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**Working Paper**

## Global imbalances and the financial crisis

UCD Centre for Economic Research Working Paper Series, No. WP10/13

**Provided in Cooperation with:**

UCD School of Economics, University College Dublin (UCD)

*Suggested Citation:* Whelan, Karl (2010) : Global imbalances and the financial crisis, UCD Centre for Economic Research Working Paper Series, No. WP10/13, University College Dublin, UCD School of Economics, Dublin,  
<https://hdl.handle.net/10197/2646>

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<https://hdl.handle.net/10419/71332>

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*UCD CENTRE FOR ECONOMIC RESEARCH*

*WORKING PAPER SERIES*

*2010*

**Global Imbalances and the Financial Crisis**

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WP10/13

April 2010

**UCD SCHOOL OF ECONOMICS  
UNIVERSITY COLLEGE DUBLIN  
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# Global Imbalances and the Financial Crisis<sup>1</sup>

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March 2010

**Abstract:** Did global imbalances cause the financial crisis? A number of influential figures have argued that inflows of foreign capital into the US due to the current account deficit helped to trigger the crisis. This paper argues that the evidence for this position is weak. The capital inflows into the US associated with the current account deficit were also not the key factor driving foreign purchases of US toxic assets. The so-called global savings glut was not as significant a pattern as is often presented. Macroeconomic policies that reduced global imbalances could have been adopted but these would probably not have prevented the crisis. Global policy efforts to prevent a recurrence of the financial crisis need to focus on improved banking regulation. Reducing global imbalances should be of secondary importance.

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<sup>1</sup> This is a briefing paper delivered by the author, in his role as a member of an Expert Panel of advisors, to the European Parliament's Committee on Economic and Monetary Affairs in relation to its Monetary Dialogue with the European Central Bank.

## **1. Were Global Imbalances the Real Culprit?**

Now that the intense disruptions associated with the global financial crisis appear to have largely passed, there has been a lot of analysis in international policy and academic circles of the period that led up to the crisis, as people try to understand its root causes. The failure of financial regulatory frameworks has been the most common point for discussion and these failures are already being addressed around the world: The G20 have outlined an ambitious agenda for new global standards for banking regulation and many governments around the world are reassessing their approaches to dealing with financial crises.

Beyond the issues relating to financial regulation, however, a number of high profile academics and policy figures have also suggested that we need to look for other, perhaps deeper, underlying factors that led to the financial crisis and a number of them have suggested that the global imbalances that prevailed in the years prior to the crisis were a key contributing factor.

To give a few examples, ECB Executive Board member, Lorenzo Bini-Smaghi (2008) suggested not long after the onset of the most serious stage of the crisis that the financial crisis and global imbalances were “two sides of the same coin”. Mark Carney, Governor of the Bank of Canada, believes that “Current account imbalances across major economic areas were integral to the build-up of vulnerabilities in many asset markets.” In an extensive November 2009 paper, Maurice Obstfeld and Kenneth Rogoff argued that global imbalances and the financial crisis were “intimately connected.” Perhaps most strongly, Richard Portes (2009), President of the Centre for

Economic Policy Research, has stated that “global macroeconomic imbalances are the underlying cause of the crisis.”

If these arguments are correct, then the fact that these global imbalances have not gone away should be a major source of concern for global economic policy leaders. While the US trade deficit has declined since the onset of the recession and surpluses from oil-exporting countries have fallen substantially, this US trade gap remains large and the sources of its funding have not changed too much. Does this mean that global policy makers need to focus on exchange rate and aggregate demand policies to reduce these imbalances if we are to avoid another crisis?

In my opinion (put somewhat reluctantly in view of the eminence of some of the figures in favour of this position) the evidence does not justify this conclusion. While there were certainly some common factors driving both asset prices and current account developments, a review of the years prior to the crisis does not suggest that macroeconomic policies aimed at reducing global imbalances would have prevented the crisis.

The rest of the paper focuses on three issues. First, I discuss whether the financial flows associated with global imbalances played an important role in the financial crisis that stemmed from toxic US securities. Second, I turn to the question of whether macroeconomic policies aimed at reducing global imbalances would have prevented the global financial crisis. Third, I discuss arguments for greater international policy co-ordination on macroeconomic policies. A concluding section argues that while greater global macroeconomic co-ordination is desirable, better global financial regulation

is going to be the key area to focus on if we want to prevent future financial crises of the type just experienced.

## **2. Net Versus Gross Financial Flows**

### ***2.1 Net Financial Flows***

When thinking about the linkages between global imbalances and the recent financial crisis, I think it is worth distinguishing here between correlation and causation. There is little doubt that some of the factors that led to the global financial crisis also exacerbated existing global imbalances. In particular, loose financial regulation allowing easier credit standards for mortgage borrowing was certainly a factor in sustaining the rise in house prices in the US and other countries with housing bubbles, and the increased spending triggered by these bubbles contributed to current account deficits. But this is a correlation. The causal factor runs from poor financial regulation to both global imbalances and the financial crisis.

What about causal links in the other direction, running from global imbalances to the financial crisis? To give an example, Portes (2009) argues that global imbalances “brought low interest rates, the search for yield, and an excessive volume of financial intermediation, which the system could not handle responsibly.” Advocates of this position emphasise the fact that US current account deficits were financed with inflows of foreign money that ended up being allocated poorly. For instance, Obstfeld and Rogoff (2009)

noted that “Foreign banks’ appetite for assets that turned out to be toxic provided one ready source of external funding for the U.S. deficit.”

This focus on inflows of foreign capital into the US as a source of the financial crisis is a natural one. The US current account deficit in the years prior to the crisis grew to historically unprecedented levels, peaking at \$800 billion dollars (six percent of GDP) in 2006 (see Figure 1). One might imagine that the financing of this very large deficit was the major factor underlying capital inflows into the US during the pre-crisis period. Indeed, Portes (2009) argued that global imbalances “contributed strongly to a sharp rise in the volume of financial transactions.”

## **2.2. Gross Financial Flows**

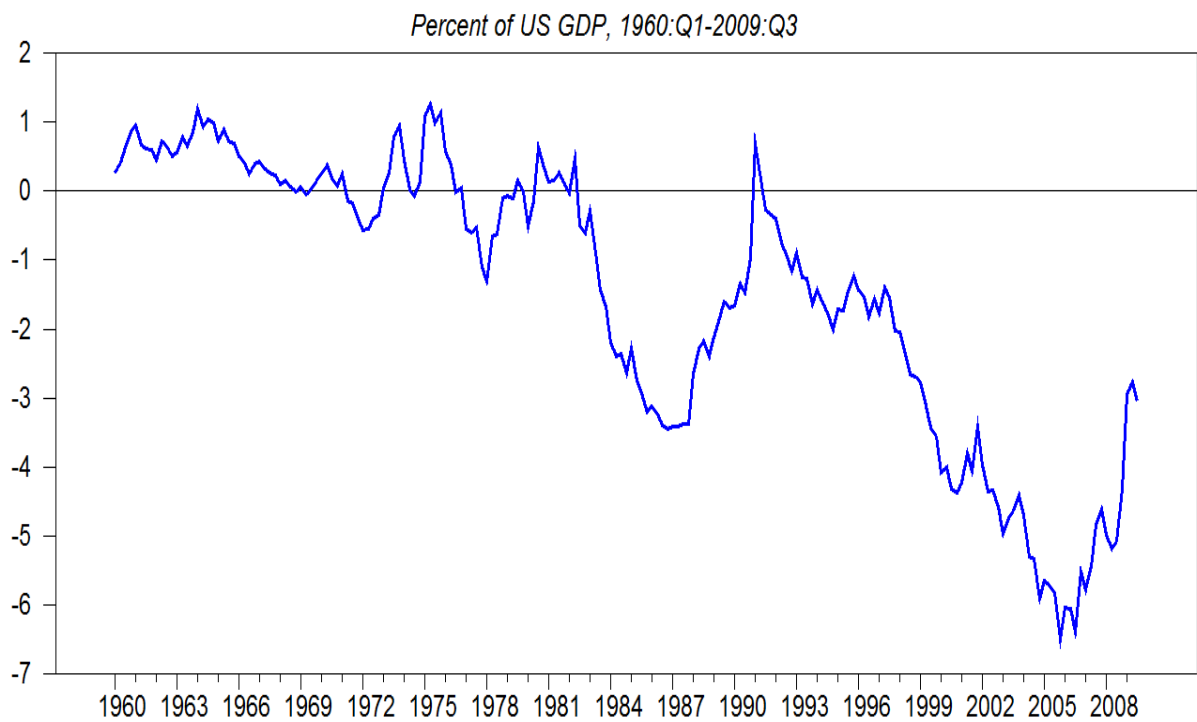
Despite the apparent plausibility of the story in which financial flows associated with the US current account deficit fuelled the financial crisis, I believe there are a number of problems with this explanation. In particular, a closer examination shows that the current account deficit did not play a dominant role in determining financial inflows into the US during the pre-crisis period.

To understand why this is the case, it is necessary to distinguish between net and gross financial flows. Financial flows involving reallocation of assets across countries can occur in the absence any current account deficits. For instance, French citizens may purchase \$10 billion in US government bonds while US corporations invest \$10 billion in foreign direct investment in French companies. These may be large gross flows but they cancel out when

calculating the bilateral capital account between the US and France.

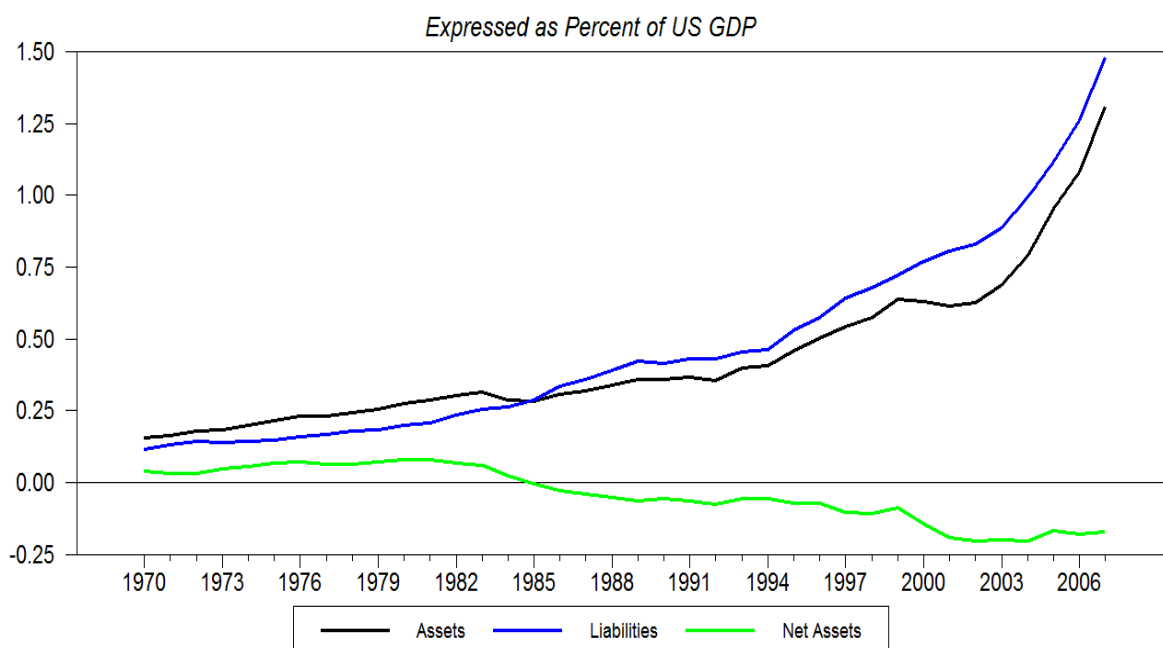
Alternatively, a bilateral current account deficit of \$10 billion may occur because trade flows lead to French citizens purchasing \$30 billion in US bonds and US citizens investing \$20 billion in foreign direct investment in French firms.

**Figure 1: The US Current Account Deficit**





**Figure 2: Gross and Net External Assets of the United States**



As has been widely documented, most importantly in the work of Lane and Milesi-Ferretti (2007), the period since the mid-1990s has seen a rapid acceleration of financial globalisation. The loosening of financial restrictions has allowed people around the world to broaden their portfolios of assets beyond those available domestically and this has seen a huge increase in financial flows.

For the United States during the pre-crisis period, the gross flows associated with financial globalisation were considerably larger than the net changes associated with current account deficits. The period from 2002-2007 saw US external liabilities rise from 83% of GDP to 147% of GDP. However, only about one-third of this could be accounted for by the accumulated trade deficits which required US citizens to increase their indebtedness to the rest of the world. The rest was accounted for by financial globalisation. So, over the same period, US external assets also rose from 63% of GDP in 2002 to 131% of GDP in 2007. Figure 2 illustrates these trends using data from Lane and Milesi-Ferretti's External Wealth of Nations dataset.

These figures show that even if the US was not running a trade deficit at all during the 1990s, there would have been plenty of foreign funds coming into the US financial markets.

It is perhaps instructive to also consider two specific examples that help to explain why there was, at best, a weak connection between the US current account deficit and the financial crisis.

**Europe:** Obstfeld and Rogoff (2009) discuss the purchase of toxic US mortgage-backed securities (MBS) by foreign banks. Obstfeld and Rogoff describe these purchases as “a ready source of external funding for the U.S. deficit.” However, as the opening months of the financial crisis showed, European banks played a major role in this process, with many of them getting into serious financial trouble when the toxic nature of the sub-prime MBS became clear. This was a major mechanism for transmitting US problems into a full-scale European financial crisis.

However, during this period, the EU had a relatively even trade balance with the United States. Even in a world in which the US was running an even trade balance with the rest of the world as well as Europe, it is likely that the European banks that purchased US mortgage-backed securities would have continued to do so.

**China:** In contrast to the European example, the years leading up to the crisis saw the US running ever bigger current account bilateral deficits with China. By 2007, this bilateral deficit had reached about \$300 billion, which was roughly two percent of US GDP. This very large bilateral deficit could, in theory, have been financed by Chinese purchases of the toxic securities that triggered the financial crisis. In reality, however, the Chinese purchased large amounts of US Treasury debt.

To summarise, while it is certainly the case that the period prior to the crisis was associated with large net capital inflows into the United States, there is little evidence that this had a causal effect in relation to the financial crisis. The net capital inflows associated with the deficit were small relative to total capital inflows and the largest single source of this deficit (trade with China) did not lead to foreign funds being invested in risky toxic assets.

### **3. Alternative Macroeconomic Policies**

The previous arguments suggest that the foreign capital inflows associated with the US current account deficit should not, on their own, be assigned an

important role as a determining factor in the financial crisis. Obstfeld and Rogoff's recent paper, however, focuses less on the fact of financial flows into the US and more on the idea that the macroeconomic policies that lead to the global imbalances also lead to the financial crisis.

This is a complex argument. Global imbalances are a pattern in which some countries are spending more than they are producing while other countries are doing the opposite. The explanations for these patterns thus relate to a whole range of factors: They are a function of macroeconomic policies in both the deficit and the surplus countries as well as structural factors such as demographics, the extent of social safety nets and the reliability of financial markets. So, in practice, there were many different types of policy actions that could have reduced the size of global imbalances and it would be very difficult to figure out in each case whether these actions would have also reduced the risk of financial crisis.

Here, I will restrict discussion to two examples of counterfactual macroeconomic policies that are often discussed: That US policy should have encouraged higher private savings and that Asian countries should encouraged lower savings. On balance, I think there is limited evidence to suggest that these measures would have prevented the financial crisis.

### ***3.1. Higher US Savings***

It is common now to suggest that the US should have adopted policies to promote higher private saving during the period prior to the financial crisis

to damp down aggregate demand. This, it is argued, would have damped the rise in house prices, lead to less spending on foreign goods and thus lower capital inflows into the United States. For instance, Bini-Smaghi (2008) argued that “if the US had adopted measures to improve net savings, in particular by households, as suggested, the housing bubble would have been more limited and its bursting less dramatic.”

On balance, I don't find these arguments very convincing. The rise in US house prices had very little to do with macroeconomic fundamentals such as strong growth in GDP. During the peak years of the “Bush boom”, 2004-2006, economic growth averaged a modest three percent per year. A reduction in this pace of growth towards a slightly more modest pace may not have had much effect on the dynamics underlying house prices.

In addition, when thinking about the counterfactual in which US households saved more during the mid to late 2000s, one has to consider where those savings would have been put to use. US households have easy access to many different types of investment vehicles. For example, many households have access to their checking account online and can easily make transfers from this account to equity funds, money market mutual funds or more exotic instruments.

If the US had adopted policies to encourage private savings, it is likely that much of this additional savings would have been channelled towards some of the toxic vehicles that helped to fund the housing bubble. Indeed, one could possibly argue that every dollar spent by US households on Chinese

imports—subsequently re-cycled to purchase US Treasury bonds—would have contributed less to the financial crisis than a dollar saved.

### ***3.2. Asia and the Global Savings Glut***

A more common focus in discussions of how macroeconomic policies lead to the financial crisis is the so-called “global savings glut” first discussed by Ben Bernanke in a famous 2005 speech. After the Asian financial crisis of the late 1990s, many of the affected countries adopted policies to encourage savings and used the subsequent current account surpluses to build up large stocks of foreign exchange reserves that could be used as a buffer against capital outflows in any future crisis.

The green line in Figure 3 shows how the savings rates of emerging markets grew steadily during the decade leading up to the financial crisis. The red line in the figure also shows how the savings rate of Middle Eastern countries rose over this period, particularly during the later years, reflecting high oil prices.<sup>2</sup>

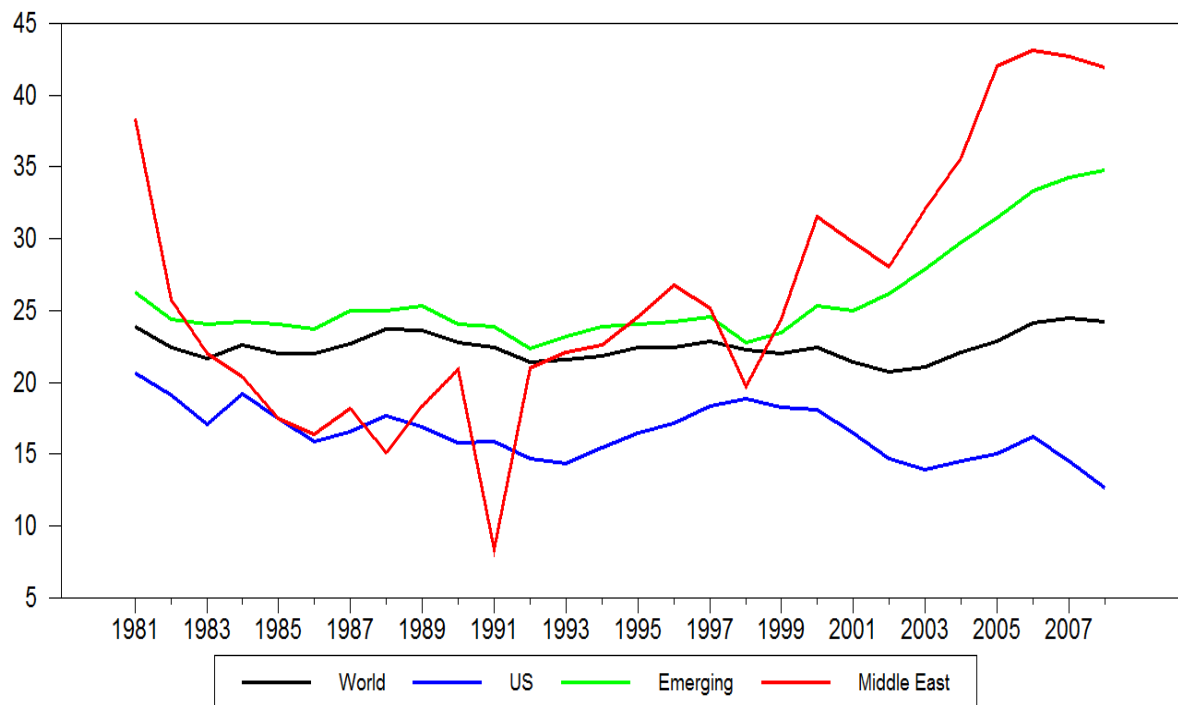
However, despite the significant attention paid to these developments, the global savings “glut” was, at most, a relatively modest phenomenon. The countries that engaged in these increased savings levels accounted for a relatively small fraction of GDP and much of this increase was offset by lower savings rates in advanced countries. Overall, according to the IMF, the global savings rate rose from 20.7 percent in 2002 to 24.5 percent in 2007.

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<sup>2</sup> The data in Figure 3 come from IMF’s World Economic Outlook Database. The composition of the country groupings can be found at <http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/groups.htm>

From the black line in the chart below, one can see that this did not correspond to the violent and destabilising upward swing in global savings that it has commonly been described as.

**Figure 3: Savings Rates from Around the World**



Of course, the reallocation of savings around the world undoubtedly had impacts upon specific financial markets around the world. For example, the big increase in foreign official purchases of longer-term US Treasury bonds (mostly from Asia) most likely contributed to keeping down yields on these

benchmark instruments.<sup>3</sup> And this, in turn, would have contributed to keeping US mortgage rates low and thus helping to fuel the housing bubble.

My reading of the evidence, however, is that the effect of official purchases on longer-term Treasury yields was probably quite modest. On balance, then, I think it is unlikely that lower savings rates in developing countries would have prevented the global financial crisis.

Furthermore, even if Asian purchases of Treasury bonds had an effect on long-term interest rates, it was still well within the power of the US Federal Reserve to counteract such effects via its control over short term rates. This, of course, brings up the question of whether US monetary policy was too accommodative in the period prior to the crisis. The answer to this question is undoubtedly yes. However, this is because the easy credit conditions generated by monetary policy contributed to the housing bubble and not because of inflows of foreign capital.

#### **4. The Future for Policy Co-Ordination**

The G20 Pittsburgh communiqué from September of last year contained a number of references to global imbalances. With many influential voices blaming global imbalances for the financial crisis, there will be calls for greater co-ordination of macroeconomic policies to reduce imbalances.

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<sup>3</sup> See Warnock and Warnock (2009).



Much of the commentary on the potential problems associated with global imbalances will undoubtedly focus on the continued risk of a “dollar crisis”, a scenario that many had focused on prior to 2007. According to this scenario, foreign investors will, at some point, cease to want to accumulate further US assets and with a decline in the dollar required to facilitate a decline in the current account deficit, there could be a sort of “sudden stop” in which the dollar drops sharply and interest rates on US debt instruments need to rise rapidly to compensate for the exchange rate depreciation. Potentially, this scenario could lead to a US-lead global recession.<sup>4</sup>

The dollar crisis scenario is something that could still come to pass. However, it seems less likely as of now. Firstly, as Figure 1 shows, there already has been something of a sudden stop in the US current account deficit, though this has been as a consequence of the crisis rather than as a cause. A sharp decline in imports outpacing an also sharp decline in exports has led to the current account deficit’s share of GDP almost halving in size from its peak in 2006. On the capital account side, there has been a dramatic reduction in private purchases of US agency and corporate bonds, though foreign purchases of Treasury debt have been maintained.<sup>5</sup>

Secondly, we have learned something from the recent crisis about the behaviour of international capital markets during a global crisis. The mechanism emphasised in the dollar crisis story failed to materialise. Investors flocked towards US Treasuries, interest rates on these bonds fell and the dollar appreciated. This may cast doubt on whether the “dollar

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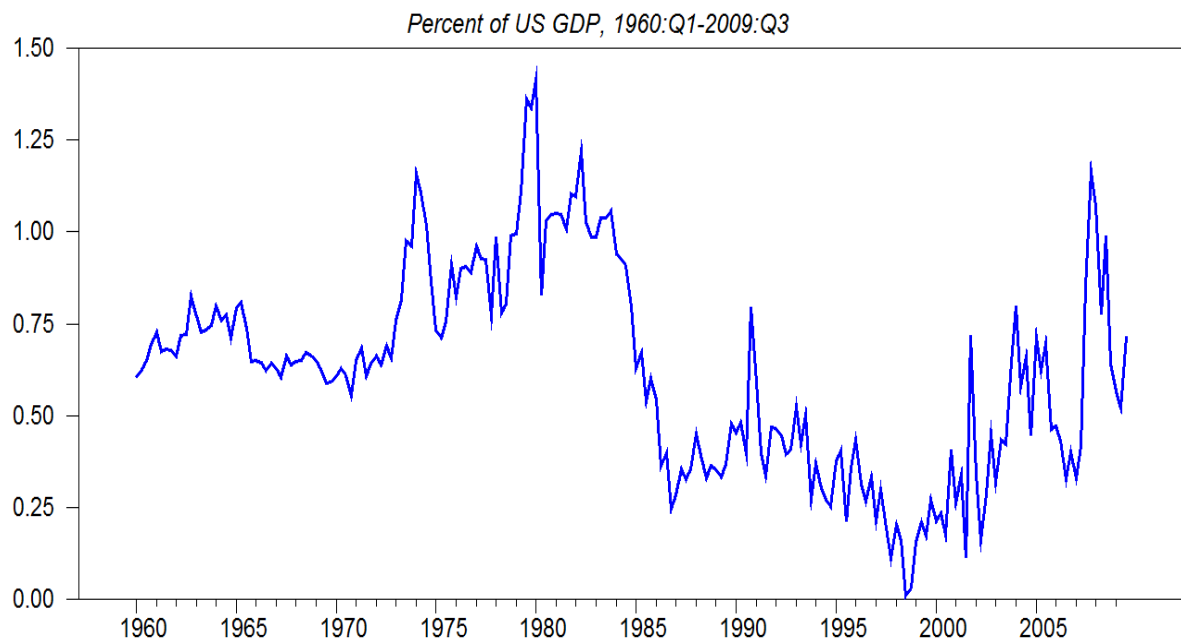
<sup>4</sup> See for instance Roubini and Setser (2004) and Krugman (2007).

<sup>5</sup> See Warnock (2009).

crisis” mechanism can ever operate in the context of a full scale global recession.<sup>6</sup>

Finally, it can still be argued that the US is still coping very well with the burden of its accumulated foreign debts. Figure 4 shows net foreign investment income for the US. In other words, it shows income from US foreign investments minus payouts to the rest of the world on US assets. This series remains positive, reflecting higher returns on US foreign investments than foreigners have obtained on their US assets.

**Figure 4: Net US Foreign Investment Income**



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<sup>6</sup> Caballero (2009) provides a critical discussion of Obstfeld and Rogoff’s focus on the role of global imbalances in generating the financial crisis.

These comments are not intended to be critical of the G20's efforts at greater macroeconomic co-ordination. In particular, the G20 process should be used to encourage China to let its exchange rate appreciate against the dollar and also to take steps to reduce its savings rate. The latter can be achieved for instance by modernising its financial markets (so consumers don't have to save in advance to purchase consumer durables) or improving its social safety net (to reduce precautionary savings.) These steps would have a positive effect on the global economy over the next few years and, just as importantly, would improve the welfare of the Chinese people.

These measures are worth taking not because they would reduce global imbalances but because they will be good for the world economy in the coming years. By the same argument, I don't recommend a quick withdrawal of fiscal and monetary stimulus in the US simply because it could help reduce global imbalances. With potential output likely to be damaged by the crisis and banks going into a cautious and conservative mode, the world economy is facing the prospect of a number of years of slow growth. Co-ordination at G20 level should be focused on ensuring that the withdrawal of stimulus is gradual and does not harm the global recovery.

## **5. Conclusions: Focus on Banking Regulation**

To conclude, I think it would be a mistake to assign a very important role to global imbalances when looking for villains to blame for the financial crisis. The large gross capital flows associated with financial globalisation certainly played a role in the transmission of the crisis around the world but it is too late to put that particular genie back in the bottle, nor is it clear that we

would want to do so. However, the net flows associated with current account deficits played a minor role in determining the crisis and it is unclear that a reversal of many of the macroeconomic policies that caused the global imbalances would have prevented the sub-prime meltdown and its consequences.

In relation to future global macroeconomic policy, there are strong arguments for policy to lean harder against asset price booms that may be unsustainable bubbles. There is also room for improved global policy co-ordination and this co-ordination may lead to reduced global imbalances. However, these policy changes are worth taking for the improvements they will bring to global economic performance rather than because they will reduce the likelihood of future financial crisis of the type just experienced.

Policy in relation to crisis prevention must go straight to the source of the problems. Rather than blaming a global savings glut or a “search for yield”, it is worth focusing on the regulatory failures that allowed the series of incentive problems associated with the infamous toxic sub-prime securities: The absence of due diligence in checking documentation associated with the originate-to-distribute model of securitisation, the failings of the ratings agencies, the reliance on inadequate risk models, and the failure of a regulatory approach that placed too much emphasis on risk-weighted capital as the measure of the health of financial institutions.

Preventing a repeat of the crisis requires a series of improvements in global banking regulations. Capital and liquidity levels need to be raised; restrictions should be brought in to prevent the wholesale mixing of “utility” and

“casino” banking; restrictions on profit-related bonuses for bankers should be put in place; and credible solutions need to be found to deal with the problem of banks that are “too big to fail.” This is a daunting agenda for global economic policy makers over the next few years. Reducing global imbalances should be a secondary concern.

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