

THE INTERNATIONAL MONETARY SYSTEM IS CHANGING: WHAT OPPORTUNITIES AND RISKS FOR THE EURO?

IGNAZIO ANGELONI AND ANDRÉ SAPIR*

Highlights

- After a thirty-year pause, discussions on the future of the international monetary system (IMS) have restarted. This is partly due to the fact that the IMS has facilitated, or at least not prevented, the economic and financial imbalances that led to the recent crisis.
- This paper argues that the international position of the US dollar is likely to erode in the coming years, though the speed of the process is uncertain. This will create a demand for other currencies to be used internationally as means of payment and store of value. The most likely candidates for filling the partial vacuum created by the dollar's decline are the euro and the Chinese renminbi. The probability that the renminbi will eventually become one of the world's key currencies is very high, but the speed of the process is uncertain.
- As far as the euro is concerned, much will depend on if and how the sovereign debt crisis is resolved. Our view is that the crisis will be dealt with and that it will result in radical steps towards fiscal and financial integration. If such steps are taken, the euro will secure both internal stabilisation and a growing international role.

* Bruegel and European Central Bank (first author, ignazio.angeloni@bruegel.org), and Bruegel and Université Libre de Bruxelles (second author, andre.sapir@bruegel.org). The ideas expressed in this paper are the authors' alone. We are grateful to our discussants, Otmar Issing and Adam Posen, and to other conference participants for helpful comments.

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1. At the crossroads

After a thirty-year pause, discussions about the future of the international monetary system (henceforth IMS or 'the system') have restarted. An increasing number of observers is arguing that the system has facilitated, or at least not prevented, the rise of economic and financial imbalances that are at the origin of the recent crisis. Meanwhile, due to market forces and policy action, the system has evolved in recent years and more changes are likely in the near future. The aim of this paper is to outline some of these developments and to discuss foreseeable implications for Europe.

Before 2007, some had already noted the peculiar configuration that the post-Bretton Woods system had assumed, with China and the US increasingly unbalanced in their external positions and with a common interest on their part to postpone or even avoid adjustment (Dooley, Folkerts Landau and Garber, 2004). With the crisis, concerns about this situation have increased. Three things happened. First, analyses of the mechanisms driving the supply and demand for risky assets in the pre-crisis years have shed light on the links between the expansion of global liquidity and the propensity by wealth holders and banks to take on leverage and risk (see, for example, Adrian and Shin, 2008). A connection with the IMS arises because the hegemonic position of the US dollar, in combination with the expansionary stance of the US monetary policy, is often recognised as an indirect cause of the rising supply of international liquidity in the years preceding the outburst of the crisis (as argued, for example, by Gourinchas, 2010). Second, the depreciation of the dollar and the ensuing search for portfolio diversification by official reserve holders accelerated a demand-driven evolution towards a 'multipolar' IMS (at least if measured at current exchange rates; ECB (b) provides evidence). On the supply side, China has made tentative steps to encourage some cross-border use of its currency. Finally, the growing evidence that global imbalances are not going to go away, even once the global economy were to emerge from the crisis, has injected a sense of 'quid agendum' among policymakers.

Clearly, the fact that there are discussions does not *ipso facto* mean that reform will actually happen. It does not even mean that the current market-driven evolution (that we will describe in some detail below) will lead to a discernibly distinct endpoint in a foreseeable future. History is not encouraging in this respect. The extensive debate in the 1960s and 1970s on the weaknesses of the dollar-centred fixed rates system and its possible alternatives did not lead anywhere, except in its dissolution (forty years ago as we write) and replacement with what was later dubbed, dismissively, a 'non- system'. By contrast, a monetary order bound to last for decades was delivered in a three-week secluded conference (1-22 July, 1944), with little contribution from outside experts or public opinions. Can this time be different? Perhaps. It is significant that in addition to discussions there are, at present, powerful economic forces at work that should plausibly propel further changes, on top of those we already see today.

Our scope in this piece is twofold. First, we review the main recent developments in the IMS and possible future trends in the medium term, including the role of China and its currency. Here we draw mainly on a recent report by Bruegel and CEPII that we co-authored with others (Angeloni *et al*, 2011), in which these trends are examined in more depth. Second, we discuss the position of the euro in the context of these developments. Discussing prospects concerning the international role of the euro may seem hazardous at the present time, when some are prophesying its demise. While not underestimating these risks, we contend that the

prospects are not necessarily as grim as they appear at present. Our focus is on the fundamental forces that will, assuming the current tensions subside, shape the position of the euro within different possible scenarios for the evolution of the IMS in foreseeable future.

We make three main points:

1. The international position of the US dollar is going to erode further, though the speed of the process is uncertain. This will create a demand for other currencies to be used internationally as means of payment and store of value¹. The real question is how this vacuum will be filled.
2. Barring a resurgence of monetary multilateralism, leading, for example, to a revival of the SDR – eventuality we regard as implausible except in case of major crises – the most realistic scenario is one in which other currencies will come to share the privilege, and the burden, of exercising an international role. Both the Chinese renminbi (RMB) and the euro are partially qualified to play this role, alone or in combination, and are bound to compete for that role. The outcome will depend on a mix of circumstances and policies.
3. The prospects for the euro are challenging but far from hopeless. As others, we are of the view that the euro crisis will be overcome only with further radical steps towards fiscal and financial integration. While it seems unclear at present whether the political cohesion and leadership necessary for such steps can materialise, one should note that, historically, political and economic unifications have typically progressed in times of crisis. The euro is at a risky crossroads, but what matters for our argument here is that the reforms needed to stabilise it internally – some of which are already in progress – are the same ones that would promote its international attractiveness. Internal stabilisation, if achieved, is likely to be matched by a growing international strength.

2. The IMS and the crisis

The current system, or ‘non-system’ as some call it, emerged from the ashes of the Bretton Woods regime in the early 1970s. Its emergence was accompanied by major policy reforms at national level that, taken together, gave rise to the current international financial architecture, which is made of widespread financial liberalisation, the generalisation of central bank independence, policy regimes aimed at delivering domestic stability and the gradual acceptance of exchange-rate fluctuations. For many observers and policy players it was deemed to be not just the only viable system, but also the most desirable one. A system of generalised floating and flexible inflation-targeting with full capital mobility, at least in the advanced world, seemed well suited to achieving policymakers’ goals of full employment, stable prices and sustainable current-account positions. In this setting, their main task was to ‘keep their own house in order’ (generally intended as some notion of internal balance: low inflation and near-full resource utilisation). International coherence was expected to result from the consistency of national self-centred policy rules.

¹ A different view is presented by Kenen (2011), according to whom “There are no alternatives to the present role of the dollar in the international monetary system”.

Gradually, however, this hope dissipated as the two assumptions on which it rested became untenable. First, macroeconomic policies by the key players were meant to remain disciplined and consistent with maintaining the system in balance. This was obviously not the case for the United States whose currency retained a central role in the system giving it the 'exorbitant privilege' of easy external deficit financing and seignorage extraction. Second, countries outside the advanced world, often unable or unwilling to abide by the system of generalised floating and flexible inflation-targeting with full capital mobility and were once a relatively marginal component of the global economy, have become major players.

As a result, in recent years the IMS has undergone a transition, the most important one since the end of Bretton Woods. The conditions for change were already in place before the crisis, as a result of a number of factors.

The first is the trend decline in the weight of the US in the global economy. This movement is clearly underway and will continue, or even accelerate, as we document below. History shows that monetary dominance is persistent: currencies tend to preserve their international role for long after the decline of the respective economy (Flandreau and Jobst, 2009). Over time, however, economic size and performance become increasingly relevant in the attractiveness of a currency for global investors.

In addition, the position of the US dollar has been threatened by the uncertainties connected with the growing external imbalance of the US economy. US deficits contributed to the supply of dollars in the global economy, hence initially supporting the position of the hegemon, but over time they generated doubts about the sustainability of such position – the time-honoured and still valid Triffin (1960) dilemma – and a growing demand for portfolio diversification. The financial crisis has accelerated this evolution. Perceived risks in the US banking system and sovereign debt have fuelled the demand for diversification by private and official wealth holders. The weakness of the US dollar has intensified, except for a short-lived 'safe haven effect' during the first phases of the turmoil.

Another contributing factor is the transformation of Asia, since the end of the 1990s, from a chronic state of underdevelopment into a thriving, competitive and highly interconnected economic region. The web of financial and trade linkages across the region has grown exponentially (Kubelek and Sa, 2010). Though a regional 'monetary pole' has not emerged yet, the conditions for one arising are increasingly present. China, the largest regional economy, while still hesitant on whether such developments should be encouraged, has nonetheless moved some steps towards developing an international role for its currency (Vallee, 2011).

Since 2005, and increasingly after 2008, China has adopted a more flexible exchange rate stance, something that is seen by many as a sign of further steps towards an open monetary and financial system, including more cross-border use of the RMB within the region. Interestingly, Fratzscher and Mehl (2011) document a sharp increase in the influence exerted by the Chinese currency on other regional exchange rates, starting after the softening of the dollar peg in 2005 and particularly after the financial turmoil of 2008. These authors go as far as suggesting that the renminbi may already have acquired, unnoticed by most, the status of an international currency.

Furthermore, dissatisfaction with capital flows volatility has revived the debate about the costs and benefits of free capital mobility. The general consensus established in the 1990s about the benefits of financial globalisation has been undermined, not only because of the crisis but also, and more simply, because many emerging countries have been repeatedly overwhelmed by surges of capital inflows followed by sudden outflows. Also, many of them, including China and India, have demonstrated that they could perform economically while retaining tight capital controls.

The accumulation of very large international reserves by still relatively poor countries raises concerns about the welfare cost of holding reserves and capital allocation at global level. Foreign-exchange reserves are mostly invested in high-quality and low-yielding liquid assets, mainly government bonds. Such an investment strategy has welfare costs for countries that accumulate reserves and has implications for international capital flows that are undesirable from an allocative viewpoint. It also has consequences for global financial stability, because it increases the burden of diversification and maturity transformation on banking sectors located in the reserve currency countries – mainly the US. Moreover, there is a growing fear among large official reserves holders that the present system exposes them to the risk of large capital losses, should the dollar depreciate in a disorderly way. In brief, foreign-exchange reserves accumulation does, beyond a certain point, offer an unfavourable risk-return trade-off and maybe a source of negative global externalities. Rising concerns in the developing and emerging world were vividly exposed in a widely commented post by China's central bank governor in March 2009 (Zhou, 2009), in which he unexpectedly called for a reform of the IMS based on a revival of the Special Drawing Rights (SDR).

Finally, increasing disputes over the pegging strategies of emerging countries, and monetary policies in the advanced countries, emphasise the increasingly evident need for an emancipation of monetary policies in large emerging countries. The process started before the crisis with the adoption of inflation-targeting monetary policy strategies by many emerging economies. However, fear of floating and lack of international cooperation led many other countries to maintain the objective of a stable exchange rate and to sterilise the monetary consequences of increased net capital inflows. In the wake of the crisis, the large growth differential between the 'North' and the 'South' has made such double-target model unworkable without raising barriers to capital flows. These developments have also prompted fears of 'currency wars'.

The common theme running through these developments is the recognition that current international monetary arrangements seem incapable of delivering not only domestic internal and external stability for each individual country, but also global economic and financial stability. A broadly shared, though not unanimous, opinion among academics (see for example Eichengreen, 2009; Portes, 2009) and policymakers (see de Larosière, 2009; Turner, 2009; and King, 2010) is that the interplay between external imbalances among the main currency areas and financial market developments was an essential ingredient in the genesis of the crisis. There is also broad (but again not unanimous) recognition that macro-imbalances were facilitated by the lack of incentives for policy adjustment and the weakness of multilateral disciplines. Whether the uneasiness about the performance of the system – well articulated by the report of the Palais-Royal initiative (Camdessus *et al*, 2011) – and the ensuing discussions will lead to reform action soon, or will lose force in the face of the formidable negotiating difficulties that any reform of international monetary relations entails,

is difficult to predict. Sceptics point out that agreements on overhauls of the IMS were only reached in exceptional circumstances, typically following major wars².

All in all, there are in our view reasons to believe that, despite the fact that (1) its role in the genesis of the global crisis remains controversial, (2) it proved fairly resilient during the crisis and (3) it will be hard to reform, the current IMS is bound to evolve through either policy initiatives or market developments, or probably both. The two main factors that have contributed to the preservation of the status quo in the last three decades – the uncontested dominant position of the US economy and the absence of plausible candidates to join the US dollar in its international role – are gradually eroding. What is much less clear at present is what direction this evolution will take, say, over a horizon of 10 to 15 years from now.

3. Realistic options for the foreseeable future

To design possible medium-term scenarios for the evolution of the IMS, it is useful to examine the structural factors that shape the global monetary order, their balance and how they are likely to develop over time. Following Angeloni *et al* (2011), we distinguish three shaping factors.

The first is the sheer economic size of nations. Throughout the history of the IMS there has been a link (albeit a complex one) between economic size and monetary leadership, with the complexity coming from the fact that incumbency matters because of 'network externalities' associated with the international use of currencies. A similar tension between economic size and incumbency is likely to apply in the decades to come as well, suggesting that the impact of economic size on monetary power, while surely present, is likely to be delayed.

Figure 1 provides a bird's eye view of the evolution of the world economy and the distribution of economic power from 1870 to 2050, at 2005 exchange rates. Throughout the nineteenth and twentieth centuries, the share of the largest economy in world GDP remained consistently above 15 percent. For most of the Gold Standard period (1879-1913), the sterling area composed of the UK and its main colonies met this criterion. It was either the dominant power in terms of GDP or a close second to the US. Throughout the Bretton Woods period (1945-1973), the US was the undisputed dominant power, with a weight consistently over one-fourth of world GDP.

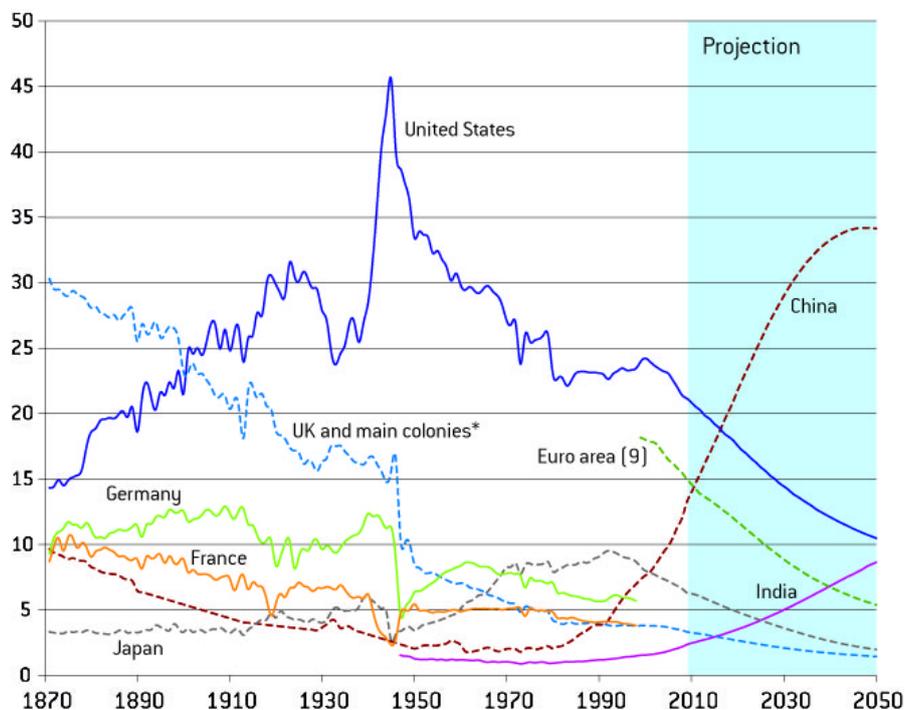
According to long-term projections, the world economy in the twenty-first century is likely to see the emergence of two new dominant players³: China and India. China should overtake the US around 2035, at constant relative prices (Subramanian, 2011, offers a comprehensive account of the progress of China). By the middle of the century, US weight should be down to less than 20 percent and, unless significant enlargements take place, the eurozone's weight will be down to 10 percent. Even assuming enlargement of the euro area to the current EU and beyond, its weight is unlikely to reach 15 percent. In contrast, China could weigh one fourth of the global economy at the 2050 horizon, and India almost as much as the euro area. In the

² The Smithsonian Agreement of 1971, that simply took note of the unilateral decision by the US Government to end the Bretton Woods system, is hardly an exception.

³ The projections in this paragraph are from Fouré *et al* (2010) and are based on assumptions about demography and productivity.

meantime – say, in the next 10 to 20 years – there will be an interregnum during which economic power will be much more evenly distributed amongst a core group of countries.

Figure 1: Percentage shares of selected countries and areas in world GDP, 1870-2050 (at 2005 exchange rates)



Sources: see Angeloni *et al* (2011).

The second factor has to do with the ability of a country or a group of countries to exercise monetary leadership. Beyond economic size, this ability depends on financial development, on the quality of economic and financial institutions, on the nature and effectiveness of governance, and on an economic power's political might and commitment to global leadership. Table 1 summarises the respective situations of the US dollar, the euro and the renminbi with respect to these elements.

Table 1: The incumbent and the challengers: state of play in 2011

	US dollar	Euro	Renminbi
Size	27% of world GDP, decreasing	20% of world GDP, decreasing (but potential for enlargement)	7.6% of world GDP, increasing
Financial markets and openness	Unrivalled liquidity and depth, full capital mobility	Second after the US, but bond markets remain fragmented in the absence of unified Eurobonds. Full capital mobility	Underdeveloped markets and restricted capital mobility
Legal system	Strong	Strong	Weak
Budgetary and monetary policy	Increasing concerns over the sustainability of budgetary policy and the risks of debt monetisation	Strong monetary record and institutional independence. Concerns over solvency of some individual state borrowers	Strong fiscal position. Good monetary policy track record but at risk, in part because of currency peg
Ability /willingness of policy system to respond to unexpected shocks, lender of last resort function	Strong	Strong for central bank but broader capacity limited by institutional arrangements	Strong
Stance towards international currency role	Incumbent	Officially neutral. Unilateral euroisation by non-member countries actively discouraged	Support for early steps of RMB internationalisation
Political cohesion and geopolitical power	Strong	Limited by political fragmentation	Strong and in ascendance

Source: Angeloni *et al* (2011).

The table indicates that there are several reasons why the dollar is dominant at the moment. Its main, not negligible, weakness arises from concerns over the sustainability of budgetary policy and the possible monetary consequences of debt unsustainability. The dollar faces however two potential rivals. The first, the euro, has many of the attributes of an international currency and already a sizeable share in foreign exchange reserves and international bond issuances, but weak governance and political foundations. The second potential rival, the renminbi, has strong underpinnings in terms of economic potential and coherence in policymaking but is still far from having acquired the characteristics of an international currency. In short, for the time being the euro will not be dominant and the renminbi cannot, and this gives the dollar a still-unrivalled status. But this situation is unlikely to last beyond the 10-15 year horizon considered here.

The third factor relates to the likely evolution of global financial conditions. A major question is whether the trend towards global financial integration observed in the last decades will continue and lead to the full inclusion of emerging countries into the global financial network. The appetite for unfettered capital market liberalisation has significantly diminished in the wake of the 1997-98 Asian crisis and of the more recent global crisis. An increasing number of emerging economies have reintroduced capital controls or are contemplating such a move, often with explicit or implicit support from the IMF. The resumption of capital flows after the worse of the global crisis was over nevertheless suggests that these controls were more

defensive than offensive; they convey a more cautious approach to liberalisation by emerging and developing countries rather than an irreversible U-turn. Meanwhile, Asian financial centres have continued to strengthen, and their openness and integration have increased.

A separate issue concerns the direction of capital flows. A striking characteristic of the last decade is that, in net terms, while private capital has been flowing 'downhill', from relatively richer to relatively poorer countries, official reserve hoarding has reversed the direction of total net flows 'uphill'. Although they abated somewhat in the aftermath of the global crisis, there are reasons to believe that 'South-North' capital flows are going to remain strong and that the world saving-investment balance pattern is not going to reverse dramatically over the next 10-15 years⁴.

Based on these observations, there seems to be three scenarios for the IMS in the foreseeable future, say the next 10-15 years:

1. A repair-and-improve scenario whereby changes to current arrangements are introduced through incremental reforms. These are *inter alia* enhanced surveillance, a voluntary reform of exchange-rate arrangements, especially in Asia; improved international liquidity facilities; accompanying domestic reforms such as the development of home-currency financial markets; and regional initiatives to complement current IMF facilities. Under this scenario, the international role of key currencies remains broadly constant and the US dollar retains its dominant role, the euro's role remains broadly unchanged, and the one of the Chinese renminbi increases, but remains marginal in comparison to the dollar and the euro.
2. A multipolar scenario in which a system structured around two or three international currencies - the dollar and, presumably, the euro and/or the renminbi – emerges over a 10-15 year horizon. Although a move to a multipolar system is generally viewed as a remote prospect, especially in the case of the renminbi, it would be entirely consistent with the long-run evolution of the world economy. Moreover, the Chinese authorities have taken significant steps in this direction through various schemes and their currency has a strong potential for internationalisation. As for the euro, it has already developed as a diversification currency and in this scenario the euro area overcomes its current difficulties and the euro graduates from a mainly regional to a truly global currency. Yet an alternative bipolar scenario with the dollar and the renminbi could occur if the euro remains handicapped economically and politically.
3. A multilateral scenario in which participants agree to take steps towards a strengthened international monetary order. In contrast with the multipolar scenario, which will largely rely on market forces and national policies, renewed multilateralism would require a fairly intense degree of international coordination and the development of new instruments to help escape the pitfalls of regimes based on the dominant role of one or a few national currencies, foster macroeconomic discipline and provide for international liquidity management. A system of this sort could build on the existing SDR or rely on other, new vehicles.

Compared with the current regime, each of these three scenarios has advantages and disadvantages in terms of efficiency, stability and equity. It has also its own specificity in

⁴ See Chapter 3 of the April 2011 IMF *World Economic Outlook*.

terms of feasibility. Table 2 provides an assessment of the three scenarios in terms of these four criteria.

Table 2: Assessing the three scenarios

Criterion	Scenario 1 Repair and improve	Scenario 2 Multipolarity	Scenario 3 Renewed multilateralism
Efficiency			
Economies of scale	0	-	0/-
Savings on reserve accumulation	+	++	+++
Limitation of FX misalignments	+	++	++
Stability			
Global anchor	0	?	+
Discipline	+	++	+++
Limitation of FX volatility	0	-	-
Resilience to shocks	+	+	++
Equity			
Adjustment symmetry	+	++	+++
Limitation of exorbitant privilege	0	+	++
Global seignorage	0	+	+
Limitation of policy spillovers	+	++	+++
Feasibility	+++	++	+

^(*) Gains (+) or losses (-) are those implied by moving from the current IMS to each of the alternative regimes. Source: Angeloni *et al* (2011).

The first scenario is the least demanding in terms of both domestic policies and international coordination, hence is the most likely in the short run. The third one is the most demanding in terms of both domestic policies and international coordination, and therefore the least likely in the foreseeable future, unless serious shocks in the global economy (e.g. a deep and prolonged recession, disorderly exchange rate and asset price movements, financial instability and contagion, or any combinations thereof) stark recession force a quantum increase in the degree of international economic and monetary cooperation. The second scenario relies on market forces, geo-political trends and domestic policies rather than international cooperation. Its probability is low in the short run, but significant at the 10-15 year horizon.

In terms of efficiency, stability and equity, all three scenarios offer improvements when compared to the current system. Comparing the three scenarios to each other, we find that that the desirability of a scenario seems to be negatively correlated to its feasibility, at least in the short run. The multipolar and the multilateral scenarios are both superior to the more modest 'repair-and-improve' scenario, especially on grounds of equity and, to some extent, stability, although their pros and cons vary across the different criteria. But they are also less likely in the short run precisely because they are more demanding in terms of domestic or international policies.

More extreme multilateral scenarios involving the creation of an ‘outside’ international currency in a proper sense (modelled for example on Keynes’ bancor) rather than simply the SDR – a scenario envisaged recently by Padoa-Schioppa (2010) would be preferable in our view, at least theoretically, as they would guarantee a fully symmetric adjustment mechanism and full control of global reserves. Admittedly, however, they are even far less realistic than the more modest multilateral scenario considered here.

If feasibility in the medium term is the main guiding principle, then the multipolar scenario is clearly the most interesting to explore since it best corresponds to the structural changes in the world economy discussed earlier, in particular the role of China.

It should be emphasised, though, that the gains from multipolarity can only materialise if key currencies are truly allowed to float (although maybe in a managed way), and if third countries move towards more flexibility or regional pegs. Here the key question concerns the internationalisation of the renminbi and whether it will make exchange rate flexibility more acceptable for both China and its regional partners.

4. A key question: the role of China

There are several reasons to assume that the renminbi will become a major international currency. As the second largest economy in the world, China already has the scale necessary to create deep and liquid financial markets. The huge size of its foreign trade and foreign direct investment volume forms the basis for renminbi-denominated transactions. In addition, the People’s Bank of China (PBC) and the State Administration of Foreign Exchange (SAFE) have large balance sheets and already actively intervene in on- and off-shore financial markets. Moreover, importantly, as Eichengreen (2010) argues, the rise of the renminbi to a fuller international status will be advantageous to China. Besides the extraction of seignorage, domestic firms would be able to limit their foreign exchange exposures by transacting internationally in their own currency, the PBC will be able to follow an independent monetary policy and China’s financial sector will become more competitive.

At the moment, however, the internationalisation of the renminbi remains very limited, even compared to currencies of other emerging countries. Cheung, Ma and McCauley (2010) show that, in 2007, daily trading of the renminbi barely surpassed the sum of daily imports and exports from China, whereas foreign exchange turnover in relation to foreign trade was around 10 for the Indian rupee or the Korean won and roughly 100 for international currencies such as the Swiss franc or the US dollar.

There are, clearly, formidable obstacles that must be overcome before China’s currency gains international status, which presupposes capital account convertibility – the ability to freely convert domestic into foreign financial assets at market determined exchange rates. They include the quality of financial regulation and supervision, the degree of the rule of law, the exchange rate policy and the strong reliance on exports. These obstacles are all interrelated and overcoming them will amount to a fundamental change in China’s economic model. Barry Eichengreen argues that *“these kinds of changes are coming. While one can question the timing – whether Shanghai will have become a true international financial centre by 2020 [as China’s State Council has announced] and whether the renminbi will be a first-rank*

international currency by that date – one cannot question the direction” (Eichengreen, 2010, pp. 6-7).

Indeed the central question about the internationalisation of the renminbi is one of timing, which is a key factor behind the different scenarios for the evolution of the IMS over the next 10-15 years discussed in the previous section.

In scenario 1, it is assumed that China gradually aligns its monetary regime on those of other Asian emerging countries, which can be characterised by ‘dirty’ float and a limited use of capital controls. Building on its experience with the creation of an offshore market for the renminbi, it continues to foster the international role of its currency, but at a gradual pace.

By contrast, scenario 2 assumes that China moves at a more sustained pace towards the internationalisation of its currency. Changes are initially gradual (for example, we suppose an extension of the ‘pilot’ project of renminbi internationalisation launched in 2009, the promotion of one or several active financial centres and initiatives towards increased financial account openness), but they create a momentum and trigger enough two-way capital mobility for a degree of internationalisation of the renminbi to take place despite remaining limitations to capital mobility. Further internationalisation would require greater capital account liberalisation and a freely floating exchange rate.

Whether or not the 15-year time horizon we envisage here would be sufficient for the renminbi to become a floating currency underpinned by fairly complete capital mobility and therefore to be fully internationalised is difficult to say.

Eichengreen (2010) argues that it took only 10 years (1914 to 1924) for the US dollar to go from a situation where, like the renminbi today, it played a negligible role in international trade and payments to one where it became the leading international and reserve currency. It is not clear, however, whether the international circumstances would allow such a rapid rise of the renminbi in the coming 10 years or even whether the Chinese authorities have the will and the capacity to transform their economy and, indeed, their social and political systems, to a sufficient extent to make that possible.

5. Opportunities and risks for the euro

In the 10-some years of its existence, the euro has made only limited progress in its international presence. Measured by the usual yardsticks – share in global official reserves, use as currency anchor for exchange arrangements, denomination of foreign trade, etc – it is the second currency after the US dollar. But so it was already shortly after its introduction; the more recent years have seen little progress in this respect (see ECB (b) and Dorrucchi and McKay, 2011). The stability of the euro’s position in the rankings of international use over the decade is striking in light of the diverse influences acting in opposite directions – the sharp depreciation in the first two years, the subsequent re-appreciation coupled with euro area enlargement, recently the financial crisis, etc. The remarkable stability of the status quo for many years may have been due on the one side to inertia generated by the long-standing dominance of the US economy and its currency, and on the other to the lack of serious contenders from the emerging world, on the other. Both conditions are rapidly changing.

The stance of European policymakers towards the phenomenon has been ambivalent. In 1999, the ECB formulated a doctrine that can be labelled “watchful neglect”. According to it, the internationalisation of the euro is a market driven process that should be monitored, not pursued [‘neither fostered nor hampered’ is the expression used in the ECB, 1999]; it is a by-product of other goals (price stability, financial integration), not a goal in itself. This view arose partly from the consideration of the potential costs and risk of an international currency, in terms of added volatility and vulnerability to external influences (an aspect emphasised by Gourinchas, Govillot and Rey, 2010). Over the years, the ECB has regularly monitored the euro’s usage in international markets, publishing extensive reports. On the other hand, other policymakers in Europe have expressed different nuances. The Commission’s position seemed typically more sympathetic (Almunia, 2008), or even at times expressed an open endorsement (EU Commission, 2008). A rather warm support has come also from the European Parliament (European Parliament, Draft resolutions to the ECB Annual Report, various years). Among member states, different positions have been expressed, some sharing the ‘neglect’ view, others more openly sympathetic to its promotion.

Looking ahead two major questions arise. The first is whether the transition of the IMS suggests that the ‘neglect’ doctrine, prevailing in Europe in recent years, should be reviewed. The second is whether, regardless of the policy stance, those changes imply that a market-driven acceleration of the progress in the euro’s international position is likely. Let’s consider the two questions in turn.

Historical experience suggests a negative answer to the first question. The British pound and the US dollar – the main global currencies in the last two centuries – acquired their international position not as a result of policy actions deliberately aiming at that goal, but as a consequence of a variety of economic, financial and geo-political developments and conditions. Economic policy may well help those conditions materialise, but its effect on whether a currency is accepted across borders as a medium of exchange and used as store of value is mainly indirect. For example, consider the circumstances linking the creation of the US Federal Reserve (1913) to the establishment of the dollar’s international position in subsequent years (Eichengreen, 2011). The presence of a central bank at the centre of the then developing US financial system, guarding financial stability after the major banking crises of the earlier years and providing the real economy with an ‘elastic currency’, undoubtedly contributed to the rising cross-border role of the dollar after the Great War (Eichengreen and Flandreau, 2009 and 2010). But neither was the Fed founded to promote such role, nor was this a relevant consideration in the mind of Benjamin Strong or other early US central bankers. Different, in our view, is the answer to the second question, namely, whether the present circumstances are more favourable for the euro to expand internationally. The euro has shown, in recent years, a considerable attractiveness at regional level, especially in Eastern Europe. This process possesses a built-in inertia, which creates favourable conditions for a further spreading in coming years, other things equal. In addition, as we observed, there is now a new and genuine demand for currency diversification in the system. It is unlikely that this demand will go away in the foreseeable future, on the contrary. This should create, *ceteris paribus*, favourable conditions for the gradual emergence of a multipolar IMS, as we have argued, in which the euro would be a natural candidate for a prominent role.

A major obstacle to such development at present is clearly the European sovereign debt crisis. As we write, the crisis is far from settled and may in fact not have reached its climax. Whatever

the eventual outcome, more market turbulence is likely. While there is no statistical evidence yet that the euro debt crisis has altered the portfolio shares of global private and official asset holders, or has affected other indicators measuring the international use of the euro, the present uncertainties are enough to discourage anybody from venturing into conjectures on further advancements of the euro's cross border presence in the years to come.

While agreeing that caution is warranted, there are, we think, two important counterarguments. The first is that, just as one should not rule out less favourable scenarios, it is also plausible that the present crisis may trigger reforms that would not otherwise have been made and will, in the end, permanently strengthen the institutional foundation of the euro. The euro sovereign debt crisis could turn out to be a necessary catalyst for progress. This paper is not the place for a discussion of this scenario and its likelihood. But we note that such outcome would have several relevant historical precedents. In their overview of five well-established federations (US, Canada, Germany, Argentina and Brazil), Bordo, Merkwicz and Jonung (2011) conclude that

“... institutional developments in most of the five federations were driven by exceptional events, often downturns in economic activity during deep crises... which affected in a fundamental way the institutions of the five federal states. In response to the economic crisis, central governments increased their power.”

The strengthening of central institutions at the expense of regional ones in these five federations involved, first and foremost, fiscal policy and the financing of public debts. While these five examples refer to cases where an established political union pre-existed monetary and fiscal unification, several arguments suggest that present-day Europe (where many functions are already transferred at Union level and a common central bank exists) is more comparable to historical examples of national monetary unifications than to international ones (Bordo and Jonung, 1999).

Our second argument is that most reforms, enacted or under consideration, aimed at strengthening the euro's economic governance are also likely to promote its position in the IMS. There is, in other words, strong synergy between the *internal stability* of the euro and its *external attractiveness*. Therefore, should the more favourable scenario mentioned above materialise, the euro will probably be well positioned to assume a growing role in a multipolar currency system. Let us consider the different aspects of this argument in some detail.

Lane and Milesi-Ferretti (2001 and 2009) and Gourinchas and Rey (2005) have concluded, looking at detailed data on US balance sheets, that the dollar's international role is linked to the US acting in many ways like a financial intermediary, issuing liabilities attractive for international portfolio holders (mainly private liquid balances and official reserve holdings) and investing in more risky assets. To extract the 'exorbitant privilege' the US banking sector performs a liquidity-creating and a maturity transformation function, much like a bank, for the rest of the world (as noted already by Kindleberger, 1965). In recent years this intermediation has become more extreme, as the demand for liquidity by international investors has increased while the lending side (equity and FDI investment, often in emerging economies) has become more risky. This interpretation seems to fit to some extent also the earlier case of the British pound; in the Gold Standard, and until later in the first half of the twentieth century, the City of London performed financial intermediation by supplying liquid assets to

international investors (bank deposits, Treasury paper, etc) and financing, via trade credit, the vast international trade between the UK and its empire (Eichengreen, 2011, chapter 3).

The question arises of whether the financial and banking sector of the euro area can perform a similar function, and what the conditions are. Will the reforms in the area of economic governance recently undertaken or being discussed help in this direction?

Of central importance here is the stability, efficiency and integration of the euro-area banking and financial sector, including its governance and the availability of an effective safety net. The reforms enacted in 2010 go some way towards providing new and sounder regulatory and supervisory structures. In particular, the European Systemic Risk Board (ESRB), an EU body of central bankers and supervisors, entrusted with the responsibility of monitoring systemic risks and making policy recommendations, should ensure regular and well informed oversight against the insurgence of systemic risks. At a more operational level, the introduction of new European supervisory agencies (respectively on banks, markets and other intermediaries) should help ensure consistent regulation across the area (a level playing field) and homogeneous implementation of rules (a single rulebook), a major deficiency that the institutional structure of the early EMU years had left unresolved (Padoa-Schioppa, 2007).

This granted, much remains to be done. The new European supervisory structures need to be tested and will acquire credibility and influence gradually, building on the limited statutory powers they have. This can only be achieved through consistent and successful performance in the field. This is particularly relevant for the ESRB which does not possess direct intervention powers but acts through non-binding recommendations. The interplay between the ESAs and the national supervisors, a complex web of cross country and cross-institutional interlinkages, will unavoidably have to be phased in gradually and by trial-and-error. In addition, there is an unresolved potential tension between two financial logics in Europe. One is financial integration associated with the internal market, the other is financial supervision associated with the single currency, with the tension coming from the fact that the former is an EU matter, whereas the latter has an important euro-area dimension as the crisis has shown. The ESRB and the ESAs are EU rather than euro-area bodies, which may preclude their evolution towards euro area supervisors.

A closely related issue regards financial integration, ie the ability of the euro-area financial system to ensure broadly uniform lending and borrowing (risk-adjusted) conditions to all market participants, especially across borders. In the early years of EMU cross-border financial integration, measured by volumes of cross border flows and yield spreads, progressed steadily but unevenly (more on money markets, less in other market segments; see the ECB's Financial Integration in Europe, various issues). The financial crisis has impaired financial integration very seriously; at the time of writing there are parts of the euro-area banking system and money markets that are cut out of regular market linkages and receive financing by the ECB, or else at drastically different conditions than the rest of the area. This has endangered the monetary policy transmission process, as often emphasised by the ECB, but also generated uncertainty and opacity in market conditions within and across compartments (interbank funds, bonds, retail banking services), constituting a factor of discouragement for international investors. The new supervisory and regulatory framework will help but is not sufficient, considering in particular that much of the phenomenon originates from rising and volatile sovereign spreads (Angeloni, 2011).

We regard the integration of sovereign bond markets as a first key condition to *jointly* restore financial stability in the euro area and to enhance the euro's international role. A broad, liquid and integrated market for public sector benchmarks plays a key role in all well-functioning financial systems. Official wealth holders (central banks and other sovereign institutions), covering a rising share of global funds under management (check) have a systematic preference for low-risk instruments. While the German Bund has fulfilled this role to some extent, an area-wide liquid market, including benchmarks issued and guaranteed by European institutions, would contribute to financial integration (by improving the collateral pools) and to the attractiveness of the euro as an international store of value.

While the advantages of area-wide bond issuances (or bond guarantees) from the point of view of fostering European financial integration and promoting the international attractiveness of the euro are clear, the political and institutional conditions for their introduction, in amounts significantly beyond those already existing for specific purposes (like the issues by the EIB, the Commission or the EFSF) are complex and challenging. A discussion of them would lead us too far from our central theme. Suffice to say that an adequate legal and economic basis would require new Treaty provisions, including strict issuance rules and limits to guarantee the quality of the new instruments and to avoid free-riding.

The second condition we see to underpin the confidence on the euro both internally and internationally is to upgrade the euro area economic performance. Price stability in a strict sense no longer seems sufficient in this respect; real sector performance will be equally important. In the first decade of the euro, progress has been achieved in making euro area labour markets more responsive and in securing a reduction of unemployment rates (ECB, 2008). But this has not prevented growing competitiveness gaps and external disequilibria across euro area countries. Real economic performance gaps across countries increasingly coincide with differentials in sovereign credit risks and in financial sector risks. The euro area has agreed on a new surveillance framework, the Excessive Imbalance Procedure, with the aim of triggering structural policy responses as a result of monitoring of national developments and peer pressure. The challenge will be, once again, implementation: peer pressure can easily lose force and political bargaining produce laxity, as the experience of the SGP demonstrates. If achieved, better and more even-handed economic performance would also improve the chances the euro area may successfully perform the intermediation role that, we have seen, is proper of countries that issue international currencies. Such role requires a pool of investment opportunities, both domestically or across borders. A strong banking sector would hardly prevail in a weak euro area economy.

6. Conclusions

The reasoning we have developed supports three conclusions.

First, the IMS is changing at an accelerating pace, partly due to the influence of the financial crisis. The stable equilibrium that prevailed for decades, characterised by a dominant US dollar and the lack of plausible alternatives, is no longer there.

Second, this situation creates opportunities and risks for the system as a whole and for individual currencies. It seems likely that the next decades will witness the emergence of a multipolar IMS, where the dollar will continue to play a crucial role but other currencies will also occupy a key role. It also seems likely that the Chinese RMB will, sooner or later, be one of the key currencies.

Third, the prospects for the euro are less clear but by no means sombre. As a result of the sovereign debt crisis, which has exposed some fundamental institutional weaknesses, the euro finds itself in a sort of knife's edge situation: either regress or advance, both internally and internationally. The reforms needed to provide the euro with stable institutional foundation largely coincide in our view with those likely to foster its international use. Stability, efficiency and integration of the banking and financial system are crucial conditions for both internal and international viability and will require further reform of the financial supervisory framework, a broad and liquid sovereign bond market and structural reforms on the real side of the economy. The coming months will tell whether the euro area is able to demonstrate the political cohesion and leadership necessary for such steps to materialise. If it does, internal stabilisation of the euro will be achieved and is likely to be matched by a growing international role.

REFERENCES

- Adrian, Tobias and Hyun Song Shin (2008) 'Liquidity, Monetary Policy, and Financial Cycles', Federal Reserve bank of New York, *Current Issues in Economics and Finance*, Vol. 14, No. 1
- Almunia, Joaquín (2008) 'The second decade of the euro: what role for the euro in the Global Economy?' Speech at the Peterson Institute, Washington, 11 April.
- Angeloni, Ignazio (2011) 'Policy perspectives on financial integration after the crisis', in *Post-crisis growth and financial integration in Europe*, edited by E. Nowotny, P. Mooslechner and D. Ritzberger-Grünwald, Edward Elgar
- Angeloni, Ignazio, Agnès Bénassy-Quéré, Benjamin Carton, Zsolt Darvas, Christophe Destais, Jean Pisani-Ferry, André Sapir and Shahin Vallée (2011), *Global Currencies for Tomorrow: A European Perspective*, Blueprint 13, Bruegel
- Bordo, Michael D and Lars Jonung (1999) 'The Future of EMU: What Does the History of Monetary Unions Tell Us?' NBER Working Papers 7365
- Bordo, Michael D., Agnieszka Markiewicz and Lars Jonung (2011) 'A Fiscal Union for the Euro: Some Lessons from History', NBER Working Papers 17380
- Camdessus, Michel, Alexandre Lamfalussy and Tommaso Padoa-Schioppa (2011) *Reforms of the international monetary system: a cooperative approach for the twenty first century*, Palais Royal initiative final report
- Cheung, Y.-W., G. Ma and R.N. McCauley (2010) 'Renminbising China's foreign assets', CESifo Working Paper No. 3009
- Dooley, M., Folkerts-Landau, D. and P. Garber (2004) 'The Revived Bretton Woods System', *International Journal of Finance and Economics* 9, pp 307-313
- Dorucci, E. and J. McKay (2011) 'The international monetary system after the financial crisis', ECB Occasional paper No. 123, February
- Eichengreen, Barry (2009) 'The financial crisis and global policy reforms', Federal Reserve Bank of San Francisco, Asian Economic Policy Conference
- Eichengreen, Barry and Marc Flandreau (2009) 'The rise and fall of the dollar (or when did the dollar replace sterling as the leading reserve currency?)', *European Review of Economic History*, vol. 13(03), pages 377-411, December
- Eichengreen, Barry (2010) 'The renminbi as an international currency', mimeo
- Eichengreen, Barry and Marc Flandreau (2010) 'The Federal Reserve, the Bank of England and the rise of the dollar as an international currency, 1914-39', BIS Working Papers No. 328
- Eichengreen, Barry (2011) *Exorbitant Privilege*, Oxford University Press

- European Central Bank (a) *Financial Integration in Europe*, (various years)
- European Central Bank (b) *The International Role of the Euro*, (various years)
- European Central Bank (1999) Monthly Bulletin, May
- European Central Bank (2008) *10th Anniversary of the ECB*, Annex to the Monthly Bulletin
- European Commission (2008) *Frequently-asked-questions on EMU and the euro*; EU Commission website
- European Parliament, Draft resolution to the ECB Annual Report, various years
- Flandreau, Marc and Clemens Jobst (2009) 'The Empirics of International Currencies: Network Externalities, History and Persistence', *Economic Journal*, vol. 119(537), pages 643-664
- Fouré, Jean, Agnès Bénassy-Quéré and Lionel Fontagné (2010) 'The world economy in 2015: a tentative picture', Working Paper 2010-27, CEPII: Paris
- Fratzscher, Marcel and Arnaud Mehl (2011) 'China's Dominance Hypothesis and the Emergence of Tri-polar Global Currency System', mimeo 2011
- Gourinchas, P.-O. (2010) 'US Monetary Policy, 'Imbalances' and the Financial Crisis', remarks for the Financial Crisis Inquiry Commission Forum, mimeo
- Gourinchas, P.-O. and H. Rey (2005) 'From World Banker to World Venture Capitalist: US External Adjustment and The Exorbitant Privilege', NBER working paper 11563.
- Gourinchas, P.-O., H. Rey, and N. Govillot (2010) 'Exorbitant Privilege and Exorbitant Duty', mimeo, University of California
- Kenen (2011) 'Beyond the Dollar', paper presented at the AEA Allied Social Science Association Meetings, Denver, Colorado
- Kindleberger, Charles (1965) *Balance of Payments Deficits and the International Market for Liquidity*, Essays in International Finance, May
- Kubelec, C. and F. Sá (2010) 'The geographical composition of national external balance sheets: 1980-2005', *Bank of England Working Paper* No 384, March
- Lane, P. and G.M. Milesi-Ferretti (2001) 'The External Wealth of Nations: Measures of Foreign assets and Liabilities for Industrial and developing Countries', *Journal of International Economics* 55 p. 263-294
- Lane, P. and G.M. Milesi-Ferretti (2009) 'The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities', IMF Working Paper WP06/09

Padoa-Schioppa (2007) 'Progressing within the Lamfalussy Framework', available at <http://www.tesoro.it/documenti/open.asp?idd=18832>

Portes, Richard (2009) 'Global imbalances', PEGGED Policy Brief no. 3

Subramanian, Arvind (2011) *Eclipse: Living in the shadow of China's Economic Dominance*, Peterson Institute for International Economics

Triffin, R. (1960) *Gold and the Dollar Crisis: the Future of Convertibility*, Yale University Press.

Vallée, S. (2011) 'The path of Internationalisation of the RMB', Background paper prepared for the report *Reforming the international monetary system: options and implications*, forthcoming