DIRECTORATE GENERAL FOR INTERNAL POLICIES

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ECONOMIC AND MONETARY AFFAIRS

Future development of global imbalances

NOTE

Abstract

Although the crisis was not triggered by a sudden capital outflow from current account deficit countries, such as the US, the deep roots of global imbalances and the crisis coincide to a large extent. Global imbalances relating to unhealthy developments should be mitigated in the future and the underlying distortions should be addressed. Reform of the international monetary system should aim at providing better insurance mechanisms for emerging economies. The G20 could be useful in initiating such reforms and also regulatory changes in the financial systems. Beyond these improvements, it remains to be seen what G20 will deliver and there are grounds for doubts. Nevertheless the EU should fully play its role in promoting balanced global growth.

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EXECUTIVE SUMMARY

This note aims to answer three questions:

1. What was the effective role of imbalances in emergence of the crisis as well as the crisis itself?

We share the statement that "At the core of the crisis lay an interplay between macro-imbalances which had grown rapidly in the last ten years, and financial market developments and innovations" (Turner Review, Financial Services Authority, 2009). In addition to microeconomic roots related to failures of regulation, broader permissive factors, including the global macroeconomic environment, were conducive to financial imprudence that has led to the crisis. At the very least global imbalances are symptoms that emerged from the same set of macroeconomic causes than the crisis.

2. What changes in the international monetary system might mitigate global imbalances in the future?

Reform of the international monetary system can only treat some of the motives that have led to global imbalances. Some of the motives behind global imbalances cannot be tackled by reforming the international monetary system: this is the case for 'saving for the next generation' in resource rich countries and for savings arising from an aging population, inadequate social safety nets, weak domestic demand or political motives. Among international monetary and financial reforms that can help reduce imbalances, some look achievable, while other may not be within reach: agreeing on better multilateral insurance mechanisms that can be used in the event of a crisis (e.g. swap lines, credit lines, reserve pooling, etc.) is easier than designing an institutional mechanism to limit exchange rate undervaluation. So international monetary reform can only be a partial solution. But this should be no reason not to engage in it.

3. How can the surveillance of large imbalances be improved, how can the response be coordinated on an international basis and was the G-20 Pittsburgh statement on the surveillance of external imbalances in September 2009 a useful and satisfactory step?

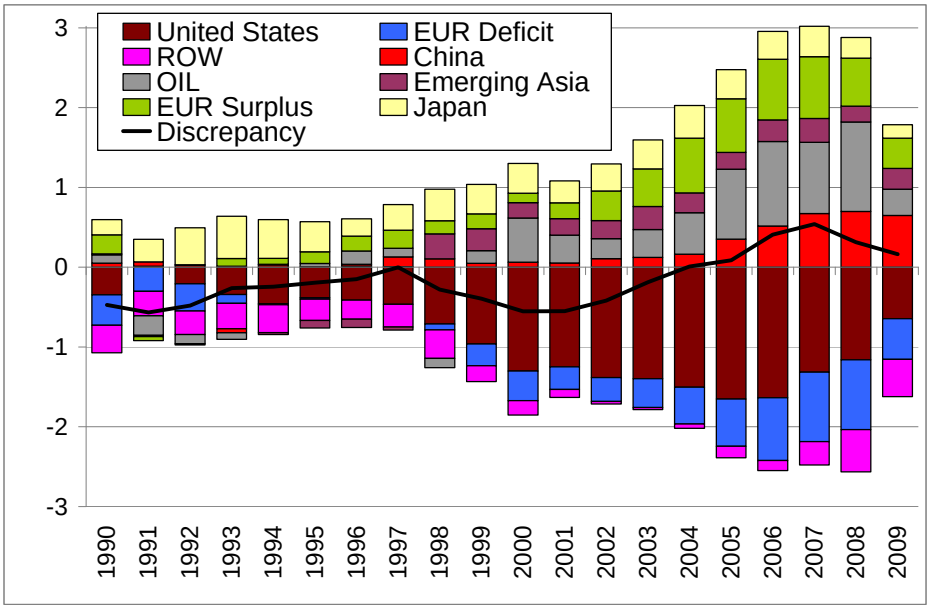
The G20 could be useful in initiating changes in various kinds of insurance mechanisms and a reform of the IMF. Coordination of regulatory changes in the financial systems can indirectly lessen global imbalances as well. Beyond these improvements, the 'G20 framework for strong, sustainable and balanced growth' is an ambitious and unprecedented coordination venture. It is fully justified by the state of the world economy but it remains to be seen what it will deliver and there are grounds for doubts. Nevertheless the EU and the euro area should fully play their role in it, which implies addressing potential inconsistencies between G20 and EU coordination processes.

1. GLOBAL IMBALANCES: MULTIPLE CAUSES

Before answering the three specific questions that are addressed in this note it is important to summarize what are the key reasons behind global imbalances. Figure 1 indicates that there was a trend of widening global current account imbalances (the generally used measure of global imbalances) from about the late 1990s till the crisis.

A significant correction was observed in 2009. It is unclear whether it can be expected to last, as projected by the IMF, or whether imbalances will rise again as global trade resumes.

Figure 1: Global imbalances (percent of world GDP), 1990-2009



Source: Adopted from Figure 1 of Blanchard and Milesi-Ferretti (2010) using data from IMF World Economic Outlook October 2009.
Note. The composition of country groups is as follows:
EUR surplus: Austria, Belgium, Denmark, Finland, Germany, Luxembourg, Netherlands, Sweden, Switzerland.
EUR deficit: Greece, Ireland, Italy, Portugal, Spain, United Kingdom, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Turkey, Ukraine.
Emerging Asia: Hong Kong S.A.R. of China, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan province of China, Thailand.
Oil exporters: Algeria, Angola, Azerbaijan, Bahrain, Republic of Congo, Ecuador, Equatorial Guinea, Gabon, Iran, Kazakhstan, Kuwait, Libya, Nigeria, Norway, Oman, Qatar, Russia, Saudi Arabia, Sudan, Syria, Trinidad and Tobago, United Arab Emirates, Venezuela, Yemen.
Rest of the world: remaining countries.

1.1. Current account surpluses

While in the first half of the 1990s Japan and some European countries accounted for the bulk of current account surpluses, despite the expansion of their surpluses in later years, their share has declined to about one-third by 2006/2008 (Figure 1). Approximately two thirds of the surpluses were accumulated in oil exporter countries, in China and in some other Asian countries in the years before the crisis.

In emerging and developing countries domestic savings in excess of domestic investment may be motivated by six[1] possible reasons:[2]

- *Intertemporal consumption smoothing* in countries benefiting from rising oil and raw material export revenues, especially when oil or raw material reserves are limited and the proceeds from their sales are used to build-up financial assets, frequently in the form of Sovereign Wealth Funds. This primarily applies to Middle Eastern countries;
- *Self-insurance against crises* (i.e. demand for foreign exchange reserves) in countries that experienced balance-of-payment crises in the past decades and prefer to rely on self-insurance than to run the risk of an IMF programme. This especially applies to Korea and to a lesser degree to other medium-sized emerging and developing countries;
- *Export-led growth strategies*. This primarily applies to China where the fixed or nearly-fixed exchange rate policy is only one element of a broader economic strategy. Distortions in favour of the traded-goods sector, the state-owned enterprises and the exporting companies are also instrumental in creating external surpluses;
- *Insufficient or inadequate social safety nets* that result in excess household savings. This also applies to China, although most of the increase in the surplus can be ascribed to corporate saving;
- *Underdeveloped or inefficient financial markets*. One aspect is related to the lack of proper financial instruments for savings and borrowings in order to smooth consumption and insure against risk. This is even coupled with low level of financial inclusion as a large segment of the population is several countries, including China and India, does not have access to the formal financial system (Prasad, 2009). Another aspect is the 'asset shortage hypothesis': residents in emerging and developing countries may wish to invest AAA rated securities, but as their home country is unable to provide a sufficient supply of such assets, they are obliged to invest in US or European investment vehicles (Caballero, 2009). This hypothesis was initially developed to account for Latin American behaviour (Mendoza, Quadrini and Ríos-Rull, 2008) but it has relevance for other countries also.
- Some countries may have *political motives* as well, for example, to demonstrate their rising global power by accumulating huge reserves.

Current account surpluses have different reasons in some major developed countries. In terms of contribution to global surpluses, Japan and Germany clearly stand out. These two countries share some similarities abut also differences:

- Both countries have experienced decade-long near-stagnation of domestic demand. In Germany a loss of competitiveness after reunification initiated a long-lasting adjustment process. While domestic demand was week during this period, improving competitiveness has led to an expansion of exports. In Japan the burst of the bubble at the late 1980s depressed domestic demand and was followed by almost two decades of stagnation and deflation, despite sizeable fiscal and monetary stimuli throughout this time.

[1] Cultural factors in some Asian countries are also sometimes indicated as a possible reason. However, while cultural factors certainly play an important role in economic decisions, it may not explain the change from more or less balanced current accounts to very high surpluses in relatively short periods of time in many Asian countries.
[2] Blanchard and Milesi-Ferretti (2010) discuss three phases of the build-up of global imbalances between 1996 and 2008 and a role of different factors during these periods.

- Both countries face more serious aging problems than their trading partners and have stringent regulations on immigration. Under such circumstances a current account surplus can be regarded as a way to accumulate savings for the time when pensioners will dominate the population.

1.2. Current account deficits

Figure 1 indicates that about two-thirds of global current account deficits have been absorbed by the US, while European deficit countries constitute about a quarter.

Various theories have tried to explore the reasons behind the US current account deficit, and there are two key rationalisations:

- A first explanation blames an exceedingly lax monetary policy, either in the US (Taylor, 2008) or globally (BIS, 2008). According to this view, *policy rates* in the aftermath of the 2001 recession remained too low for too long and this triggered both asset-price inflation, primarily but not exclusively on the US housing market[3], and a generalized leverage boom. Financial market imperfections and regulatory failures have exaggerated these developments. The consequent fall in domestic saving and the increase in consumption have widened the trade and current account balance. According to it, and this triggered both asset-price inflation, primarily but not exclusively on the US housing market, and a generalized leverage boom;
- "Global savings glut", i.e. excess foreign demand for safe US assets (that can lead to a current account deficit under a freely floating exchange rate). According to this view, first put forward by Ben Bernanke (2005), net capital flows into the US lowered *long-term* interest rates, which in turn favoured leverage and excessive risk-taking[4,5]. However self-serving for the US, Bernanke's provocative thesis pointed out that financial globalization and the foreign appetite for US Treasury bonds had to feature in the analysis.

The difference between the two explanations is that the first highlights US policy developments while the second one emphasizes changes in the behaviour of current account surplus countries. Both are consistent with a fall in interest rates and a rise in the US current account deficits.

In an integrated Europe better utilization of savings, the loss of competitiveness in some countries, the housing bubbles could explain rising current account deficits in the decade before the crisis.

The above list of potential causes of current account surpluses and deficits suggests that imbalances are not 'bad' per se and hence the target should be the correction of distortions leading to imbalances. Further, as Blanchard and Milesi-Ferretti (2010) point out, many of the factors are interrelated. For example, rapid growth in China and other emerging market drove up oil and other commodity prices, thereby increasing the import bill of commodity importers and the revenue of exporters. Savings from oil revenues contributed to the fall in interest rates and thereby emergence of unsustainable booms.

[3] Several papers have reported statistically significant correlations between the change in housing prices and the change in current account balances in cross-country regressions, see, for example, European Commission (2009), Laibson and Mollerstrom (2010), and Obstfeld and Rogoff (2009).
[4] The 'global savings glut' hypothesis was challenged by Laibson and Mollerstrom (2010) as it should have caused a boom in global savings and investments and also an investment boom in countries that imported capital, which by and large have not happened.
[5] While the US dollar continues to be the dominant currency of the world, safe assets can also be produced by eg Germany and Japan and these two major countries have not experienced current account deficits.

2. ROLE OF IMBALANCES IN THE CRISIS

"*At the core of the crisis lay an interplay between macro-imbalances which had grown rapidly in the last ten years, and financial market developments and innovations*". The gist of this sentence, from the Turner Review (Financial Services Authority, 2009), can be found in many other assessments by experts and, interestingly, regulators.[6] There is no consensus however within the economic profession on the role of global imbalances in the genesis of the crisis. The IMF's chief economist, for example, is on record arguing that "the crisis itself was not triggered by global imbalances" (Blanchard, 2009)[7].

2.1. Trigger of the crisis

Before the crisis there was a fear that the rising US current account deficit may correct suddenly and abruptly due to a capital outflow that will be accompanied by a substantial fall of the dollar. This has not happened and the trigger of the crisis was not a correction of imbalances per se. In contrast, in response to the crisis the 'flight to quality' has even increased the demand for safe assets and US treasury yields have even fallen to record lows and the dollar significantly appreciated, yet at the same time the US current account deficit was reduced substantially (Figure 1). Hence, the *direct* tigger of the crisis was not the forced correction of large imbalances by capital outflows (Caballero, 2009), but failures within the financial system. Global imbalances, on the other hand, could have *indirectly* caused the crisis by contributing to failures within the financial system via lowering interest rates, contributing to the growth of leverage, and leading to an excessive volume of financial intermediation as we discussed in the previous section (see also Portes, 2009)

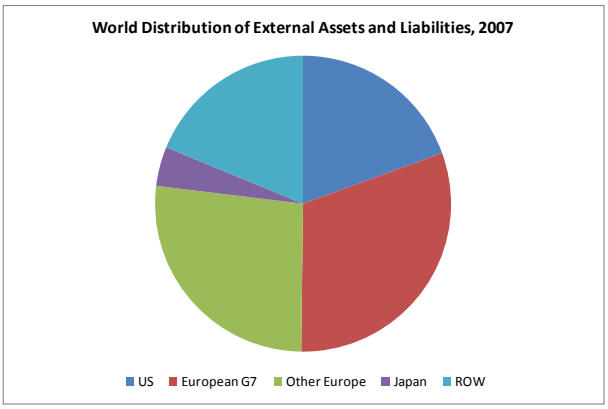
2.2. Crisis transmission: Gross stocks vs. net flows

An important point to note at the outset is that whatever role global imbalances, i.e. cross-border *net savings flows*, played through creating conditions for imprudent financial behaviour, they played virtually no role in the transmission of the crisis. A clear indication of this fact is that although exchange rate varied in response to crisis development, the shock did not originate in the foreign exchange market. Nor were exchange markets subject to abrupt adjustment of the type feared in the mid-2000s. Rather, *gross cross-border savings stocks* - in other words the high degree of financial integration - were instrumental in the contagion. This is an important distinction to bear in mind, especially as in the years prior to the crisis *net savings* were flowing from emerging countries into the US whereas gross cross-border investment primarily involved the US and Europe (Figures 2a and 2b).

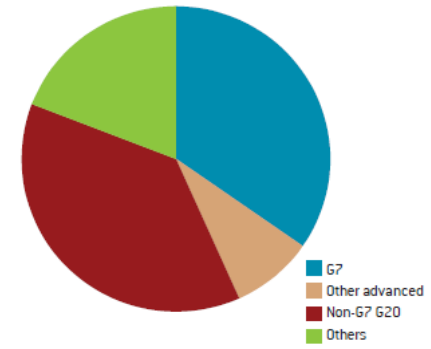
[6] See for example the De Larosière (2009) report prepared at the request of the European Commission.
[7] Blanchard and Milesi-Ferretti (2010) present a careful analysis of global imbalances and discuss their relationship with market developments.

Figure 2 - International Savings: Gross Stocks and Net Flows

Gross stocks



Net flows



* Sum of absolute values of current account balances. G20 excluding the Netherlands and Spain. Source: IMF.

2.3. Micro and macro factors

To clarify the discussion about the role of global imbalances it is appropriate to start from a broader question: whether *macroeconomic factors* contributed to the crisis. Certainly, its roots were microeconomic – from failures of regulation to inadequate incentives structures at financial institutions. But broader permissive factors were conducive to financial imprudence. With higher interest rates, housing booms, stock market valuations, and the rise in private debt would certainly not have reached the same levels. Almost by definition, macroeconomic factors therefore played a role in the boom-bust cycle, because interest rates affect the demand for credit: there is necessarily an interest-rate level that would have prevented the boom.

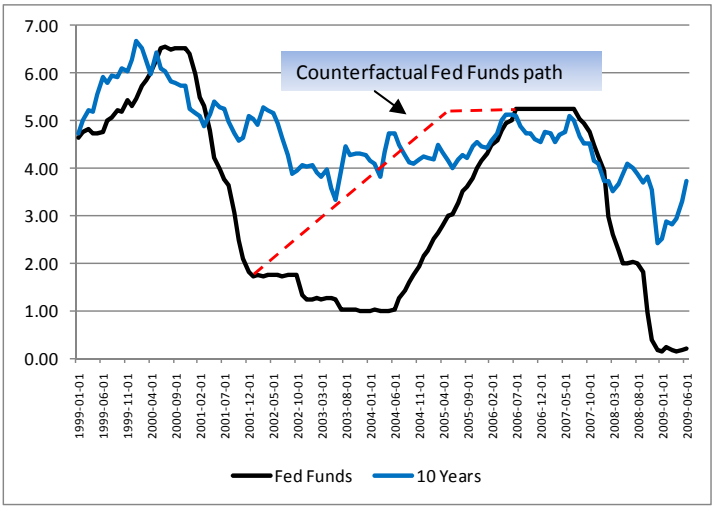
But the question then is what created this macroeconomic environment. Was it a failure of monetary policy? Or was rather the broader saving-investment balance at global level the root cause of the low interest rates? As discussed in the previous section, both explanations have been proposed. Both can be consistent with a rise in the US deficits in the years before the crisis, but the monetary one does not ascribe a particular role to them[8]. So those who blame US monetary policy for the crisis cannot at the same time put the culprit on global imbalances.

To help sorting out which explanation best fits the facts Figure 3 depicts the evolution of policy (Fed Funds) interest rates and of 10-year Treasury interest rates from the late 1990s to the late 2000s. The dashed line, taken from Taylor (2009), represents the counterfactual Fed Funds evolution that would have been observed, had the central bank followed a 'Taylor rule'[9]: the Fed would have tightened faster after the 2001 recession, instead of lowering interest rates further to counter perceived deflation risks. Accordingly, short-term rates would have been higher between 2001 and 2005, denting the housing price boom and making the subsequent bust less pronounced.

[8] First, lax monetary policy in any given country has ambiguous effects on the current account (because it stimulates demand but at the same time depreciates the exchange rate). Second, to the extent it results in an external deficit, this deficit cannot be regarded as a cause, but rather as a consequence. Third, if monetary policy was too lax worldwide, this cannot explain imbalances.

[9] The 'Taylor rule' describes the interest rate-setting behaviour of central banks as a function of inflation and the output gap.

Figure 3: US Policy and Long-Term Interest Rates



Source: Taylor (2009), Federal Reserve Bank of St Louis

In retrospect, the Fed should certainly have worried less about deflation risks in 2003, when then board member Ben Bernanke outlined a contingency plan to avoid the repetition of the Japanese experience, and it should have worried more about the risks of a housing bubble. The question, however, is whether this explanation is sufficient. There are grounds for doubt:

- To start with, consumer-price inflation remained rather subdued throughout 2000-2006 and accelerated only with the world commodity-price boom of 2007-2008. Central bank credibility, structural changes in the US labour market and the increase in the global labour force resulting from China's participation in globalization all resulted in a containment of wage and price increases. A central bank dedicated to price stability had therefore little reason to raise interest rates aggressively enough to prick the real-estate bubble;
- The question, therefore, is rather whether the Fed should have raised interest rates in the name of financial stability. John Taylor implicitly assumes that by following a Taylor rule it would have killed two birds with one stone – achieving both macroeconomic and financial stability. But there is no theoretical or empirical motive to believe that the two objectives are coincident.

Furthermore, from 2001 on, long-term interest rates remained remarkably stable at a low level (Figure 3) consistent with stable inflationary expectations. This stability, famously dubbed a 'conundrum' by Alan Greenspan, contrasted with previous episodes when bond rates responded to movement in policy rates. It suggests that structural factors contributed to low long term interest rates.

This is where global imbalances enter into play. The starting point for analysis is the observation of a massive inflow of foreign savings into the US. As the US came out of the 2001 recession, a new global saving-investment pattern emerged: what became known as 'global imbalances' was the combination of an historically high, and growing US current-account deficit of the order of 1.5% of world GDP, and corresponding surpluses in East Asia and later in the oil-producing countries. During this period foreign net purchases of US Treasury securities always represented more than 60% of net issues and for the entire period they amounted to 81% of total net issues.[10]

The question thus becomes: why was the rest of the world so keen on investing in US assets?

[10] Data here are taken respectively from the IMF's World Economic Outlook and the US Flow of Funds statistics.

- The *asset-shortage hypothesis* is intellectually attractive, but it has however not been tested extensively. Furthermore, the *asset-shortage hypothesis* does not explain why the emerging countries' investment in the US overwhelmingly came from central banks;
- Both the *self-insurance* and the *export-led growth* hypotheses are consistent with the large share of official flows in the emerging countries' US investments. This also applies to the intertemporal consumption-smoothing hypothesis, to the extent governments were prime actors in it.

From a macroeconomic perspective the contribution of the inflow of foreign savings into the US can be assessed empirically. Warnock and Warnock (2009) have explored the impact of foreign capital inflows on US long-term interest rates and find that official flows alone may have depressed them by close to 100 basis points in 2005. So the macroeconomic impact of foreign saving was non-trivial[11].

In addition, foreign demand for safe US assets probably had a structural impact. Intuitively, the low level of long-term rates resulting from capital inflows led investors from the US and other industrialized countries to diversify away from 'plain-vanilla' US Treasury securities and look for higher-yield paper, thereby encouraging investment banks to manufacture securities that were granted AAA status by rating agencies but which offered a higher return than Treasury bonds. This contributed to explain the success of structured products like CDOs. The US was playing its traditional role as the 'world venture capitalist'[12], borrowing from risk-adverse Asian investors and investing into risky assets. However, these were no longer productive investments but toxic leveraged products (Caballero, 2009).

Stylised facts thus are at least consistent with the idea that there were common factors behind global imbalances and the crisis, as proposed by Obstfeld and Rogoff (2009). However they are also consistent with several potential explanations of global imbalances.

[11] Note, however, that this is not strictly the effect of imbalances. Had the US saved more, and Asia less, the world saving-investment balance would not have changed and the world real interest rate would have remained (roughly) constant.
[12] The expression is borrowed from Pierre-Olivier Gourinchas and Hélène Rey (2007).

3. REFORM OF THE INTERNATIONAL MONETARY SYSTEM AND GLOBAL IMBALANCES

Proposals for reforming the international monetary system[13] have different levels of ambition:

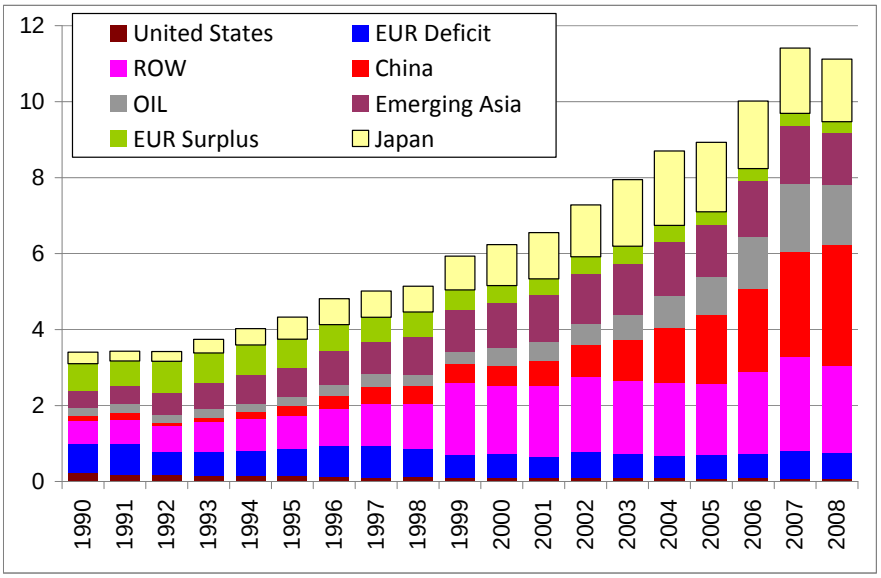
- Better insurance mechanisms for emerging countries in which the demand for reserves is mainly motivated by a precautionary motive;
- Institutional mechanism to limit exchange rate undervaluation;
- Longer-term blueprints to substitute the current system by either a system based on a supranational currency or a multi-currency system.

We argue that the first one is a fruitful avenue, though not an easy one, and that the benefits of a successful reform should not be overestimated. We are doubtful there is much to hope from the second approach, though a strengthening of multilateral surveillance may help limit excessive exchange rate fluctuations. We consider that under current circumstances there no hope for a fundamental reform of the global monetary regime.

3.1. Insurance mechanisms

As said, a key motive of the demand for reserves is insurance against volatile capital flows and crises. Foreign exchange reserves can be used, in principle, to insulate a country from capital outflows and to avoid an eventual reliance to the IMF, which is generally regarded as a stigma in many emerging countries. Indeed, reserves have grown rapidly even as a ratio to GDP during the past decades (Figure 4). The most rapid rise can be observed in China, where in addition to current account surpluses (Figure 1), the financial account was also in a sizeable surplus in most years during the past decade.

Figure 4: Foreign exchange reserves (percent of world GDP), 1990-2009



Source: IMF.
Note. See the composition of country groups at the note to Figure 1.

[13] See Lago (2009) for a comprehensive overview of the current debate about the reform of the international monetary system.

Whether the level and trend of reserves are justified by the self-insurance motive is a matter for discussion. Clearly, reserves are excessive according to standard benchmarks and Jeanne (2007) suggests they are "Too Much of a Good Thing". But in a world of increased financial interdependence Obstfeld, Shambaugh and Taylor (2008) criticise the standard, trade based approach and they find more support for reserve accumulation considering broader aggregates that need to be insured.

Irrespective whether self-insurance is the main motive or not, the experiences of countries with high reserves suggest some tentative conclusions about their benefits during the current crisis. Some of these countries, such as Russia and Korea, have tried initially to withstand the pressure on the exchange rate and used reserves intensively to defend the currency, but after a certain loss in reserves (25-40 percent), both countries gave up the intervention and allowed the currency to depreciate sharply. Aizenman (2010) coined this turnaround as "fear of losing international reserves", which indeed has a rationale when there are uncertainties about the duration and length of the crisis and also an apprehension of a huge reserves loss may make the country more vulnerable than other countries that had lower reserves initially.

Goldman Sachs (2010) also reports mixed evaluation of the cushioning impact of large initial reserves, as their level does not contribute to explaining the impact of the crisis on the economy. Reserves seemed to moderate the rise in country risk premium, to cushion the exchange rate fall, and also to give room to policy makers for supporting the economy. But Goldman Sachs (2010) also highlights that in many emerging countries the key cushioning factor was the strengthening of policy frameworks and macro-fundamentals since the crisis of the late 1990s and early 2000s, and hence reserves may have played only a small role in the resilience.

Yet a conclusion that policymakers in emerging and developing countries may draw from the current crisis is that even more reserves are needed to insulate them better from volatile capital flows, which could aggravate global imbalances.

Addressing the self-insurance motive through reforming the international monetary system has a reasonable hope for success. Currently, all channels of international liquidity support have drawbacks.

- **IMF facilities.** In additional to traditional lending conditional on the implementation of a comprehensive program, such as the stand-by agreement (SBA), the IMF has introduced funding systems based on pre-qualification, such as the Flexible Credit Line (this has been requested by three countries: Mexico, Poland and Columbia). However, due to historical experiences with the IMF several countries consider any IMF involvement as stigma and want to avoid by any means. Others are deterred by uncertainty over future criteria for access to the FCL[14].
- **Bilateral FX swaps.** In response to the crisis, the central banks of major countries opened swap agreements with each other. The Federal Reserve also offered swap lines to Brazil, Korea, Mexico, and Singapore. In Europe, Nordic central banks provided swaps to Iceland, Latvia and Estonia. While these swap lines were essential during the current crisis, their granting is somewhat ad hoc, it is not transparent, and, as some observers argue, it also involves, or may involve, political motives. The Federal Reserve used the phrases "fundamentally sound and well managed economies" and "four large and systematically important economies"[15] in the press release notifying about the swap lines. Other prudent emerging countries, even if

[14] In the EU, the medium-term financial assistance facility for non-euro-area EU countries serves a similar role as the IMF's SBA and can not help countries with sound fundamentals, such as Poland, that experienced a substantial exchange rate depreciation and serious pressures on its government bond market.
[15] See the press release at: http://www.federalreserve.gov/newsevents/press/monetary/20081029b.htm

they were systematically less important, may have also wished to receive such a support[16].

- **Regional arrangements.** In Asia the Chiang Mai initiative developed after the Asian crises of 1997/98 and it certainly has merits, but the amount that can be drawn automatically is small. Multilateralisation is currently being discussed. But regional swap lines and other reserve pooling facilities by construction cannot address situations when the whole region suffers from a synchronised external shock (unless there is a substantial external contribution to the regional facility).

Reforms of the international monetary system should address at least the weaknesses of current facilities:

- **Reforming the IMF and its facilities.** The stigma perception attached to IMF activities in certain countries is a pity, because the IMF resources were tripled in response to the April 2009 G20 summit and the bulk of available funds remained idle despite the desperate need in several countries to counteract capital outflows and boost confidence. Consequently, the most natural way to address the self-insurance motive of the demand for reserves is to reform both the governance of the IMF (increase the representation of emerging and developing countries) and its facilities. For example, eligibility to the Flexible Credit Line could be made automatic based on well defined pre-qualification and trigger systems.
- **Reforming bilateral FX swaps.** It is difficult to see how any system of bilateral swaps can be designed, as providers of FX liquidity may wish to retain the right for discretional decisions. Also, there could be potentially a large number of countries wishing to benefit from such swaps, which may be difficult to manage in a decentralised way. The role and also the willingness of major central banks to substantially extend bilateral swap facilities are uncertain.
- **Designing new multilateral mechanisms.** Designing a new system for temporary liquidity support for prudent countries in the wake of external disruptions in capital flows that does not suffer from the perceived stigma effect of IMF operations is a promising avenue. This is currently contemplated in the preparation for the G20 presidency. For example, Lim (2010) and Rhee (2010) advocate an 'FX Liquidity Insurance Mechanism' (FLI) that would provide temporary credit and/or guarantee schemes for prudent countries or domestic financial institutions in prudent countries. The IMF certainly should play a role in the FLI due to its established central role in the current international monetary system, its well functioning organisation, and expertise, but individual governments and central banks can provide funding or guarantees to the FLI. The critical issue is balancing conditionality and moral hazard.
- **Multilateral lending to regional arrangements.** The IMF has indicated openness to the idea of supporting regional arrangement and this could be a way to overcome their shortcomings in the presence of major shocks.

While reforms discusses so far would certainly promote financial stability, their success in reducing global imbalances depends not just on the credibility of the result of the reform (will countries trust the new system enough to decrease their demand for reserves?), but also on the role of the self-insurance motive in the demand for reserves. When this motive is the dominant and credible insurance mechanism can be set up, the reforms can reduce future global imbalances. But this is not the case when other motives discussed in section 1.1 dominate.

[16] The European Central Bank agreed to swap lines with major central banks, including the central banks of Denmark and Sweden, but has not offered it to any country in emerging Europe.

3.2. Limiting exchange rate misalignments

The next avenue is to limit exchange rate misalignments, either through multilateral surveillance or with the help of an institutional mechanism.

Multilateral surveillance is a natural option to pursue. The Pittsburgh declaration states that "ensuring a strong recovery will necessitate adjustments across different parts of the global economy" and as part of its assessment of growth and current account perspectives, the IMF is likely to make recommendations for various sorts of policy adjustments, including exchange rate regimes and policies.

This will be a challenging task, especially after the failure to implement the 2007 revision of the 1977 decision on exchange rate surveillance. The fact that the US authorities were instrumental in pushing for a more aggressive approach to exchange rate surveillance bodes bad news on the perception of the Fund's future even-handedness.

Beyond mere surveillance, the question is whether an institutional mechanism can be put in place that avoids exchange rate misalignments and especially ensures that policies that amount to deliberate exchange rate undervaluation cannot be implemented.[17]

Experience with target zones in the 1980s and the 1990s is not encouraging. In spite of a collective commitment to them within the framework of the Plaza (1985) and especially the Louvre (1987) agreements, major economic powers remained reluctant to submit their domestic policies choices to an external exchange rate-related rule. This applies even more today when many countries have adopted policy frameworks geared towards domestic targets.

3.3. Future monetary arrangements

Beyond mere repair, can the international community prepare grounds for a more fundamental international monetary reform that would contribute reducing global imbalances and help redirecting capital flows towards poorer countries? After decades of silence, the discussion started again recently, following the posting of an ambitious paper by Governor Zhou Xiaochuan (2009). In this paper, the governor of the PBOC suggested that "*The outbreak of the crisis and its spillover to the entire world reflect the inherent vulnerabilities and systemic risks in the existing international monetary system".*

Against the background of tectonic shifts in the global economy, the revival of the international monetary debate is a welcome development. There is room for reflection on the way major shifts in the balance of international economic power will be reflected in the rules of international money. Reforms of the international monetary system are however far off and it would be excessive to count on such a reform to bring a solution to the problem of global imbalances.

[17] Goldstein (2010), for example, proposes a system to limit current account imbalances to, say, four percent of GDP, with perhaps a lower threshold for systemically important economies. Failure to comply with the rule would induce penalties ranging from intensive consultations with the IMF to World Trade Organisation (WTO) approved trade policy retaliation and forfeiture of eligibility for SDR allocations and for an increase in the IMF quota of the country concerned.

4. THE G20 SURVEILLANCE PROCESS

The "Framework for Strong, Sustainable, and Balanced Growth" is a very ambitious venture, which basically aims at succeeding at G20 level where the G7 never really succeeded. It risks disappointing. It should however be supported because it provides a rare opportunity to build on the spirit of multilateral cooperation that manifested itself during the crisis to foster a closer coordination of national economic policies. If implemented – even only partially – it could be a vast improvement upon the current state of affairs.

The G20 could also be useful in initiating changes in various kinds of insurance mechanisms and a reform of the IMF. Coordination of regulatory changes in the financial systems can also contribute to a decrease in leverage of various actors of the economy and can reduce the chances of future unsustainable bubbles, and thereby it can indirectly improve domestic savings in countries with low savings rate, which would lessen global imbalances as well.

There is a question, however, as regards the ability of the EU and the euro area to play their full role in the G20 process. While Europe's commitment to the multilateral process is certainly stronger than those of most other players, it is confronted with significant difficulties regarding the principles and implementation of the G20 process and its consistency with EU coordination processes.

European coordination processes – especially the SGP and the Lisbon process – are based on two principles of importance in the EU. First, all countries are treated equally irrespective of their size, so that eg a budgetary deficit in Ireland is consider as much of concern than a deficit in Germany. Second and consistent with the first principle, instruments are pre-assigned to objectives, for example structural reforms contemplated as part of the Lisbon process are expected to deliver growth.

The principles of the G20 coordination process are likely to be rather different. First, the IMF (which serves as a secretariat to the G20) is likely to start from major imbalances and put the emphasis on policy corrections by the major players. Second, its philosophy is likely to be more pragmatic – it is likely that it will start from a diagnosis on what the major problems are and examine responses in relationship with this diagnosis. In other words, G20 coordination is unlikely to be rules-based whereas this is the case for EU coordination.

Coming on top of issues of representation, the difference in approach between these two processes may generate tensions and result in a handicap for the implementation of the G20 process in Europe. It would be advisable for the EU to prepare and give thoughts to ways to overcome this tension, if it does not want to take the risk of becoming an obstacle to the effectiveness of a process it is a strong supporter of.

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