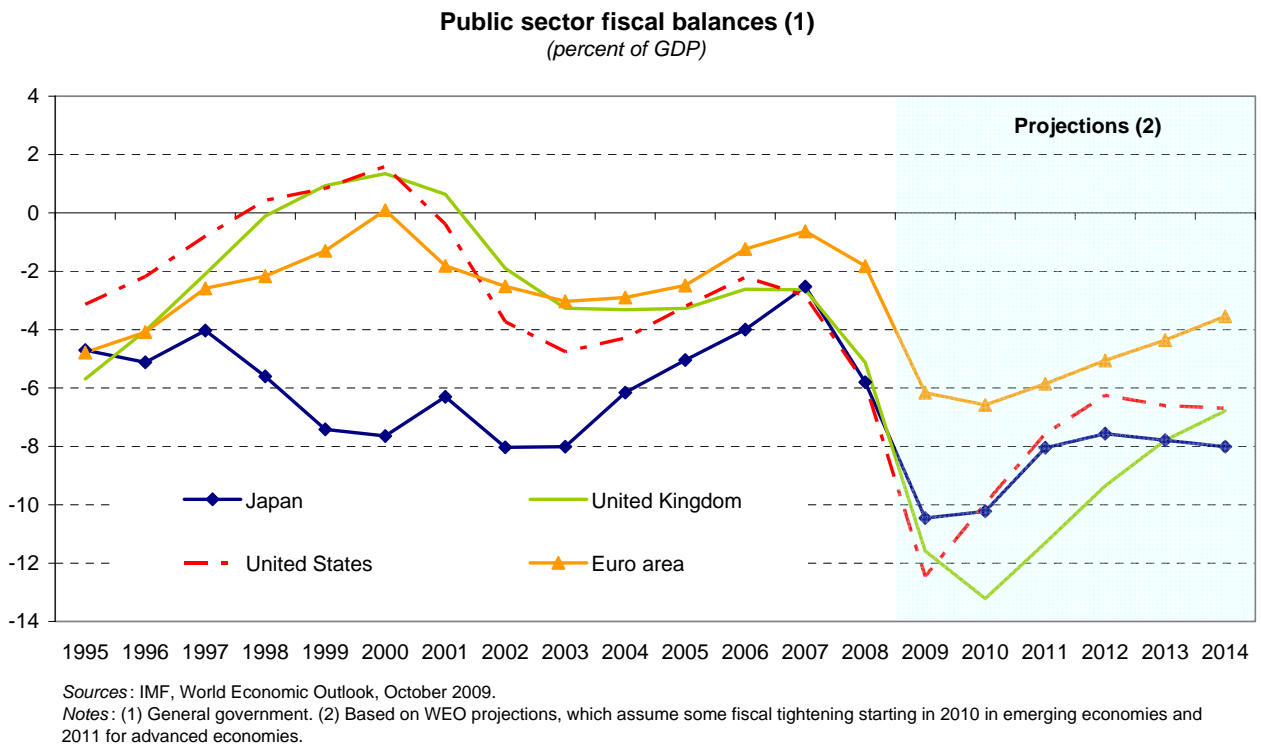


Figure 5

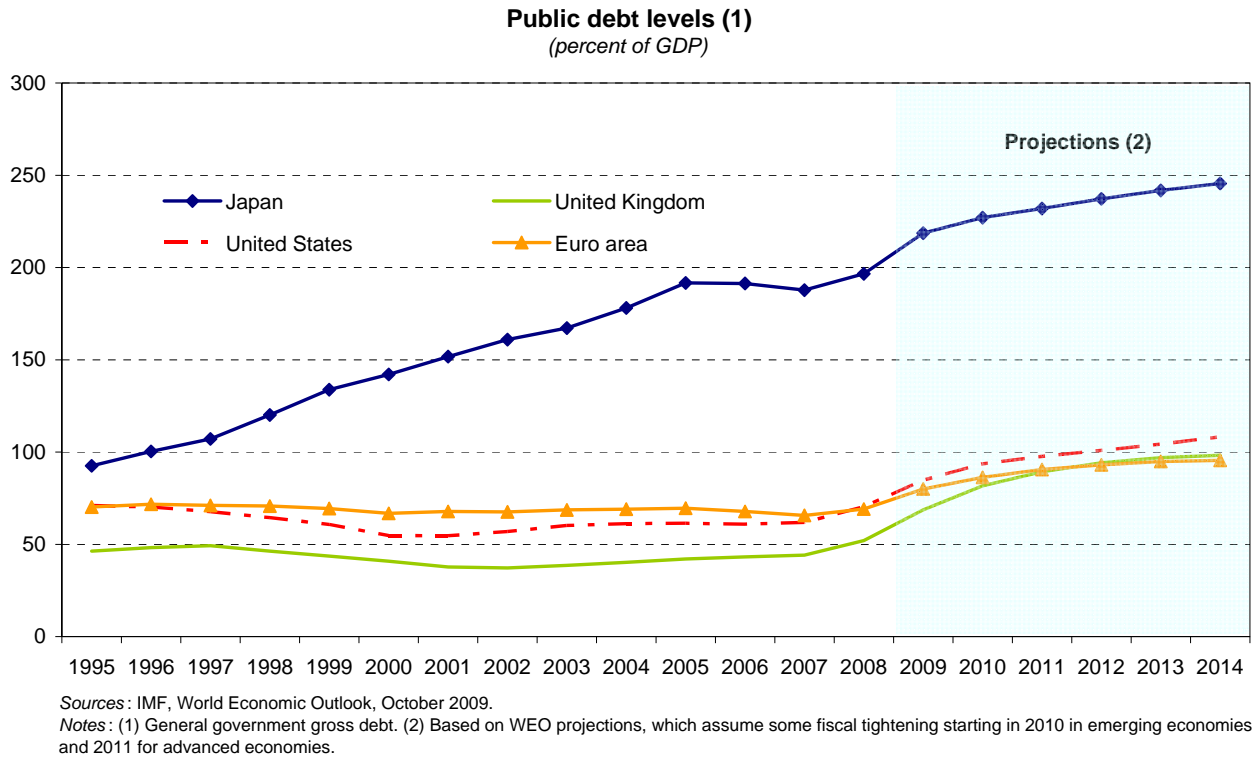


Figure 6

