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# POLICY PLATFORM | White Paper

## Future Development of Global Imbalances

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**Future Development of Global  
Imbalances**

**NOTE**

**Abstract**

Global imbalances played an important role in setting the stage for the financial crisis by depressing real interest rates and supporting the search for yield. Central banks did not trigger this phenomenon but accommodated it. Monetary policy is not well suited to deal with current account imbalances and the resulting capital flows and asset price developments. Greater importance should therefore be attached to fiscal policy. While international cooperation is desirable, it is unlikely to achieve much whenever there is a conflict with important domestic policy issues. Nevertheless, the agreements reached at the G-20 Pittsburgh summit provides hope that cooperation will be improved.

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## 1. INTRODUCTION

In the run-up to the present financial crisis, the issue of the causes and consequences of increasingly large current account imbalances received considerable attention both by international organisations (e.g. IMF 2002, 2005a, 2005b) and economic policy makers (e.g. Bernanke 2005, 2007). While the debate at that time was intense, following the onset of the financial crisis the issue of global imbalances – large and sustained current account imbalances – was pushed to sidelines in light of more pressing concerns.

That was unfortunate: there are good reasons to believe that global imbalances played an important role in setting the stage for the crisis.<sup>1</sup> Consequently, in guarding against the development of financial instability and in strengthening the international monetary system, it is important to reassess the role they played and to determine what policy measures can be used to prevent them from occurring again. There is a wide range of such measures available: they can be national or international and can involve fiscal, monetary policy and structural policies.

This note proceeds as follows: In Section 2 we first review recent current account developments and their role in setting the stage for the current financial crisis. Section 3 discusses how monetary policy should react to large capital flows. In Section 4 we turn to the question whether current account imbalances warrant changes in the international monetary system and Section 5 discusses briefly the G-20 Pittsburgh statement. Section 6 concludes.

## 2. GLOBAL IMBALANCES

### 2.1. Recent current account developments

It is natural to start by reviewing the developments in global current account balances in recent years. Figure 1 shows current accounts, as a fraction of world GDP, for a set of countries from 1996 to 2008 and IMF forecasts for 2009-10. The US current account deficits rose gradually from 1996 onwards, and peaked at 1.65% of GDP in 2005, before contracting in 2006-08. These deficits are forecasted to decline further in 2009-10. Large deficits were also run by the “Other current account deficit countries.” The latter group consists of countries in Eastern Europe, and Portugal, Ireland, Greece and Spain, and the United Kingdom.

Offsetting these deficits were the large surpluses run by Germany and Japan, and by China and a group of other Asian emerging market countries.<sup>2</sup> Furthermore, considerable current account surpluses were also experienced by oil-exporting countries.

Of course, current account balances reflect saving-investment decisions of firms and households, and of the government sector’s decision to finance current spending by taxes or borrowing. Imbalances are thus the consequence of choices of a large group of economic agents, both at home and abroad since the global current account deficit must sum to zero (disregarding measurement issues). There is no reason to believe that it is desirable for all countries to have the current account in equilibrium. In turn, this implies that it is not

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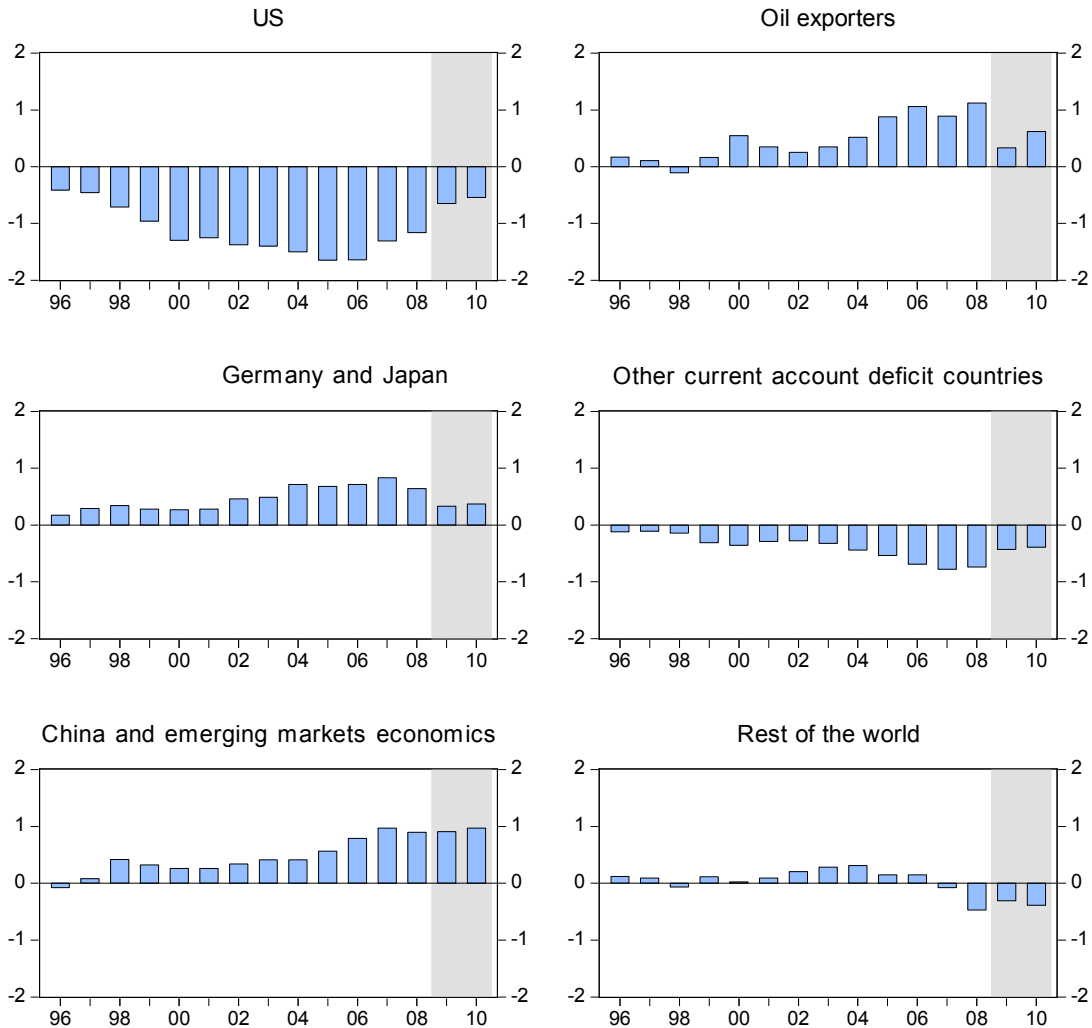
<sup>1</sup> See also Obstfeld and Rogoff (2009).

<sup>2</sup> This group contains Hong Kong SAR, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan Province of China, and Thailand.

possible to say with any certainty what their appropriate level is. However, their main determinants are well known.

Income expectations are particularly important: rapid economic growth is likely to lead to current account deficits as the economy spends against future income. One would therefore expect to see deficits in many transition economies, which we do, and surpluses in Germany and Japan, which are growing slowly for structural reasons (e.g. aging populations) and because of the lack of structural reform.

**Figure 1**  
Current account surpluses as fraction of world GDP



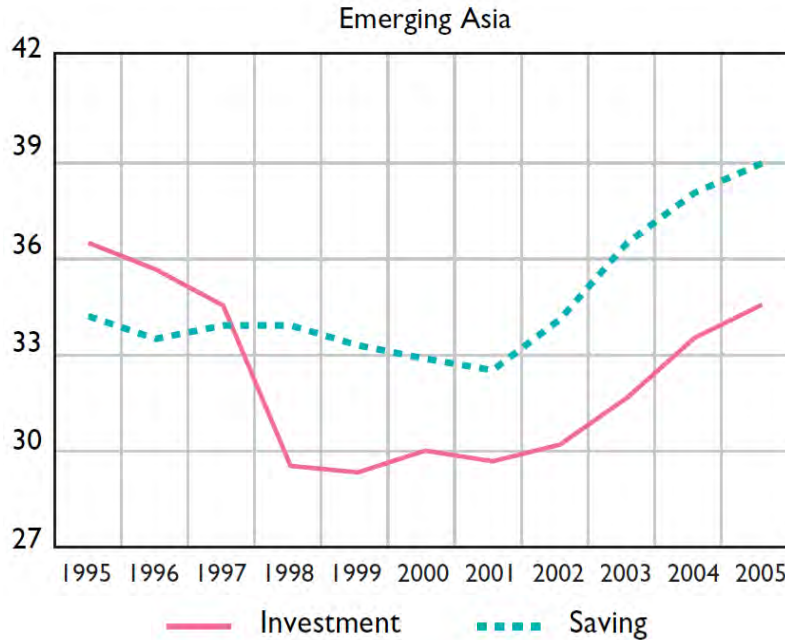
Notes: Further the country groupings are explained in the text. The source is IMF, World Economic Outlook, Fall 2009. The data points for 2009-10 are IMF forecasts.

What is more surprising from this perspective is that China and a number of Asian emerging market economies are running large surpluses. Several factors are likely to play a role.

Most obviously, following the Asian Financial Crisis in 1997-98, which followed a large asset price boom that was characterised by a massive build up of the capital stock, investment

naturally fell, leading to a large saving-investment imbalance and a current account surplus (see Figure 2).

**Figure 2**  
Saving and investment as a fraction of GDP



Source: Moëc and Frey (2006).

Additional factors that supported this shift were the need to rebuild foreign exchange reserves after the crisis; the desire to avoid a recurrence by accumulating large foreign exchange reserves; an unwillingness in some countries to experience real exchange rate appreciation because of the consequences that would have on the income distribution; and the lack of social safety nets, which became evident in the crisis and encouraged private saving. This suggests that current account imbalances have many causes and reflect a range of current and past economic policies.

## 2.2. Current account balances and the crisis

What role did global imbalances play in the global financial crisis that started in 2007? It is now generally recognized that many factors helped trigger the bubble that preceded the crisis. Severe incentive problems were plainly important. For instance, subprime lenders had little reason to conduct proper credit risk analysis in light of the fact that the loans would be securitized. Similarly, remuneration schemes in the financial sector encouraged short-term risk taking and herding. Furthermore, the fact that rating agencies sold advice to issuers about how to structure financial products so as to ensure a high rating was indicative of severe conflicts of interest in this important part of the financial system.

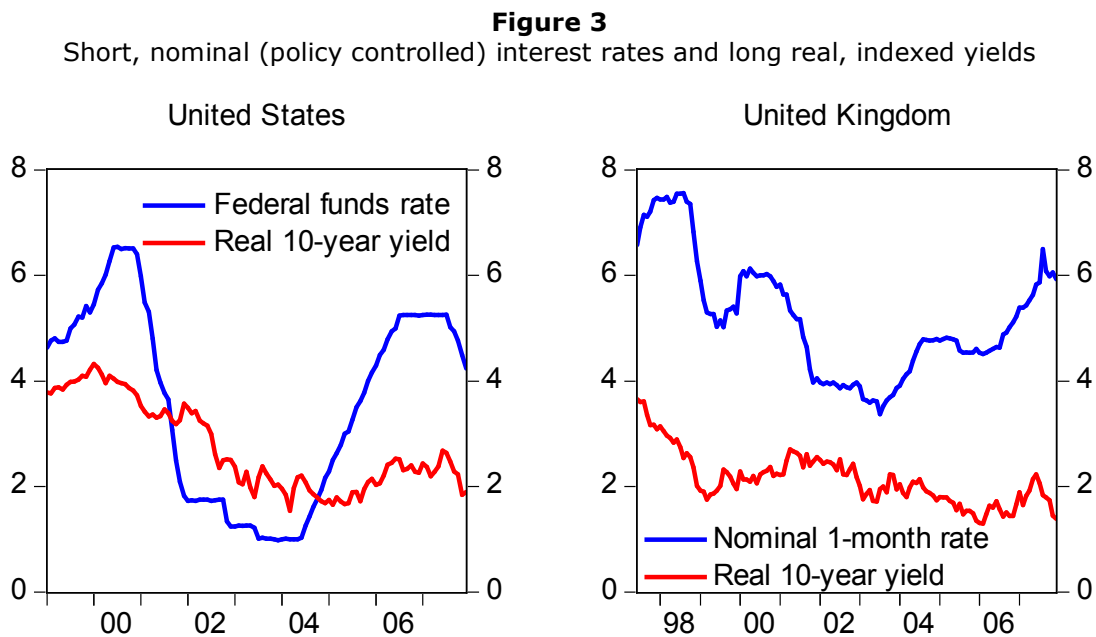
The crisis has also revealed weaknesses in the regulation and supervision of financial institutions. For instance, subprime mortgage originators were apparently not regulated. Furthermore, the existence in some countries of multiple regulatory agencies generated opportunities for regulatory arbitrage or for gaming the system. Apparently, AIG was an unregulated business entity that exploited the strength of its insurance affiliates that were large, regulated entities in good standing.

But while micro economic factors were of crucial importance, macro economic developments also played a role. In particular, the great moderation – the decline in the

volatility of economic activity and inflation and the resulting increase in the predictability of monetary policy – misled investors to believe that financial markets had become less risky. Together with the decline in expected returns, best captured by the fall in long real interest rates (as discussed below), this triggered a search for yield which took several forms. Most obviously, investors borrowed against their portfolios to increase leverage in order to raise returns. Furthermore, they proved willing buyers of a range of new, highly complex and poorly understood structured financial products that promised higher returns at, as was thought at the time, little extra risk, as evidenced by the fact that they frequently were triple-A rated.

What factors led to the decline in real interest rates? Some observers have argued that expansionary monetary policy depressed real interest rates and in this way stimulated the search for yield. But central banks typically conduct monetary policy by setting or influencing very short-term nominal interest rates. It is difficult to see how changes in these interest rates could have impacted on the yields on long, indexed bonds. Indeed, macroeconomic theory suggests that in the long run the real and nominal side of the economy are approximately independent, so that changes in inflation, exchange rates and nominal interest rates have no impact on economic activity, employment, real interest rates and other real variables.

Figure 3 contains plots of long real and short nominal interest rates, as measures of monetary policy, in the UK and the US before the crisis erupted.



Notes: Data from the Federal Reserve and the Bank of England.

The figure shows that monetary policy indeed turned highly expansionary in the US in 2001 and, but less so, in the UK. However, monetary policy was tightened from 2003-04 onwards, that is, several years before the crisis erupted. Despite these variations in monetary policy, long real interest rates fell by about half between the late 1990s and 2007, from around 4% to around 2%. This disconnect between the two interest rates suggest that monetary policy was probably not responsible for depressing real interest rates.

The second possible explanation for the decline in real interest rates emphasises shifts in savings-investment balances across the world. This is where global imbalances come into

play. Figure 2 shows movements in saving and investment as a fraction of GDP in emerging Asia. Investment exceeded saving during the boom period before the onset of the Asian financial crisis in 1997, which triggered a sharp reversal of this situation. By contrast, in oil producing countries there was a sharp increase in saving following the rise in oil prices from 2003 onwards. This increase in saving relative to investment tended to dampen the demand for goods globally. Taken together, these developments required real interest rates across the world to fall to support demand.

In turn, the resulting fall in real interest rates had two effects on the economy. First, it reduced investors' expectations of future returns and thus provided them with incentives to search for yield, that is, increase leverage and to buy riskier, but higher-yielding assets, including securities backed by sub-prime mortgages. Secondly, since the demand for housing is particularly interest rate sensitive, the decline in long real interest rates across the world led to a global increase in housing prices.

Overall, the large current account surpluses and deficits before the crisis were symptoms of broader imbalances in the global economy. These played an important role in setting the stage for the crisis by depressing real and therefore nominal interest rates, and setting the stage for the search for yield that led to wide-spread fragility in the financial system.

### **3. THE ROLE OF MONETARY POLICY**

How should monetary policy respond to large current account imbalances or, equivalently, large capital flows? The traditional pre-crisis view of such flows did not consider the possibility that they could impact on real interest rates but rather focussed on the risks they raised in emerging market economies where the financial system, regulation and supervision are weak. Under these circumstances large short-term inflows in foreign currency could be transformed by the banking system into longer-term lending in domestic currency, leading to both currency and maturity mismatches. Moreover, large inflows could lead to a deterioration of lending standards as banks expand lending, as evidenced by the US subprime crisis. A sudden stop or, worse, sudden reversal of the inflows then provides fertile ground for a financial crisis to erupt.

As a consequence of the crisis, it is now widely recognised that such financial sector weaknesses are also present in advanced economies. Large current account imbalances and capital inflows are therefore increasingly seen as an important issue for all economies. But how should the authorities react in response to large inflows? In particular, can monetary policy be used to counteract them and the credit and asset price booms that they can trigger?

One way for central banks to respond is to do nothing and let the exchange rate appreciate. But that might trigger additional inflows as domestic asset prices rise in foreign currency. Furthermore, it would trigger a costly reallocation of resources from the traded to the non-traded goods sector. Moreover, if the inflow is temporary, the process will be reversed and new costs incurred.

Another way for monetary policy to respond is to fix the exchange rate. In this case, however, the required foreign exchange market intervention by the central bank will result in an increase in money and credit growth, raising asset prices, expanding aggregate demand and fuelling inflation pressures. Of course, the central bank can sterilize the inflows for some while. But over time it becomes increasingly difficult and costly to do so.<sup>3</sup>

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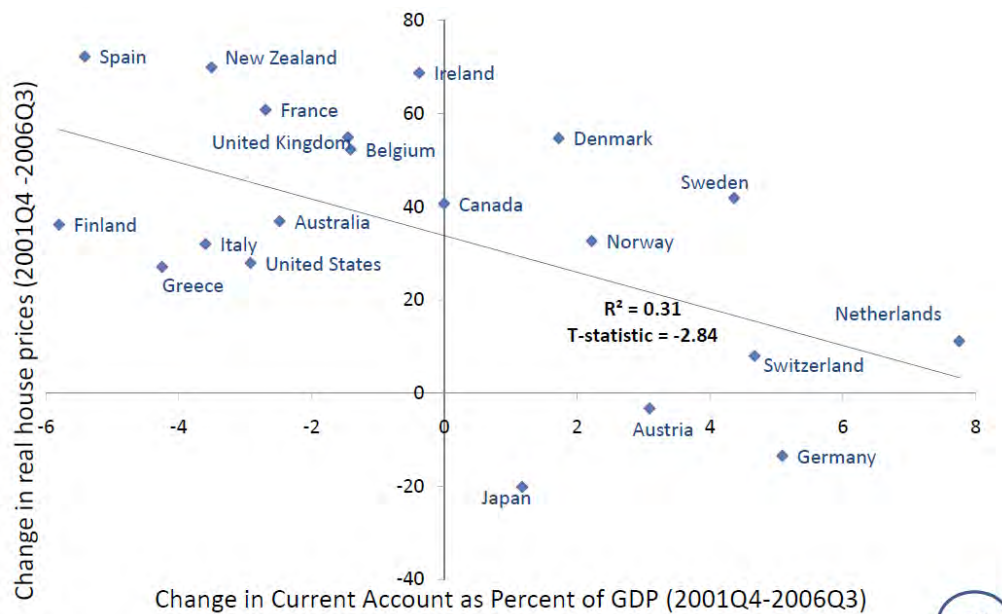
<sup>3</sup> The reason for this is that the yields on the securities the central bank has to offer to absorb liquidity tend to exceed the return it can obtain on the foreign exchange it purchases.



Overall, dealing with large inflows is not an easy task for monetary policy. This suggests that fiscal policy should play a greater role. Thus, economies with large current account deficits or large capital inflows should tighten fiscal policy and economies with large current account surpluses should adopt more stimulatory fiscal policies.

To better see the relationship between current account imbalances and the present crisis, consider Figure 4, which shows that advanced economies that underwent large housing bubbles also experienced large current account deficits.<sup>4</sup> In particular, Ireland, Greece and Spain (there are no data for Portugal) all saw pronounced housing booms and current account deficits before the crisis. One is therefore tempted to conclude that tighter fiscal policy in these countries would have been warranted to limit the booms. Of course, more expansionary fiscal policy might have been warranted in other economies experiencing large current account surpluses.

**Figure 4**  
Current Accounts and House Prices in the Advanced Economies



Source: International Monetary Fund, Haver Analytics, and Federal Reserve staff calculations.

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Source: Bernanke (2010).

Overall, global imbalances, which played an important role in the run-up to the crisis and therefore cannot be disregarded, are not easily dealt with by monetary policy. Other economic policies, including fiscal policy, will therefore need to play a greater role. Of course, national monetary policy cannot play any role within the individual member countries of the euro area, some of which experienced large imbalances in the years before the crisis that now threaten economic stability.

#### 4. THE INTERNATIONAL MONETARY SYSTEM

The main lesson for the design of the international monetary system we should draw from the financial crisis is that current account imbalances and capital flows can simply not be disregarded by policy makers. While such imbalances can be leaned against by fiscal policy

<sup>4</sup> This figure is compatible with the analysis above: as global real interest rates declined, the demand for housing rose, leading to higher house prices and current account deficits.

by national governments, one country's current account deficit is another one's surplus. Thus there is unavoidably an international dimension to these issues. While in theory there thus ought to be gains from international policy coordination, for instance under the auspices of the IMF, in practice such gains have proven elusive. There are at least three reasons why this has been the case.

First and as already noted, there is little agreement about what current account surpluses and deficits are appropriate. While some episodes of large current account deficits are due to excessively expansionary fiscal policy, deficits can arise even if fiscal policy is broadly balanced. Thus, fast-growing economies that expect future income to rise are likely to increase consumption already today, leading to a current account deficit. Furthermore, since the return to capital is likely to be high in such economies, corporate investment may be high, leading to a current account deficit now, but also to expectations of higher future exports and an offsetting future surplus.

Similarly, in slow-growing economies that are characterised by ageing populations, concerns about the public pension and social welfare systems, a regulatory environment that impairs the functioning of labour markets and raises steady-state unemployment rates, saving may rise to high levels as households worry about future economic conditions, leading to a current account surplus.

Overall, current account deficits and surpluses naturally arise as firms and households respond to the economic developments, leading it difficult to determine what an appropriate level is. In turn, this makes it difficult to agree on how economic policies should be coordinated internationally.

Second, political realities can stand in the way of international agreement. Policy choices concerning levels of taxation and spending are intensely political and geared to domestic considerations. It may therefore be difficult to reach international agreements that impact on them. For instance, many believed that in the years before the onset of the current financial crisis the US should have raised taxes and taken measures to raise private sector saving. Similarly, many calls were made for China to promote more consumption demand and to appreciate the exchange rate, at the cost of lower exports. Neither of these policy suggestions was adopted. It is certainly possible that the reason was that governments failed to see what the international consequences of their domestic policy choices were and that greater cooperation could have led to more desirably outcomes. However, it seems also plausible that these policies were adopted and maintained because they were seen to be in the best national interest of these countries.

Third, it is not generally possible for the IMF to compel countries to take prompt corrective action when current account imbalances loom large. Eichengreen (2009) notes that the IMF could neither have forced the US nor China to adjust policies to limit current account imbalances before the crisis. It is of course true that the IMF can apply conditionality in its lending operations. However, neither the US nor China were borrowers. Indeed, countries that are running current account surpluses are unlikely to ever become borrowers from the IMF and many countries having current account deficits face no problems financing them. The IMF's ability to force policy changes is thus limited to the few economies facing a sufficiently serious financial crisis that forces them to borrow from the IMF.

Furthermore, the IMF's ability to play a constructive role in the management of global imbalances is hampered by the fact that the balance of power within the institution is seen as grossly unrepresentative and as reflecting a by-gone era. The resulting lack of legitimacy means that its policy advice, even when sound, is all too frequently disregarded.

To enhance the IMF's role as an honest broker and to underpin its effectiveness and credibility, reform of IMF quotas is necessary. Such reform must entail substantial changes

to bring the distribution of voting power into line with economic and financial realities.<sup>5</sup> Thus, these changes must increase the quotas of the major emerging market and transition economies, which have been growing rapidly in recent years and are likely to continue to do so. Following the quota adjustments in 2006 and in 2008, important steps have been taken but more governance changes may become necessary. In particular, it is desirable to raise the degree of independence of the IMF's analysis from the board in order to promote a candid, even-handed, and balanced analysis of the crucial policy questions the world economy faces.

## 5. THE PITTSBURGH G-20 SUMMIT

Perhaps surprisingly given its contentious nature and the fact that important domestic policy objectives are at stake, the issue of global imbalances received considerable attention at the Pittsburgh G-20 summit and figured prominently in the final statement.<sup>6</sup> While the latter does not provide much detail and one may be tempted to conclude that little progress was made, the fact that the issue was discussed reflects a growing understanding by the G-20 countries that the pronounced current account imbalances in the last decade played an important role in setting the stage for the crisis. This is a crucial step forward: the recognition that a problem exists is a precondition for its solution.

As noted in the appendix to the Statement, the G-20 members agreed to address the respective weaknesses of their economies. In particular, G-20 members with large and persistent external deficits pledged to adopt policies to support private savings and undertake fiscal consolidation while maintaining open markets and strengthening export sectors. Similarly, G-20 economies with similar surpluses committed to strengthening domestic sources of growth, which could include increasing investment, reducing financial markets distortions, boosting productivity in service sectors, improving social safety nets, and lifting constraints on demand growth.

Furthermore, the summit adopted a "framework" for multilateral surveillance of macroeconomic policies, with the aim of making national policies consistent with balanced growth and including regular consultations on commonly agreed policies and objectives. The IMF was asked to assist in this process, building on its existing surveillance analysis, and to report to the G-20.

It is of course difficult to know how committed individual G-20 countries are to these objectives – which are best interpreted as aspirations – and it seems unrealistic to expect large policy changes, in particular in situations in which they would conflict with domestic policy objectives. Nevertheless, the final statement does suggest that the long overlooked role of global imbalances is finally getting more attention.

## 6. CONCLUSIONS

The main conclusions in this note are four.

First, global imbalances played a key role in setting the stage for the current financial crisis. While many observers at the time felt that such imbalances could be easily financed and that they did not raise financial stability risks, it is now clear that that was not true.

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<sup>5</sup> See Cooper and Truman (2007) for a discussion of reforms to the IMF quota formula.

<sup>6</sup> The end statement of the Pittsburgh summit (G-20 2009) is not a marvel in government communication and it is easy to conclude that little was achieved. Angeloni (2009), on which this section draws heavily, provides a lucid analysis of the agreements made.

Henceforth, much greater attention must be placed on understanding the causes and consequences of large payments imbalances and policy measures must be taken to ensure that they are not too sizable or long lasting. Furthermore, measures that strengthen the financial system and increase its ability to intermedicate large capital inflows should be contemplated.

Second, such imbalances are difficult to handle with monetary policy (and within the EMU it is impossible to do so). Greater weight must therefore be placed on fiscal and other policies. Economies with large current deficits should contemplate restricting demand by tightening fiscal policy or by adopting measures that raise saving. Economies with large current account surpluses should do the opposite. Particular attention should be paid to economies in which current account imbalances largely reflect private sector saving-investment imbalances since these may reflect weaknesses in the financial sector or in the social welfare system.

Third, since current account imbalances arise from developments both in the domestic and foreign economies, global cooperation can be important and may facilitate the rebalancing of the world economy. However, to date such cooperation has not been effective and we should not have too high hopes for the future. One way to strengthen cooperation is to move forward with reforms of the IMF to enhance its credibility.

Fourth, the Pittsburgh summit led to potentially important agreements about how to reduce the likelihood of future episodes of large imbalances. Those agreements must now be matched by deeds.

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