

# TRADE AND DEVELOPMENT REPORT, 2015

Making the international financial  
architecture work for development

## *Chapter III*

### SYSTEMIC CHALLENGES IN THE INTERNATIONAL MONETARY SYSTEM



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## Chapter III

# SYSTEMIC CHALLENGES IN THE INTERNATIONAL MONETARY SYSTEM

## A. Introduction

The tensions and troubles in today's global economy emerge from the interaction between weak effective demand and persistent financial instability. The global financial crisis in 2008 was a reminder of the economic and social damage that such an interaction can generate. Much of the subsequent reform effort has concentrated on repairing bank balance sheets, strengthening regulatory frameworks and improving the resilience of financial institutions to shocks through actions at the national and international levels. This is an ongoing process (see chapter IV of this *Report*). But the success of such efforts is closely related to global macroeconomic forces whose current weakness stems partly from the malfunctioning of the existing international monetary system (IMS).

The main function of the IMS is to contribute towards global macroeconomic and financial stability by maintaining stable exchange rates, ensuring sustainable current account positions, providing an adequate amount of international liquidity and enabling orderly adjustments to external shocks. The erosion and eventual breakdown of the system along all these fronts

contributed to the accumulation of global macroeconomic and financial imbalances which facilitated the build-up of unstable financial market conditions that eventually triggered the crisis (e.g. United Nations, 2009; Kregel, 2010; Dorrucchi and McKay, 2011; see also *TDR 2010*).

The global spread of the crisis from its origins in the financial markets of developed countries, as well as those countries' subsequent approaches to crisis management, have revealed the inadequacy of existing global safety nets to deal with large adverse shocks. The crisis has also revealed the tendency of the current IMS to create substantial instability in the provision of international liquidity<sup>1</sup> and its inability to provide sufficient support to the recovery of global aggregate demand. Moreover, ongoing financial instability raises questions about how supportive the global environment

will be for attaining the Sustainable Development Goals (SDGs) that are currently the subject of debate on the Post-2015 Development Agenda. All these factors point to the need for more fundamental reform of the IMS.

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The current IMS creates substantial instability in the provision of international liquidity and is unable to adequately support global economic recovery.

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This chapter examines the weaknesses of the current IMS, and proposes some elements for its reform. It focuses on three fundamental challenges commonly perceived as confronting any IMS (see, for example, United Nations, 2009; Erten and Ocampo, 2012), and examines how these challenges and the responses to them have changed over time. It suggests that the reforms aimed at addressing the inadequacies of the current IMS exposed by the global economic and financial crisis have been timid at best.

The three fundamental challenges are:

- First, regulating the provision of international liquidity. Traditionally, private and public agents of different countries have willingly accepted one or several national currencies to use as a unit of account, as a means of payments or as a store of value in their international economic and financial activities. The dollar has, predominantly, served these purposes since the end of the Second World War, but this has been associated with large swings in the availability of international liquidity and in exchange rates. Furthermore financial globalization and the increasing role of private financial intermediaries in the provision of international liquidity have compounded the complexity of this challenge.
- Second, providing access to short-term liquidity for managing shocks.<sup>2</sup> The International Monetary Fund (IMF) was designed to provide such finance in order to prevent countries from resorting to a combination of trade restrictions and competitive currency devaluations. However, developing countries have increasingly shunned IMF assistance, especially following the Asian crisis in 1997–1998, in favour of accumulating large foreign-exchange reserves as a form of self-insurance and a first line of defence against external shocks.
- Third, ensuring a more equitable sharing of the burden of current account adjustment.<sup>3</sup> The asymmetric adjustment process implied by

curtailed spending in the deficit countries without offsetting spending increases in the surplus countries represents the so-called “contractionary bias” of the IMS. This has particularly undesirable impacts on global macroeconomic dynamism when global output growth is already anaemic, as is currently the case.

This chapter suggests that the increased role of short-term private international capital in the provision of international liquidity has caused boom-bust cycles, and has led developing countries to accumulate large amounts of foreign exchange reserves in spite of the inequity that the associated transfer of resources to reserve-currency countries implies. In its current form, the IMS will continue to generate both instability and inequity, and force developing countries to adjust to the effects of policies beyond their own control.

The chapter does not provide a comprehensive blueprint for reform. Rather, it focuses on the major difficulties in meeting the three challenges described above, and discusses various proposals as well as the conditions required to implement those proposals.

The chapter is organized as follows. Section B offers a historical account of the way in which successive forms of the IMS have addressed the three challenges mentioned above. It also examines how the post-Bretton Woods era has accentuated these challenges. On the basis of this analysis, section C evaluates a number of proposals for a comprehensive reform of the existing IMS that would lead to a new, centrally administered IMS, as well as some more incremental changes which might be easier to implement. The discussion of such incremental changes includes proactive measures that developing countries could take to better attain their developmental goals. The ways in which greater regional monetary cooperation could help deal with the contractionary bias of the IMS and provide stepping stones for more comprehensive reforms in the future are also discussed. Section D summarizes the main conclusions and sets out a policy agenda.

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## B. The international monetary system: Main challenges and evolving responses

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Any international monetary system will face the three challenges noted above. The prevailing global economic and institutional situation determines how these challenges manifest themselves, as well as the nature and effectiveness of the responses to them. This is the focus of this section.

### 1. *The gold standard and the Bretton Woods system*

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The classical gold standard, which lasted from around 1880 to the beginning of the First World War, supposedly managed these three challenges by linking the provision of global liquidity to the physical availability of gold, and making prices adjust to changes in the domestic stock of gold that resulted from movements on the current account. However, its actual functioning did not depend on the automatic working of the “price specie flow” mechanism that was designed to ensure symmetric adjustment; rather, it depended on the dominant role played by the United Kingdom as the major source of global capital flows at that time and the entrepot for world trade, and therefore by the set of commercial, financial and political networks centred on the City of London (see Triffin, 1961; de Cecco, 1974; Panic, 1992; and Eichengreen, 1992). This enabled a period of relative economic stability in the global economy, along with large cross-border flows of capital (and people) and expanding trade flows. However, stability was concentrated in countries that came to constitute

the “core” of the world economy. Continuous capital flows from the United Kingdom ensured that some countries, such as the United States, could run large current account deficits for prolonged periods, while developing countries with current account deficits experienced much greater volatility of capital flows and more damaging adjustment because surplus countries did not feel the pressure to adjust. The system collapsed on the eve of the First World War, by which time it was evident that the major economies – and particularly the United Kingdom – had not adhered to the rules and had expanded their domestic monetary base far beyond what was justified by their gold holdings.

Efforts to re-establish gold standard arrangements after the First World War confronted the dual problems of higher nominal prices resulting from wartime inflation and the shifting positions of creditors and debtors. This affected the ability of the United Kingdom to take on the mantle of global economic leadership.

With the burden of adjustment falling heavily on the deficit countries, including the United Kingdom, this system proved to be impossible to maintain. The United Kingdom moved to the massively overvalued pre-war exchange-rate parity in 1925, and was eventually forced to exit from the gold exchange standard in 1931. It also meant that the surplus countries

provided no expansionary impulse to the world economy that could have offset the contractionary measures that the other countries were obliged to adopt as a result of the decline in their gold stocks. The combination of these factors had a huge contractionary effect on the world economy that contributed

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**The Bretton Woods conference aimed at a system that would prevent the restrictive trade practices and competitive devaluations of the interwar period.**

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to the Great Depression, leading to sharp price falls and the threat of debt deflation (Eichengreen, 1992).

Instead of engaging in expansionary macroeconomic policies in a coordinated way, many countries responded to this by abandoning the gold-exchange standard and devaluing their currencies in an effort to boost net exports, and by resorting to protectionist measures to restrict imports. However, one country's additional exports are another country's additional imports. Thus the net effect of such a beggar-thy-neighbour policy was heightened volatility of both the exchange rate and output, which depressed international trade and exacerbated the fall in global demand.

Finding an international system that would prevent the restrictive trade practices and competitive devaluations of the interwar period was a key objective of the Bretton Woods Conference in 1944. Conference participants also sought to eliminate gold as the monetary base and determinant of exchange rates, and discussed whether and how the burden of adjustment should be shared more equally between surplus and deficit countries.

As is well known, the post-war IMS that emerged from the Bretton Woods Conference largely followed the wishes of the dominant creditor country, the United States. Its main feature was a grid of fixed exchange rates between the dollar and all other currencies, combined with the possibility for central banks to convert dollars into gold at a fixed parity of \$35 per ounce. The exchange-rate parities could be changed only in cases of fundamental disequilibrium, thereby preventing the competitive devaluations that took place during the interwar period. However, this also implied that adjustment through prices (i.e. exchange-rate changes) rarely occurred,<sup>4</sup> taking place instead through changes in quantities (i.e. changes in domestic demand).

The system also sought to limit the size of external imbalances, and thus the need for capital flows to finance external deficits. This was achieved by providing loans to deficit countries out of national currencies contributed to the newly established IMF by its members, subject to conditions determined by the IMF's Board of Governors. However, because these conditions would only apply to deficit countries requesting assistance, and because IMF loans to deficit countries were accompanied by strict policy conditionalities, including requirements for currency

devaluation and monetary and fiscal contraction, the system exhibited a contractionary bias at odds with the original intention of the architects of Bretton Woods.

By the early 1960s, the stock of foreign-held dollars started to exceed the value of the United States' gold holdings in terms of its declared parity of \$35 per ounce. This gave rise to what is known as the "Triffin dilemma": should the United States no longer provide dollars to other countries, global trade and income would risk stagnation, but if it continued lubricating trade and growth through an unlimited provision of dollars, confidence in its commitment to convert the dollars into gold at the fixed price would be eroded. One attempted solution to the Triffin dilemma was the creation of an artificial currency known as Special Drawing Rights (SDRs), which has given central banks the right to obtain dollars or other internationally widely used currencies from the IMF without conditions attached. These SDRs were intended to be used by countries to support their expanding trade and payments without requiring the creation of additional dollars. But when these units finally became available in January 1970, this reform proved to be too little, too late.

## 2. *The post-Bretton Woods era*

The United States unilaterally suspended the convertibility of the dollar into gold on 15 August 1971. The Bretton Woods system of fixed exchange rates finally collapsed in 1973, and flexible exchange rates became the norm, with the IMF's Articles of Agreement amended to legitimize floating exchange rates.<sup>5</sup> At the same time, the IMF was called upon to "exercise firm surveillance over the exchange rate policies of members" with a view to preventing competitive depreciations and sustained undervaluation, while making the adjustment mechanism more symmetrical.

In addition to the abandonment of dollar convertibility into gold and the adoption of widespread floating, the other core characteristic of the post-Bretton Woods era is a change in the modalities under which liquidity is provided. The growing role of often short-term private international capital flows as a complement to liquidity supplied through current account deficits of the United States has implied that

the provision of global liquidity is no longer limited to what may be called “official liquidity”, i.e. “the funding that is unconditionally available to settle claims through monetary authorities” (BIS, 2011: 4). Official liquidity can be mobilized from accumulated foreign-exchange reserves, from swap lines between central banks, and from the IMF through SDR allocations or loan agreements. It can be and has increasingly been augmented by “private liquidity” resulting from cross-border operations of financial institutions, such as banks, and non-financial institutions, such as enterprises that provide cross-border credits and/or foreign-currency-denominated loans.<sup>6</sup> This has effectively meant the merging of the international monetary and financial systems.

The combination of floating exchange rates and the gradual liberalization and increasing role of international capital flows in the provision of international liquidity was expected to reduce the pressure on deficit countries to make adjustments through changes in quantities (i.e. reduced domestic demand), giving greater weight instead to adjustment through prices (i.e. exchange rate changes), including through currency appreciation by surplus countries. This was considered particularly important in the context of substantially greater international capital flows following the sharp increase in oil prices. It was also expected that these market-friendly mechanisms would discourage countries from accumulating ever-increasing official reserves, while according each country the necessary autonomy to pursue its domestic macroeconomic policy goals.

However, contrary to these expectations, the post-Bretton Woods era has seen recurrent and significant exchange-rate swings, large payments imbalances and growing reserve holdings. Moreover, the new elements of the IMS have failed to remove the contractionary bias associated with the greater pressure on deficit than on surplus countries to adjust payments imbalances, and the liberalization of international capital flows has introduced new forms of instability associated with the inherent volatility and procyclicality of private capital flows.

Prior to the global financial crisis that began in 2008, bank loans constituted the bulk of dollar credit.

European banks (mainly from France, Germany, Switzerland and the United Kingdom) accounted for one third of the global dollar banking market, as they searched for (supposedly) safe assets with minimum capital requirements, such as the asset-based securities issued by United States banks (Borio et al., 2014). This may also indicate that the role of European banks in financing the pre-crisis credit boom in the United States exceeded that related to developing countries’ accumulation of foreign exchange reserves in the form of United States Treasury securities, despite these countries’ often large trade surpluses. Since the crisis, by contrast, most of these dollar credits have been in the form of bonds issued by firms and governments other than those of the United States. A recent evaluation by McCauley et al. (2015) estimates that the dollar credit to non-financial borrowers outside the United States, comprising outstanding bank loans and bonds, amounted to \$8 trillion in mid-2014, equivalent to 13 per cent of global output excluding that of the United States.<sup>7</sup> This amount of offshore dollar credit considerably exceeds its euro and yen counterparts that total \$2.5 trillion and \$0.6 trillion respectively. Another notable feature is the considerably faster expansion of dollar credit to borrowers outside the United States relative to that of domestic credit, both between 2005 and the onset of the financial crisis, as well as since 2009.

There are several consequences of this surge of privately created global liquidity. First, the provision of international liquidity has become procyclical and unstable as private capital flows are subject to global financial cycles driven by push factors, such as financial investors’ search for higher yields, their capacity to leverage, and advanced countries’ monetary policy decisions. The share of total private international capital that flows to an individual country is influenced by that country’s pull factors, such as its growth expectations and external financing needs, as well as by the openness of its capital account (e.g. Rey, 2013; Ghosh et al., 2014). In boom periods, private liquidity creation will augment official liquidity. In crisis periods, by contrast, financial investors’ risk appetite and capacity to leverage tend to decline causing a slump in the availability of private international liquidity. This procyclicality of private capital flows poses the

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Short-term private international capital flows have assumed a growing role in the provision of international liquidity, and make it procyclical and unstable. ...

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risk that when countries face the most severe liquidity shortages, the provision of international liquidity shrinks, leaving mainly its official component intact.

Second, the increased provision of private liquidity implies that countries with current account deficits can avoid adjustment as long as they can access sufficient private lending. But this is often at the expense of aggravating procyclical pressures and disconnecting exchange-rate movements from underlying fundamentals. Unless capital inflows are contained or central banks intervene in currency markets to prevent the capital inflows from causing an appreciation of their currency, there are no economic or institutional mechanisms that would limit this self-reinforcing process leading to growing trade deficits and capital inflows, other than the confidence of global financial markets in the sustainability of the process – which eventually vanishes.

Third, gross capital flows are more relevant than net flows (or developments in the quantities and prices of traded goods and services) in explaining balance-of-payments crises. They also affect current account balances, since large gross asset and liability positions generate significant investment income flows. Their net impact on the current account tends to be negative for developing countries, owing not only to financial liabilities being, in general, larger than assets, but also to the difference between the interest rates paid and earned.

Moreover, if gross inflows stop suddenly and gross outflows surge simultaneously, a country will experience an adverse shock in terms of net capital flows, which is equivalent to a deterioration of the current account in terms of causing exchange rate changes. These changes can be particularly damaging if there are large currency mismatches in balance sheets; and sharp declines in the exchange rate in turn can result in increased debt servicing difficulties and defaults. This will be the case, in particular, when such balance-sheet mismatches occur in the private sector for which foreign-exchange reserves cannot be readily mobilized to compensate for liquidity shortages.

Since the 1970s, there has been a sequence of financial crises in emerging market economies that

were closely linked to sudden changes in the direction of private capital flows (see chapter II). This experience led financially integrated developing countries to accumulate official liquidity in the form of foreign-exchange reserves for two reasons: first, as a form of self-insurance in order to compensate for eventual liquidity shortages arising from a sudden stop and reversal of capital flows; and second, as a by-product of intervention in foreign-exchange markets designed to avoid currency appreciation resulting from capital inflows that are unrelated to the financing of imports. This means that reserve accumulation can to a large extent be considered a policy measure aimed at mitigating adverse effects on the domestic economy emanating from procyclical international capital flows.

A related objective of this strategy is to avoid reliance on the IMF in crisis situations, given the severe macroeconomic contraction caused, to a significant extent, by policy conditionality attached to IMF loans. Such conditionality is often based on an inappropriate assessment of the underlying problem, as also recognized by the IMF itself (*TDRs 2001* and *2011*; IMF, 2011a).

The accumulation of foreign-exchange reserves can also reflect non-precautionary motives, such as a country's choice of exchange-rate regime and specific macroeconomic strategies. This has played an important role for those countries that support domestic growth through net export promotion and rely on intervention on foreign-exchange markets to maintain external competitiveness. Such export-led growth strategies have sometimes resulted in large current account surpluses.

The total holdings of foreign-exchange reserves have grown sharply since the beginning of the millennium, amounting to almost \$12 trillion in 2014 (chart 3.1). Developing countries accounted for most of the increase, which was particularly large in China. In 2014, China held about one third of the world's total foreign-exchange reserves and roughly 45 per cent of those of developing countries.<sup>8</sup>

These reserve stocks have sometimes been judged “excessive” based on conventional measures, such as the levels needed to counter fluctuations

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... In response, developing countries are seeking to accumulate sizeable foreign-exchange reserves for self-insurance. ...

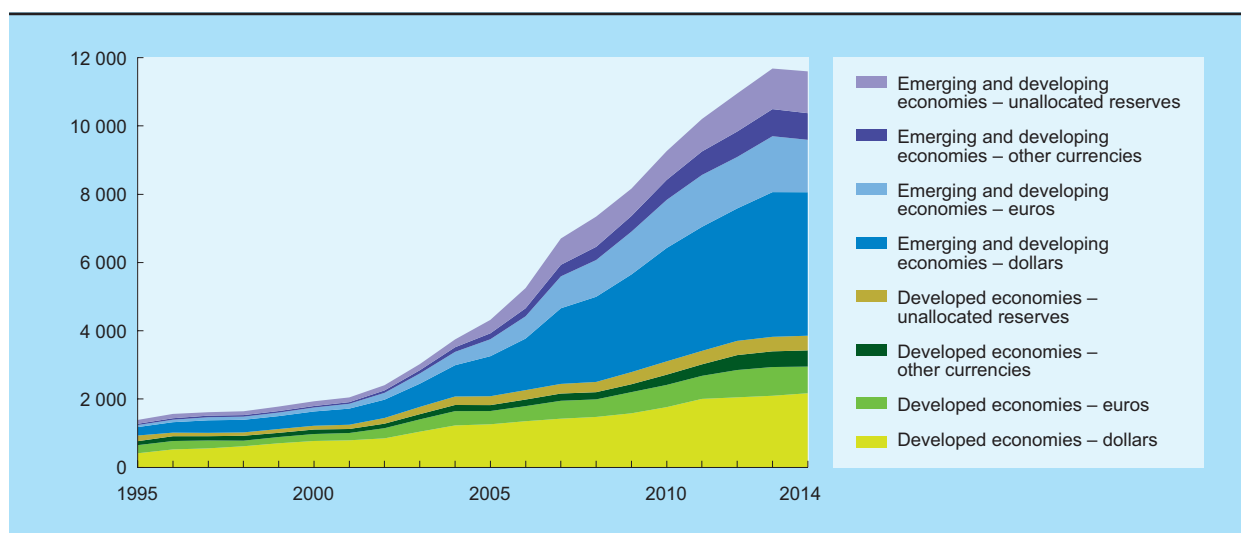
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Chart 3.1

### FOREIGN EXCHANGE HOLDINGS OF SELECTED COUNTRY GROUPS, BY CURRENCY DENOMINATION, 1995–2014

(Billions of current dollars)



**Source:** UNCTAD secretariat calculations, based on IMF, 2015a.

**Note:** Since data for the composition of China's foreign-exchange reserves are not publicly available, in the chart those reserves have been allocated for the entire period based on estimates for 2014 (*Financial Times*, 15 April 2014), with about two-thirds in dollars, a quarter in euros, and the rest in other currencies.

in export earnings or to roll over short-term (up to one year) external debt (the so-called “Guidotti-Greenspan” prescription of reserve adequacy). However, empirical estimates suggest that financial openness, desired exchange-rate stability and the size of the domestic banking system are additional considerations in determining the adequacy of reserves. In crisis situations, policymakers attempting to avoid or mitigate currency depreciation may need to counter a large and sudden withdrawal of liquid domestic deposits (i.e. “sudden capital flight”) in addition to stemming depreciation pressure from sudden stops and reversals of foreign financial inflows. This implies that a determination of reserve adequacy differs by the type of economy.<sup>9</sup> For financially integrated developing economies, reserve adequacy may be determined by the Guidotti-Greenspan rule, as well as by the size of broad money as a potential source of capital flight by residents. For countries such as many least developed countries (LDCs), which are less integrated in global financial markets, the traditional trade-related rules remain practical starting points beyond which country-specific factors determine precise assessments. In developed

economies, reserve adequacy will depend on whether they have ready access to other sources of official international liquidity for these purposes (such as through standing foreign currency swap arrangements among central banks, as discussed in the next section). Otherwise, they need to rely on reserves to lower the risks to bank and non-bank balance sheets resulting from shortages in dollar liquidity and related dysfunctioning of their foreign-exchange markets, as well as to contain adverse effects once such situations occur (for further details, see, for example, IMF, 2015b).

The large size of countries' foreign-exchange reserves has given rise to a new form of the Triffin dilemma. The original dilemma was linked to the size of official dollar reserves and the confidence of their holders that the United States could convert these holdings into gold at the fixed price. The new form of the dilemma refers to the combination of two mechanisms: first, the persistent accumulation of foreign-exchange reserves is associated with the continued purchase of supposedly safe assets in the form of government securities in the reserve-currency

countries; and second, this requires confidence of the holders of these foreign-exchange reserves that Treasury securities and reserve currencies will not depreciate, as this would imply a decline in the purchasing power of their reserves (Aglietta and Coudert, 2014).<sup>10</sup> In the medium to long run, the status of the dollar as the main international currency will partly depend on the future fiscal policies and performance of the United States and other significant economies (Eichengreen, 2011), and partly on the availability of alternatives that could challenge its role.

Such alternatives are not yet evident. The global financial crisis that began in the United States in 2008 may have been expected to seriously challenge the dollar's international role.<sup>11</sup> Yet the dollar's predominance as an international currency remains intact, and has, if anything, actually strengthened since the onset of the crisis (e.g. Prasad, 2013). There has been no discernible diversification away from the use of the dollar in the invoicing of international trade (Goldberg and Tille, 2008; Auboin, 2012).<sup>12</sup> Moreover, it has maintained its dominance in foreign-exchange markets, as it continues to be used in over 85 per cent of foreign-exchange transactions worldwide, either on both sides of the transactions or in exchanges between the dollar and other currencies (BIS, 2014; Goldberg, 2011).<sup>13</sup> The dollar also continues to be the central currency in the exchange-rate arrangements of many countries, and is still dominant in central banks' foreign-exchange reserves, accounting for roughly two thirds of their reported composition in

both developed and developing countries (chart 3.1). Moreover, the dollar remains the major currency used in international capital markets.

To sum up, this section suggests that the current dollar standard is both unstable and inequitable. The combination of widespread floating and the sizeable role of private international capital flows in the provision of international liquidity, with macroeconomic policies largely based on national priorities, has been accompanied by wide swings in the availability of international liquidity and the accumulation of often wide external imbalances whose adjustment has generally occurred through crisis. Hence, the current system has failed to provide a reasonable level of global macroeconomic and financial stability. Financially integrated developing countries have

chosen to address this shortcoming through the accumulation of substantial foreign-exchange reserves, in spite of the associated transfer of resources to reserve-currency countries that makes the system highly inequitable.<sup>14</sup> The accumulation of large external imbalances – frequently associated with

volatile capital flows – and their disorderly unwinding point to the need for imposing limits on the size of such imbalances. They also suggest the need for globally more efficient forms of foreign-currency-denominated liquidity provision, especially in crisis situations, to complement – and eventually replace – large holdings of foreign-exchange reserves held for precautionary purposes. These aspects are examined in the next section.

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... However, the associated resource transfers to reserve-currency countries make the IMS highly inequitable.

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## C. Reforming the international monetary system

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The many existing proposals for reforming the IMS generally exhibit an inverse relationship between comprehensiveness and feasibility. This is particularly true of proposals that aim to take the IMS back to a more rules-based and multilaterally coordinated system designed to address all of the three challenges mentioned in the introduction. Most of these proposals have a long history, and surface periodically after every major international financial crisis. This is not surprising. Indeed, they serve as a benchmark for more incremental but feasible reform measures that may achieve consensus in the near term. A related question is whether the current unsatisfactory global economic situation will improve the chances of political acceptance of comprehensive reforms and produce the high degree of multilateral agreement and macroeconomic policy coordination they would necessitate.

This section starts by discussing some of these comprehensive proposals. It then focuses on a second category of less ambitious proposals, but which could be more easily implemented. This second category generally considers reforms which, in addition to increasing the supply of safe assets, and especially the availability of official liquidity during periods of crisis, should aim at curbing the role of short-term private capital flows in providing international liquidity. This would reduce both the demand for foreign-exchange reserves and the accumulation of unsustainable current account imbalances. Such reforms also seem well-suited to be combined with measures designed to increase the contribution of surplus countries to adjustment. Various possibilities at the regional level or across groups of countries, such as liquidity provision, policy surveillance and mechanisms for the sharing of the burden of adjustment, are also considered. Adopting such measures at the regional or interregional level may be an

improvement on the current system that subjects developing countries to disorderly adjustment pressure and requires them to hold large foreign exchange reserves, thereby exposing them to the system's inequity. These proposals for greater regional monetary integration among developing countries might be more politically feasible at the present juncture than comprehensive global reforms, while also preparing the ground for global reforms in the future.

This section does not aim at providing a blueprint for a new IMS; rather, it examines how features of existing proposals address the three eternal challenges of an IMS. It also discusses what conditions would need to be met in order for these proposals to be implemented so as to lay the foundations for global macroeconomic and financial stability.

### 1. *Creating a new global monetary order*

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Proposals for a new global monetary order often emphasize the need for a world currency, and usually start from the premise that the managed floating regime of the post-Bretton Woods era has not lived up to expectations. Extreme exchange rate gyrations have been identified as a major systemic defect, posing a constant threat to the smooth expansion of global trade and incomes (Mundell, 2012).

Creating a world currency is seen by some (e.g. Mundell, 2012) as following a natural sequence, from establishing target zones for the three main reserve currencies, followed by a multi-currency monetary union which would lock in exchange rates, fix an inflation target, establish a joint monetary policy committee and create an arrangement for the

coordination of fiscal policies, to a world currency initially representing a weighted basket of the three main currencies, but gradually extended to other countries.<sup>15</sup> Lin (2013) has presented an alternative proposal for a world currency, whereby the supply of the newly created global currency would be governed by an international treaty and augmented according to some well-defined rule. It would be combined with a system of fixed, but adjustable, exchange rates between the global currency and all national currencies.

While recognizing that similar proposals have had limited traction in the past, their supporters argue that both the increased frequency of currency crises and the declining weight of the United States in the world economy could convince countries that such a reconstructed IMS would be in their own interests as well as in the interest of global economic stability (Mundell, 2012).

The adverse effects of exchange-rate misalignments on trade flows have also given rise to proposals for multilateral exchange-rate coordination. Such proposals may simply mark a step towards a world currency (i.e. the first stage in the scheme advanced by Mundell). But to the extent that such aspirations seem difficult to fulfil, searching for an appropriate system of exchange-rate management constitutes a reform agenda in itself.<sup>16</sup> This is particularly true if exchange-rate policy coordination follows rules that prevent the accumulation of large external deficits resulting from cross-country price and cost differentials. Thus, the main objective would be to design an exchange-rate system that aims at stable real exchange rates and global macroeconomic stability (*TDRs 2009* and *2011*).

Focusing international policy coordination on exchange-rate management has some advantages. For example, it can rely on countries' obligations under Article IV of the IMF's Articles of Agreement to collaborate with a view to "assuring orderly exchange arrangements" and "promoting a stable system of exchange rates". Moreover, multilaterally agreed exchange rates would provide a consistent set of multilaterally agreed external positions of individual

countries. Indeed, the few instances of effective international policy coordination have been mostly associated with correcting exchange-rate misalignments, such as through the Plaza Agreement and the Louvre Accord in the 1980s. However, any coordination of exchange-rate policies

will invariably face significant problems in defining the criteria to be used both to set the initial target rates and to change them, in identifying the causes that underlie any wide divergence of actual from targeted rates, and in determining whether targets

should be adjusted.<sup>17</sup> In addition, there is also tension between the loss of policy autonomy to which policymakers would need to agree, and the degree of policy coordination required to maintain the exchange rates within a band that provides reasonable exchange-rate stability. The absence of regulations on international capital movements would make such coordination difficult if not impossible. Moreover, the current simultaneous attempts by many central banks to engineer currency depreciations suggest that the exchange rate remains a major policy tool used predominantly to support national economic interests.

The drying up of private liquidity during financial crises and constraints on the rapid provision of official liquidity for emergency finance have led to renewed interest in moving towards a more diversified IMS. This would entail the current dollar standard being replaced by a multi-currency system, with a range of international currencies – such as the dollar, the euro, the renminbi and possibly other currency units – playing a more important role. Some observers believe

such a system would offer several advantages (see, for example, Farhi et al., 2011; Lee, 2014) in terms of more elastic liquidity provisioning and easing the Triffin dilemma. They suggest it would provide alternatives for countries to diversify their foreign-exchange reserves, exert greater discipline on the policies of the reserve-currency countries and prevent their issuers from abusing the supposed exorbitant privilege of issuing a reserve currency to bolster narrow national interests over broader global interests. In addition, rejecting the idea of network externalities in the use of just one international currency, a

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There is an inverse relationship between comprehensive and feasible reforms.

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New multilateral arrangements remain the long-term objective of any comprehensive reform.

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multi-currency system may be economically more efficient, because using multiple currencies would better match economic transactions between currency blocks, resulting in savings on transaction costs. As pointed out by some authors, history has seen many episodes of coexisting international currencies (e.g. Eichengreen, 2005).

Others have noted that any central bank that issues an international currency takes decisions based solely on national concerns, rather than concerns related to the needs of the international payments system and the world economy. This problem also exists in a multi-currency system. Moreover, the supposed disciplining effect from currency competition can occur only if there is close substitutability. But if this is the case, there is the risk of abrupt and substantial exchange-rate changes, not only in the transition period, when central banks will diversify their reserve portfolios, but also once such a system has been established. This is because a multi-currency system would increase the risk that, when confronted by or in anticipation of any event that might adversely affect the value of their portfolios, reserve-currency holders would try to rapidly convert their holdings from one currency into another ahead of other holders. This conversion could be interpreted by the other holders as signalling an imminent crisis and cause them to rapidly convert their own portfolios as well. The overall result would be substantial volatility in the exchange rates of the reserve-currency countries.

In addition to querying the systemic stability of a multipolar monetary system, there would be the question of which currencies would combine with the dollar. Market forces play an important role in the increased use of a currency as an international currency, though policymakers have at times tried to foster, or hinder, the use of their country's currency in such a way (Roosa, 1982).<sup>18</sup> More recently, and especially until the beginning of the euro crisis in 2011, the euro appeared to be a serious challenger to the dollar's dominant position as an international currency. This challenge was based on the economic size of the euro area, which is comparable to that of the United States, as well as the amount of its global exports. Moreover, the euro area has well-developed

financial markets with banks that operate internationally. On the other hand, while the euro area possesses an ample stock of government debt securities, the euro is backed by a heterogeneous group of countries that are united by a loosely structured federal arrangement, and there is no homogeneous market for government debt securities. Moreover, the Stability and Growth Pact and the exclusive focus of the mandate of the European Central Bank (ECB) on price stability hinder member States from undertaking the kind of expansionary macroeconomic policies that reserve-currency countries might need to offset the adverse output and employment effects arising from the current account deficits associated with other countries' demands for safe assets in the form of government securities. This presents a serious challenge, especially because of the current lack of economic dynamism in the euro area.

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The drying up of private liquidity during crises and constraints on the rapid provision of official liquidity for emergency finance have renewed interest in a more diversified IMS.

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A greater international role of the renminbi seems to be a logical corollary to China's growing weight in the world economy. Since 2009, renminbi internationalization has been active-

ly promoted by the Chinese Government, partly in reaction to the slow pace of Asian regional financial cooperation and the international community's apparent lack of interest in reforming the IMS, as well as to avoid significant capital losses in their country's foreign-exchange reserves (Yu, 2014).<sup>19</sup> Moreover, China is starting to reap the associated benefits of the renminbi's internationalization, including lower transaction costs in trade and a reduced need for accumulating additional foreign-exchange reserves. It is worth noting in this context, that in its quinquennial SDR review scheduled to take place in late 2015, the IMF Board of Governors will consider including the renminbi in the currency basket that forms the SDR. This will require an evaluation of whether the renminbi is being sufficiently widely used, and whether it is "freely usable" (Zhou, 2015; IMF, 2011b).

Nevertheless, it is widely believed that promoting renminbi internationalization while avoiding an undue increase in China's exposure to financial instability faces challenges. It will require the relaxation of foreign-exchange controls and further domestic financial market reform, promoting capital account convertibility,<sup>20</sup> greater exchange-rate



flexibility, market determination of interest rates and the commercialization of banks, as well as effectively addressing high corporate and local-government debt (Eichengreen, 2011; Yu, 2014).<sup>21</sup> Thus, while renminbi internationalization is a long process, there can be little doubt that the continuing increase in the weight of China in the global economy is pushing in this direction.<sup>22</sup>

Given that introducing a global currency may be a project for the very long term, and that the move towards a multi-currency system may not improve global financial stability, and in any case it would be a gradual

and time-consuming process, the proposal to give the SDR a more prominent role in the IMS, initially discussed in the 1960s, has received new impetus. The idea of replacing the dollar with the SDR as the global international currency has been promoted, in particular, by the Governor of the People's Bank of China (Zhou, 2009), by a United Nations commission (United Nations, 2009) and also by a number of academics (e.g. Kenen, 2010a; Ocampo, 2011 and 2014).

Similar to advocates of a multi-currency system, proponents of an SDR-based system also argue that this would impose a greater degree of policy discipline on the United States, thus helping to promote global macroeconomic stability. Depending on how SDRs would be issued, an SDR-based system would also curb the need for reserve accumulation for self-insurance purposes, thus helping to cut the cost of holding borrowed reserves, and reduce the current system's bias in favour of the reserve-currency country. What is more, an SDR-based system would address the Triffin dilemma. It would delink the provision of official international liquidity from any national issuer, and the creation of a real alternative to national currencies as reserve assets would allay the concerns of holders of large foreign-exchange reserves about maintaining the purchasing power of their reserves. Also, since SDRs are based on a currency basket,<sup>23</sup> diversification out of dollar-denominated assets would entail much smaller exchange-rate fluctuations than a move towards a multi-currency system, thereby minimizing the threat to international financial stability.

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**A greater international role of the renminbi is a logical corollary to China's growing global economic weight in the long run.**

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**Despite all its deficiencies, the dollar standard is likely to remain for the foreseeable future.**

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On the other hand, moving towards an SDR-based IMS involves several technical and institutional challenges, including how SDRs would be issued, how the diversification away from dollar-denominated reserve assets would be managed, and how the required institutional changes would be

handled (United Nations, 2009; Ocampo, 2011; and Erten and Ocampo, 2012).<sup>24</sup> In order to support the sustained expansion of international transactions, the IMF would need to be empowered to issue SDRs more frequently than under the current regular five-year reviews, whereby SDRs are allocated to

meet long-term global needs to supplement existing reserve assets. More regular allocations according to member States' quotas could be done, as currently, based on estimations of global demand for reserves (IMF, 2011a), but making them much larger<sup>25</sup> and more frequent, or by allocating to developing countries a larger share than their quotas.<sup>26</sup> Moreover, to avoid using SDR allocations as a substitute for needed adjustment while ensuring the availability of official liquidity as a form of emergency finance in times of crisis, the IMF could be empowered to issue SDRs in a countercyclical way, such as by increasing allocations at times of global financial stress and partly withdrawing such allocations once financial conditions normalize.<sup>27</sup> However, given that the demand for official liquidity for crisis-related emergency finance mainly emanates from developing countries and that the IMF's quota system is heavily skewed in favour of

developed countries, this would require a substantial revision of quotas. In the light of continuing delays in the implementation of the quota reform in 2010, which awaits ratification by the United States Congress, this is unlikely to happen in the near future.<sup>28</sup>

To further reduce exchange-rate volatility that might occur by moving out of official dollar-denominated reserve assets into SDR-denominated reserves, the diversification could be managed through a so-called "substitution account", as suggested in the debate on IMS reform during the 1970s. This would be under the auspices of the IMF and used by member States' central banks and governments to deposit some or all of their dollar reserves, obtaining



in exchange claims denominated in SDRs.<sup>29</sup> Moving towards an SDR-based IMS would also involve eliminating the Fund's distinction between its so-called general resources, which have been based on member States' national currencies, and the SDR accounts. Since any SDR represents a potential claim on some currency, an SDR must be underwritten by the central banks that issue the currencies included in the basket that make up the SDR. However, none of the underwriting central banks can determine the currency on which the SDR holder's claim will be exercised. This loss of control over money creation could well be difficult for any central bank to accept.

Enlarging the international role of SDRs and changing the rules for their issuance to meet more flexibly the economic needs of member countries, instead of reflecting the existing quotas, would be a major reform. In the light of continuing delays in the implementation of a comparatively marginal adjustment, such as quota redistribution, moving towards an SDR-based system poses economic and political challenges that may make it difficult to implement.

## 2. Reforming the dollar standard

Between the early 1990s and the early 2000s, a number of developing countries experienced boom-bust cycles of private international capital flows that precipitated a series of balance-of-payments crises in these countries, as discussed in chapter II. The Asian financial crisis in 1997–1998, in particular, triggered a debate on what system of global governance was compatible with flexible exchange rates and large-scale private capital flows, and what role the IMF should play in such a system (*TDR 2001*). Given that proposals designed to regulate and stabilize international capital flows were summarily dismissed from the outset, the outcome of this debate emphasized national policy measures that provided self-defence mechanisms combined with the creation of precautionary “pre-crisis” lending facilities at the IMF.

Since capital flows largely respond to conditions in developed-country markets, effective self-defence mechanisms in developing countries have mainly focused on the accumulation of foreign-exchange reserves. The new approach to IMF lending was designed to reduce the vulnerability of members to

the contagion effects from capital account crises in other countries through ostensibly “sound policies”. The IMF made available pre-committed credits to countries meeting pre-established eligibility criteria to bridge any liquidity shortage that might remain even after using a country's reserves. This was on the condition that potential recipients of such IMF financing would commit to maintaining policies that private capital markets would interpret as a credible defence against a crisis of confidence. However, the creation of new loan facilities for this purpose has had only very limited success. For example, the Contingent Credit Line (CCL) created by the IMF in 1999 remained unused until it was suspended in November 2003, because potential users feared that requesting a CCL loan could signal an impending difficulty that market participants had not detected, and might therefore cause private capital inflows to be withdrawn rather than increased. Similarly the Flexible Credit Line (FCL) adopted by the IMF in 2009 has been used by only three countries (Colombia, Mexico and Poland), despite less stringent eligibility requirements. An additional facility, the Precautionary and Liquidity Line (PLL), was created for countries that have sound policies but are ineligible for the FCL because of certain vulnerabilities – but only two countries (the former Yugoslav Republic of Macedonia and Morocco) have used it (IMF, 2015c and 2015d).<sup>30</sup> As a result, other instruments have emerged for the provision of official liquidity during times of market stress, such as currency swap arrangements.

### (a) Central bank foreign-currency swap arrangements

Central bank foreign currency swap arrangements have begun to play a crucial role in the provision of emergency liquidity. When the implosion of the United States financial markets eventually led to the global financial crisis in 2007–2008, interbank funding began drying up beyond United States financial markets, and created an acute global shortage of dollar liquidity.<sup>31</sup> The United States Federal Reserve could use its ordinary facilities to provide liquidity to United States banks, but could not do so for the multinational banks, many of which are based in other developed countries, and which, prior to the crisis, had relied on cheap dollar funding through their operations in the United States. Thus, in December 2007 the United States Federal Reserve started

to engage in currency swap arrangements with a number of foreign central banks. In a sense, these arrangements were the international extensions of the unconventional domestic monetary policy measures that many major central banks adopted at the time, with the crucial difference that the international swap arrangements were undertaken in a coordinated way.

Central bank currency swaps are arrangements between two or more central banks to enable a central bank in one country to provide foreign-currency liquidity to banks in its jurisdiction in the event of a sudden shortage of such liquidity. Given the dominant role of the dollar in global interbank markets, and the fact that most local foreign-currency loans are denominated in dollars, the United States Federal Reserve has been one of the parties involved in many of these arrangements.

Addressing these liquidity problems by using foreign currency swap arrangements and making the United States Federal Reserve the de facto international lender of last resort relied on three main premises. First, central banks can act swiftly; second, they face virtually no limit on their money-creating capacities; and third, the provision of international liquidity through swap arrangements with the central bank that issues the currency in which the liquidity shortage occurs does not cause any exchange-rate effects. If, on the other hand, foreign central banks sell their own currencies to buy, for example dollars on the spot market, the required massive scale of the transaction will exert strong downward pressure on their currencies. This will complicate, rather than facilitate, the securing of the required funding for their commercial banks, as well as creating upward pressure on the dollar, which may destabilize United States financial markets.

Moreover, many central banks, including those from developing countries that had accumulated substantial reserves, were reluctant to use a large amount of their dollar-denominated assets to meet dollar liquidity problems. They were concerned that their reserves would prove insufficient to resolve liquidity

problems if they started to experience capital outflows, and that using too much of their reserves would instead fuel market uncertainty and accentuate the dollar shortage. Indeed, according to some estimates, the dollar reserves of many central banks at the onset of the global financial crisis were smaller than the amounts they subsequently borrowed through the swap arrangements. Thus their reserves alone would not have been sufficient to reduce funding pressure on financial institutions and improve the functioning of interbank lending and credit markets during times of market stress (Obstfeld et al., 2009).<sup>32</sup> Moreover, the United States Federal Reserve was conscious of the fact that a massive selling of Treasury securities by foreign central banks was likely to add to financial turmoil in United States financial markets.

According to some observers (e.g. Allen and Moessner, 2010; Bordo et al., 2014), the counterparts involved in these swap arrangements (most notably the ECB) were chosen because of their size and the potential spillover effects that serious banking crises in their jurisdictions could have on global financial markets.<sup>33</sup> From this perspective, the swap lines extended by the United States Federal Reserve represent a case of successful cooperation between central banks in addressing global concerns. Others (e.g. Aizenman and Pasricha, 2010; Prasad, 2013), on the other hand, argue that cooperation merely stemmed from coinciding interests under the special circumstances that prevailed at the time, and that the chosen countries had banking systems with a sizeable stock of liabilities owed to the United States' banking system, as well as a good sovereign credit history. This might be taken to mean that extending the swap arrangements was in the interest of the United States, and served simply to control a situation that may have posed a systemic risk to that country's banking system.

The People's Bank of China (PBOC) did not request a swap arrangement with the United States Federal Reserve because it had access to a very substantial amount of dollar reserves, which some

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Central bank foreign currency swaps now play a crucial role in providing emergency liquidity ...

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... but swap arrangements extended by developed-country central banks mainly cater to developed-country needs.

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estimate to have totalled \$3.8 trillion, or roughly one third of the world's total, in April 2014 (Aizenman et al., 2015). Moreover, Chinese banks are funded mainly from domestic sources, with few international operations that would require dollar-denominated liquidity.

Instead, the PBOC itself established currency swap arrangements with a wide range of other central banks, mostly from developing countries.<sup>34</sup> But it is generally believed that the main objective of these arrangements has not been to address the problem of liquidity shortages, but rather to foster the internationalization of the renminbi by increasing the share of China's trade invoiced and settled in renminbi (PBOC, 2012: 68), perhaps with a view to eroding the network externalities that have helped maintain the dollar's predominant role as an international invoicing and settlement currency.<sup>35</sup> These longer term objectives of the currency swap arrangements extended by the PBOC are also reflected in their duration of three years with the possibility of renewal, as well as their denomination in renminbi which differs, for example, from the PBOC's swap arrangements under the Chiang Mai Initiative Multilateralization that are denominated in dollars and serve to strengthen the defences of member States during financial crises, as discussed below.

Of particular interest in the context of this chapter may be the PBOC's currency swap arrangement with Argentina signed in July 2014, which enables Argentina's central bank to exchange the renminbi it receives (against Argentine pesos) through the swap into other currencies, including dollars, if necessary. This amounts to adding renminbi to Argentina's foreign-exchange reserves as if they were dollars. These "vouchers" for dollars thus free up Argentina's actual foreign-exchange reserves for its immediate needs.<sup>36</sup> In a sense, this swap arrangement enables Argentina to tap into China's very sizeable dollar reserves for its own foreign exchange liquidity requirements. While these arrangements may closely resemble foreign-currency loans, they nonetheless can help deal with

episodes of capital flow volatility and stabilize the foreign exchange market in times of stress.<sup>37</sup>

Other currency swap networks have sprung up involving the central bank of a major economy in a specific region and a number of central banks in smaller neighbouring countries. For instance, some European countries that are not members of the euro area (such as Denmark, Hungary, Poland and Sweden) which suffered from euro liquidity shortages benefited from swap arrangements with the ECB, while the Swiss National Bank extended swap arrangements to the ECB and to the central banks of Hungary and Poland that were suffering from liquidity shortages in Swiss francs. In Asia, China

and Japan established arrangements with Indonesia and the Republic of Korea, as well as with a number of other countries. What is more, these regional networks have been used not only for regionally dominant central banks to provide liquidity in their currencies, but also to redistribute dollars to central banks that could not get direct access to dollar liquidity through the United States Federal Reserve. An example is the swap arrangement between the Bank of Japan and the Reserve Bank of India.<sup>38</sup> But such swap lines have been much smaller in size and ultimately temporary, and at present they do not offer adequate emergency finance to those countries that are likely to need it the most.

All of the swap lines established by the United States Federal Reserve in 2007–2008 expired, as scheduled, in February 2010. But the arrangements with five central banks (i.e. the Bank of Canada, the Bank of England, the Bank of Japan, the ECB and the Swiss National Bank) were made permanent in October 2013. Given that these central banks established temporary swap arrangements with each other in 2011, when the euro crisis began to threaten the functioning of global financial markets, lenders could access emergency liquidity in these six international currencies. As a result, central bank swap arrangements have now become part of the IMS, and finance the bulk of lender-of-last-resort liquidity provisions of foreign central

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The lack of decisive reform continues to encourage developing countries to accumulate more reserves ...

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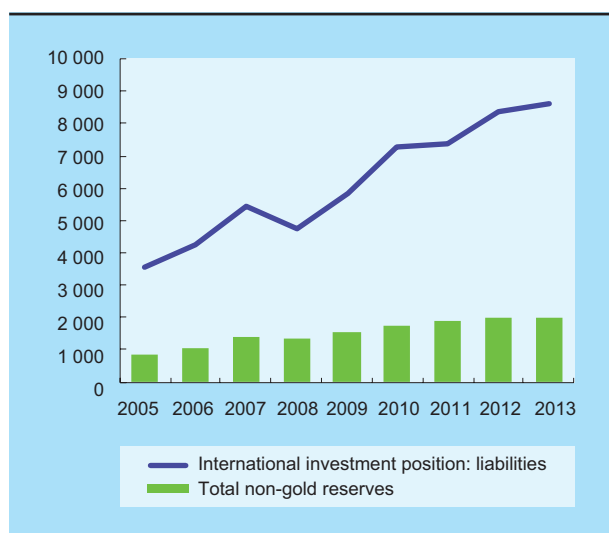
... but this implies serious risks for those countries themselves and for the global economy.

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Chart 3.2

**CROSS-BORDER LIABILITIES AND  
FOREIGN-EXCHANGE RESERVES  
OF SELECTED DEVELOPING  
COUNTRIES, 2005–2013**

(Billions of current dollars)



**Source:** UNCTAD secretariat calculations, based on IMF, *International Financial Statistics* database.

**Note:** The country sample on which the reported data are based comprises: Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Egypt, El Salvador, Guatemala, India, Indonesia, Jamaica, Jordan, Malaysia, Mexico, Morocco, Pakistan, Panama, Peru, the Republic of Korea, South Africa, Thailand, Tunisia, Turkey, Uruguay and the Bolivarian Republic of Venezuela.

banks, while the United States Federal Reserve has become the de facto international lender of last resort.

A systemic question related to central bank currency swaps concerns their relationship with the existing international monetary and financial arrangements. Since swaps can potentially create unlimited amounts of international liquidity, a comprehensive network that gives automatic access to official international liquidity could obviate the need for self-insurance in the form of large foreign-exchange holdings. However, thus far, currency swap arrangements have been limited to countries that have a clearly perceived self-interest in maintaining access to liquidity in the partner country, and therefore a permanent institutional framework for such swaps is unlikely to emerge. Indeed, since the high degree of flexibility and discretion that allow rapid liquidity provision at relatively low transaction

costs are the key characteristics of central bank swap arrangements, their very logic prevents broader institutionalization (Destais, 2014; Sgard, 2015).

An additional systemic question is whether central bank currency swaps have reduced the desire of developing countries to accumulate large stockpiles of foreign-exchange reserves. To the extent that swap lines are rapidly available at times of market stress, central banks can reduce other liquidity buffers, including their reserve holdings. On the other hand, large reserve stocks may be required to reduce a lending central bank's sovereign credit risk and make swap lines accessible. And only the combination of secure swap lines and large reserves may contribute to crisis prevention by instilling confidence in the financial markets of a country's liquidity and solvency. Moreover, foreign-currency-denominated debt has increasingly been accumulated by non-financial actors, such as corporations and households, and central banks may be legally prevented from extending the borrowed foreign currency to them. Perhaps most importantly, evidence suggests that, despite the accumulation of significant foreign-exchange reserves by some developing countries, in most countries these are still modest compared with the increase in their external liabilities, and too modest to effectively avert threats to financial instability (chart 3.2). All of this, and especially the fear of exclusion, will continue to encourage countries to accumulate more reserves.

**(b) Addressing the contractionary bias  
of asymmetric adjustment**

To date, insufficient efforts have been made to effectively address the IMS' contractionary bias by making surplus countries contribute (more) to global adjustment, rather than leaving virtually the entire burden of adjustment to deficit countries.<sup>39</sup>

Nevertheless, a number of concrete ideas have been proposed as to how countries with a current account surplus could be made to adjust. These proposals envisage such adjustment taking place either in an automatic or coordinated manner, but always ensuring that global adjustment is compatible with maintaining global aggregate demand at a level sufficient to provide full employment and support the national development strategies of developing countries. For example, countries might intervene in currency markets, limit or tax surplus



countries' holdings of foreign assets (particularly Treasury securities), symmetrically limit the share in GDP of countries' current account surpluses or deficits, or receive authorization from the World Trade Organization (WTO) to impose tariffs or other forms of trade retaliation on exports from surplus countries (for a review, see Williamson, 2011). But there are a range of unresolved questions: who would determine that a country's surplus situation is unacceptable, what would trigger action, how would it be determined that the action is proportionate and, perhaps most importantly, what would induce powerful surplus nations to agree?

The IMS' contractionary bias could also be addressed through more appropriate IMF surveillance through its Article IV consultations. However, it is well known that the IMF exerts its surveillance function in an asymmetric way, as it can meaningfully influence national policies only when a country formally requests financial support and thus becomes subject to IMF conditionality. Thus, IMF directives only affect deficit countries but have little leverage over surplus countries. Moreover, global surveillance procedures have failed to prevent currency turmoil and several international financial crises, particularly the global crisis that began in 2008. The IMF's inability to forestall financial crises and to deal with them, once they occur, has often been due to its inappropriate assessment of the underlying causes. This is partly attributable to its asymmetric surveillance. The IMF considers it necessary to focus its surveillance more on risk spreading and spillovers, as well as on linkages between financial and macroeconomic forces. It also considers it important to streamline its multilateral surveillance messages, such as by delivering more candid and practical advice to systemically important economies, and removing any doubts about the institution's even-handedness (IMF, 2014). While these are worthy intentions, there is no indication that it will go beyond the traditional "naming and shaming" of surplus countries.<sup>40</sup>

Effective international policy coordination would be the optimal way to address the IMS' contractionary bias, but this appears to be very difficult to implement. The limited success of the G-7, and later the G-20, in this regard, as well as much of the initial causes and persistence of the euro crisis,

may be partly attributed to diverging views among policymakers as to the correct approach to adopt for tackling the crisis. They also differ on the extent (and sometimes even the direction) of the impact of policies, especially fiscal policies (*TDRs 2010, 2012*). With such disagreement, decisions on the appropriate nature of policy coordination and monitoring mechanisms become more difficult. However, it is evident that the absence of such coordination intensifies the contractionary pressures afflicting the global economy.

To sum up, the steps taken by the international community to reform the IMS have been insufficient for addressing the shortcomings of the current dollar standard. Of specific concern to developing countries is that the provision of international liquidity remains subject to the boom-bust cycles of short-term private international capital flows, and that central bank foreign currency swap arrangements are not effective disincentives to the accumulation of foreign-exchange reserves for precautionary purposes. Moreover, the shortcomings of international policy coordination have failed to address the problem of an unequal sharing of the burden of adjustment among deficit and surplus countries.

### 3. **Strengthening regional and interregional cooperation**

Since comprehensive reform of the IMS is not on the immediate agenda, and the measures taken by the international community to address the shortcomings of the current dollar standard remain unsatisfactory, developing countries need to consider what they could do for themselves. One important strategy which individual countries could consider pursuing is to use capital account management as a regular instrument for preventing the boom-bust cycles of international capital flows from exerting pressure on exchange rates and destabilizing financial markets (*TDR 2014*).

There are also ways of dealing with some specific concerns through bilateral, regional and other group-based arrangements that provide

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Implementing effective international policy coordination has proved difficult.

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some additional access to liquidity both in general and also as emergency finance when required. Recent developments in regional and interregional monetary arrangements have focused increasingly on alleviating adverse impacts of external financial shocks with a view to securing macroeconomic and financial stability within the group. This can be done in a number of ways: establishing payments systems that dampen the volatility of cross-border private capital flows and promote intra-group trade without using the dollar, reserve pooling that makes available short-term finance to facilitate external adjustment, and exchange-rate policy coordination that prevents the accumulation of intraregional imbalances or facilitates their adjustment.<sup>41</sup>

Regional payment systems which reduce the number and value of transactions that need to be carried out in foreign currencies are one way to mitigate exchange rate uncertainty and risk. They can also help to promote interregional trade by cutting the transaction costs through the use of domestic currencies in such trade rather than having to change currencies (often several times) against a third, international, currency.

Among developing countries, Latin America has pioneered the implementation of such payment mechanisms.<sup>42</sup> In 1965, the Latin American Integration Association (LAIA) established the “reciprocal credit and payment agreement” (CPCR – the acronym for its Spanish name) among the member countries’ central banks. It has functioned as a clearing house and a short-term credit mechanism for trade transactions, which includes a clearance period of four months (with central banks assuming the risk of delayed payments) and net settlement in dollars thereafter. It was used a great deal during the 1970s and 1980s at times when access to dollar financing was extremely difficult. At its peak, during the Latin American debt crisis, 80 per cent of intraregional trade was channelled through this arrangement. However, changes in international

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Since comprehensive reforms are not on the immediate agenda and the measures taken by the international community remain unsatisfactory ...

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... developing countries need to consider what they could do for themselves at the regional level.

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financial conditions in the early 1990s meant that it was more beneficial to prepay imports, effectively discouraging the use of this facility. This partly explains the subsequent marked decline in the volume of transactions settled through the LAIA, which fell to barely 5 per cent of intraregional trade (UNCTAD, 2011). Similarly, in 1969 Central American countries founded the Central American Monetary Stabilization Fund in order to finance balance-of-payments imbalances, but its operations were suspended in the mid-1980s following widespread payment difficulties by the participating central banks (see *TDR 2007*).

Various groups of countries have instituted a number of innovative payment systems since the 2008 crisis years. One of the simplest, the Local Currency Payment System (Sistema de Pagos en Monedas Locales, SML), was established between Argentina and Brazil in 2008 for bilateral trade. It enables transactions between exporters and importers in the two countries in local currencies without the intermediation of the dollar, as would otherwise have been the usual practice. The SML is particularly useful for small and medium-sized enterprises, as it obviates their need to access foreign exchange markets, which added significantly to their costs because their low volume of transactions is typically associated with higher per unit costs. Initially, only a small number of transactions took place with a low total value, but use picked up quickly, and by 2013 almost 10,000 Brazilian export operations (Argentine imports) had been carried out through SML. Argentine exporters to Brazil have not been using the system to the same extent, partly because of the arbitrage benefits to them of retaining income in dollars. The system accounts for only 3 per cent of total bilateral trade, but still clearly benefits smaller firms, almost three quarters of which reported using the system multiple times. Uruguay has recently signed SML agreements with Brazil (in 2014) and Argentina (in 2015), creating the basis for a multilateral system that could be joined by the other countries of the Common Market of the South (Mercosur).



A more complex mechanism established in 2010 is the Unitary System of Local Payments Compensation (Sistema Unitario de Compensación Regional, SUCRE), which is based on a “virtual” regional currency.<sup>43</sup> The countries participating in this arrangement are Bolivia (Plurinational State of), Cuba, Ecuador, Nicaragua, Uruguay and the Bolivarian Republic of Venezuela. Like the SML, SUCRE aims to avoid the use of the third-party currency, the dollar, for transactions within the region. It also enables delayed settlements of payments (unlike SML where transactions are mostly settled within 24 hours). Its use has increased rapidly: within four years of its inception it accounted for around 24 per cent of total intra-group transactions (Perez Caldentey et al., 2014). Like the SML, members of the SUCRE use the mechanism to varying degrees, reflecting their different economic structures and size. The Bolivarian Republic of Venezuela has used the system the most, with the SUCRE accounting for 93 per cent of its total intraregional imports in 2012. In contrast, Ecuador has used it for only 7 per cent of transactions and Cuba for about 10 per cent of exports.

Easing electronic payments and creating a more modern system of interregional transactions was the aim of another payment mechanism in Latin America known as the regional interlinked payment system or “Sistema de Interconexión de Pagos” (SIP). Introduced before the economic and financial crisis, this mechanism began with El Salvador (2007) and then gained additional members as the crisis unfolded, including Guatemala, Honduras, Nicaragua, the Dominican Republic and Costa Rica. This mechanism is broader than the SML and SUCRE, and comprises all kinds of transactions apart from those involving trade, including remittances. It aims to offer a cheap, rapid and safe platform for transfers and settlements between firms, financial institutions and central banks of member countries. All operations are centralized through one institutional administrator (currently the Dominican Republic), which is responsible for real time gross settlement of positions. As a result, it is estimated that the cost of regional trade transactions has fallen significantly (Perez Caldentey et al., 2014; Fritz and Mühlich, 2014).

Regional mechanisms are also emerging to help meet developing countries’ medium- and short-term

needs for international capital, thus potentially contributing to strengthening their resilience to external shocks. Providing countercyclical finance has long been recognized as one of the critical pillars of regional financial cooperation and integration.

An example of such a mechanism is the Chiang Mai Initiative (CMI) launched by the ASEAN+3 economies<sup>44</sup> in May 2000. It is a system of bilateral swap arrangements designed to provide liquidity support to members experiencing short-term

balance-of-payments problems. The CMI has been replaced by the Chiang Mai Initiative Multilateralization (CMIM), which is a multilateral reserve-pooling and swap arrangement. The CMIM became effective in March 2010 with an initial size of \$120 billion, which was dou-

bled to \$240 billion in 2012. It is designed to supplement the existing international financial arrangements for addressing balance-of-payments and short-term liquidity difficulties in the region. There are also plans to create a CMIM Precautionary Line, which will operate in parallel with the CMIM mechanism, now renamed the Stability Facility.<sup>45</sup> In addition, an ASEAN+3 Macroeconomic Research Office (AMRO) was established in April 2011 as an independent regional surveillance unit that analyses and monitors the regional economies and supports CMIM decision-making.<sup>46</sup>

However, neither the CMI nor the CMIM have emerged as major alternatives to the IMF or developed-country sources for helping to resolve members’ balance-of-payments problems. Indeed, they were not used at all during the 2008–2009 crisis, and have been only rarely used since then. To begin with, the amount of dollar liquidity that can be drawn from the CMIM appears to be too small to constitute a credible defence against reversals of international capital flows. More significantly, a member that seeks to draw more than a certain share of the maximum swap amount that it can obtain must have a loan agreement with the IMF and submit to IMF conditionality.<sup>47</sup> However, once the CMIM Precautionary Line and regional surveillance by the Macroeconomic Research Office become fully operational, the link with IMF conditionality could be reduced, making these funds more attractive. But then it is important to ensure that the arrangement does not attach similar

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Developing countries could proactively build on existing regional and interregional monetary arrangements.

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conditionalities to its loans as those imposed by the IMF, which could deter countries from using it.

Establishing swap arrangements between regional monetary institutions and a central bank issuing an international currency could significantly increase the amount of liquidity support available to members of regional arrangements.<sup>48</sup> In the ASEAN region, the CMIM would be well suited to take on this role as its members include both China and Japan, which have already participated in bilateral swap arrangements with countries in the region. Such linked swap arrangements would, in principle, need to provide access to unlimited amounts of liquidity to be fully effective. It has been suggested that related moral hazard issues could be resolved by associating such access with the prequalification process of the IMF's FCL and PLL facilities. Thus, prequalified countries would access the IMF facilities as a first line of defence, and subsequently they would have access to unlimited swaps should a massive liquidity withdrawal occur (Park and Wyplosz, 2014). While this proposal raises many concerns associated with IMF lending, as mentioned earlier, it deserves further debate, especially if appropriate reform of IMF governance and surveillance is undertaken.

Latin America has a longer history of regional arrangements involving mutual credit support among countries. The Latin American Reserve Fund (or FLAR – the acronym for its Spanish name) established in 1978 is a liquidity-sharing mechanism between medium and small-sized members (Fritz and Mühlich, 2014). Its lending volume depends on the paid-in capital of its members and on the type of credit – whether it is to finance balance of payments, liquidity shortages, or other types of contingencies – with an upper limit of two and a half times the paid-in capital for balance-of-payments problems. However, its disbursement capacity is relatively small, since it has a paid-in capital of only \$3.6 billion, with individual contributions ranging from \$328 to \$656 million. Nevertheless, the voting mechanisms for decision-making have created a sense of ownership among its member countries.<sup>49</sup> This is reflected in its position as a favoured creditor and a zero default rate with a higher credit rating than that of the individual countries themselves, even in the context of

sovereign defaults. It has a record of speedy responses to loan requests, with no conditionality attached to its assistance. Larger member countries still tend to view it as a complementary mechanism to other liquidity-sharing arrangements such as IMF support, but some countries such as Ecuador have borrowed more from FLAR than from the IMF (Fritz and Mühlich, 2014: 10). Prospects for its enlargement to include other major regional players such as Argentina, Brazil and Mexico give rise to concerns related to its voting and surveillance mechanism (see Titelman et al., 2014), similar to the moral hazard concerns with respect to the CMIM, as mentioned earlier.

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Regional arrangements have suffered from institutional shortcomings and, especially, limited size, which could be overcome by linking them to global facilities.

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Similarly to FLAR, the Arab Monetary Fund (AMF) provides emergency balance-of-payments financing that tailors its lending conditions to each beneficiary's situation. The conditions are generally less strict than those of the IMF. The AMF started operations in 1977 with 22 West Asian and African countries. Given that its total subscribed capital is about \$1.8 billion, which is even smaller than that of FLAR, it usually complements IMF loans (for further discussion, see *TDR 2007*; and Fritz and Mühlich, 2014).

One recent proposal goes a step further and builds on Keynes' idea of establishing a clearing house that would facilitate trade and other international payments using debits and credits denominated in a notional unit of account (Kregel, 2015).<sup>50</sup> The unit of account would have fixed conversion rates to national currencies but may not be traded. Credits with the clearinghouse could be used only to offset debits by buying imports. Countries with a current account surplus would have an incentive to spend their credits as these would lapse if not used within a specified period of time. This provision would both help support global demand and lead to a more equitable sharing of the burden of adjustment.<sup>51</sup> In particular, the tax or interest charges on credit and debit balances would limit payment imbalances in a symmetric manner, and multilaterally negotiated exchange-rate changes would enable the adjustment of imbalances when their limits are breached. The collected charges could be used as additional credits to support the clearing accounts of developing countries. As an additional feature, a country's capital flows could be limited by its current account position

and capital outflows in the form of foreign direct investments or portfolio investments would balance out foreign credits in the same way as imports. There would be no need for foreign-exchange reserves, and notional exchange rates with the accounting unit could be adjusted to support development policy. Such clearing houses could be established on a regional basis, building on existing swap arrangements. This would allow developing countries to pursue their development trajectories without relying on reform of the international monetary and financial architecture, particularly as their concerns have not been adequately taken into account in discussions on reform. As argued by Kregel (2015: 21), for these countries, “the basic advantage of the clearing union schemes is that there is no need for an international reserve currency, no market exchange rates or exchange rate volatility, and no parity to be defended.”

A problem affecting regional arrangements is that all their members may be subject to external shocks simultaneously. This problem clearly underlines the need for such arrangements to be of a certain minimum size. Links to interregional swap arrangements would be particularly useful in this respect. Another possibility might be the creation of a common fund with a periodic increase of paid-in capital, whereby a regional clearing union or reserve pool could increase its liquidity provision capabilities by borrowing on its own. This could even be an effective tool for preventing intraregional contagion in the event of external shocks with different intensities or varying time lags. Moreover, in a heterogeneous international community, strong regional initiatives can combine with global, regional and national institutions to create a better governance system than an arrangement based solely on global financial institutions.

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## D. Conclusions and policy agenda: Merits and drawbacks of current reform proposals

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The shortcomings of the IMS have been the subject of intense debate for decades, but the new global economic environment has altered some challenges and brought in new concerns. The challenge of providing an adequate level of international liquidity, which was at the heart of the debate on reforming the IMS during the Bretton Woods period, has lost much of its relevance. Private international capital flows have at times complemented, but more often dwarfed, official international liquidity. The boom-bust cycles associated with some of the private flows indicate the need for paying much more attention to the challenge of ensuring a predictable and orderly supply of official international liquidity, and especially of short-term

finance required to compensate for sudden liquidity shortages.

Efforts to reform the IMS can take the form of either wholesale changes to global arrangements and agreements or more piecemeal and less ambitious reforms of the dollar standard. Such choices generally involve trade-offs between comprehensiveness and feasibility, as illustrated in chart 3.3, where the pre-crisis dollar standard may serve as a benchmark.<sup>52</sup> The chart presents the three fundamental challenges confronting an IMS mentioned in the introduction, along with those that feature in the more recent debate. For example, the crisis exposed the tendency of the dollar

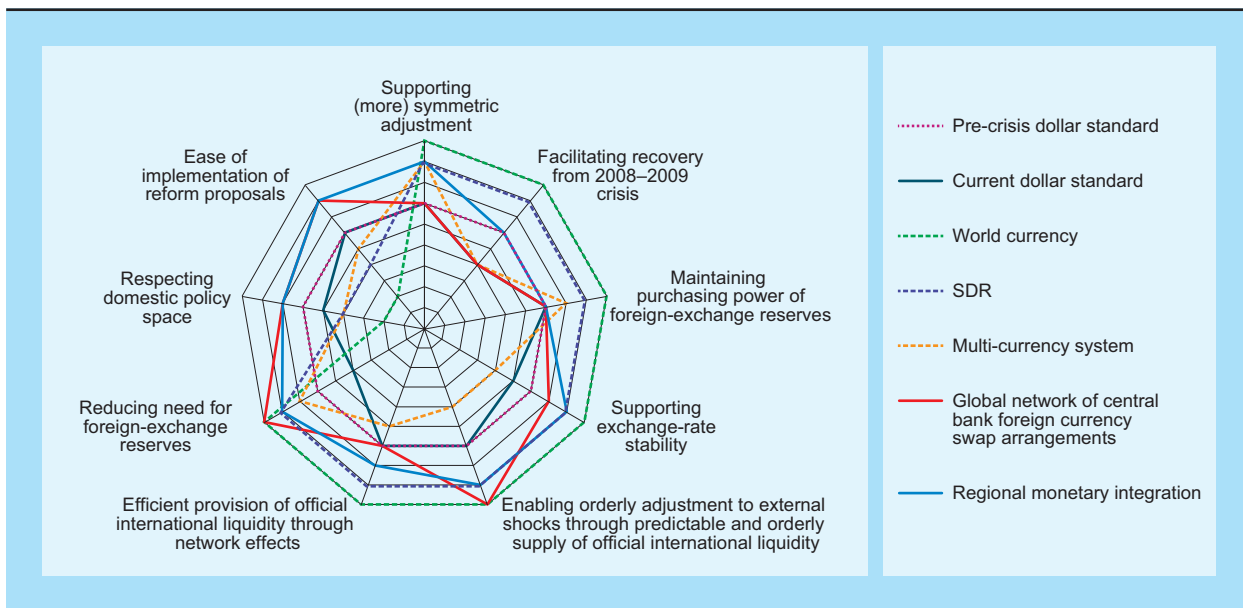
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The evolving global economy poses new challenges to reform aimed at providing stable and secure emergency finance and redressing the IMS' inequity and contractionary bias.

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Chart 3.3

## FEATURES OF THE CURRENT DOLLAR STANDARD AND ALTERNATIVE REFORM PROPOSALS



Source: UNCTAD secretariat.

standard to create excessive external imbalances, pose risks to exchange-rate stability and make countries highly vulnerable to the boom-and-bust cycles that characterize international capital flows, with additional challenges to monetary policy in developing countries. This implies a lower ranking of the current, as compared with the pre-crisis, dollar standard, as the crisis has heightened the need for foreign-exchange holdings, sharpened the system's inequity bias, reduced domestic policy space and slowed down economic recovery.

New multilateral arrangements are the only reforms that would effectively resolve the system's biases, both in terms of inequity and asymmetry. Thus, such arrangements should remain the long-term objective of any comprehensive reform agenda. But as long as policymaking is dominated by national interests and there is no supranational institution with effective enforcement mechanisms, such as a global central bank, or a world financial authority, there is little prospect for a global currency. And despite all its evident advantages, effective global macro-economic policy cooperation has been observed only in situations of acute crises, when countries' national interests coincided and disputes over the correct economic model, as well as the direction and

size of policy effects and the associated monitoring and commitment mechanisms, could be overcome. This trade-off between desirability and feasibility is particularly pronounced at present, when the transition from weak economic recovery to sustained global growth would greatly benefit from coordinated expansionary policies.

It is also doubtful whether, at the present juncture, it would be possible to implement the institutional changes required for moving towards an SDR-based system. And while moving towards a multipolar monetary system might be beneficial in terms of a more flexible provision of official international liquidity, it would probably pose risks to exchange-rate stability. Alternative international currencies such as the euro and the renminbi may assume increasingly important roles for trade invoicing and settling international transactions. However, their role as reserve assets is unlikely to substantially increase in the foreseeable future, as the crisis in the euro area persists and the internationalization of the renminbi is proving to be a prolonged process.

The various foreign currency swap arrangements created by central banks from various countries can offer a potentially powerful tool to ensure the



predictable and orderly provision of official international liquidity. Currently, the greater proportion of these swaps caters to developed-country needs, while such swaps involving developing countries are still relatively limited.

As long as attempts to strengthen financial regulation and improve the resilience of financial systems remain largely ineffective in addressing global risks and leverage factors that drive boom-bust cycles in international capital flows, and developing countries continue to be discouraged from adopting capital-account management policies as ordinary policy tools, the only collective insurance mechanism available to them is financial assistance from the IMF. However, IMF assistance often implies the adoption of procyclical policies during crisis periods, and many countries are choosing, more generally, to avoid the conditions attached to IMF-supported programmes. Hence, involving the IMF in IMS reform that meets the needs of developing countries will require prior reform of IMF governance, policy orientation and surveillance mechanisms.

These difficulties in the design and implementation of the various reform proposals have reinforced the perception that self-insurance in the form of large foreign-exchange holdings is an effective strategy for developing countries to foster exchange-rate stability and ensure the predictable and orderly availability of emergency finance. However, encouraging developing countries to take on still larger holdings of foreign-exchange reserves would imply serious risks, not only for those countries themselves but also for the global economy as a whole. Foreign-exchange reserves that are accumulated through borrowing in international credit markets or on the basis of portfolio capital inflows can further increase countries' vulnerability to capital flow reversals and global financial instability. Moreover, the costs involved in holding reserves borrowed in international credit markets will also increase the current system's inequity. Another possible solution is for the countries to try and achieve current account surpluses. However, given the many questions associated with the potential for export-led growth strategies in the post-crisis economic environment (*TDR 2013*), this

option would probably induce developing countries to aim for exchange-rate depreciation, which could jeopardize the sustainability of their external debt and risk triggering a currency war. Moreover, the increase in the IMS' contractionary bias associated with widespread attempts to accumulate foreign exchange reserves would have the effect of further holding back already weak global demand and economic recovery.

A preferred option for developing countries may be to proactively build on a series of regional and interregional initiatives designed to foster regional

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Involving the IMF in IMS reform that meets the needs of developing countries requires prior reform of IMF governance, policy orientation and surveillance mechanisms.

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macroeconomic and financial stability, reduce the need for foreign-exchange accumulation, and strengthen resilience and capabilities to deal with balance-of-payments crises. While regional arrangements have suffered from some institutional shortcomings, the greatest problem probably is their limited size. This could be overcome by establishing zones of monetary cooperation at the regional level,

which would include both clearing arrangements and systems of emergency finance that could absorb a significant number of such shocks, and thereby reduce the need for self-insurance. An additional possibility could be to link regional arrangements to global facilities, such as the IMF or to central bank swap arrangements that include a central bank which issues an international currency (*TDR 2007*; Aglietta and Coudert, 2014). So far, proposals for cooperation with the IMF (e.g. Volz, 2012; IMF, 2013) have not included any binding rules or guidelines, and little seems to have been achieved on coordination with extra-regional swap arrangements. The modalities for coordination need to be clarified before a new crisis hits so that there will be a ready response when needed, and duplication and substitution of resources from various sources are minimized.

The reform proposals discussed in this chapter are difficult to separate from those designed to avoid, or at least mitigate, instability of the financial system. Indeed, the proposals discussed in this chapter are complementary to, and should not be seen as a substitute for, the equally necessary reform of the regulatory and supervisory architecture of the financial system. This is the topic of the next chapter. ■

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## Notes

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- 1 The notion of “international liquidity” has evolved over time. Traditionally, it referred to the gold and foreign-currency assets that a country’s central bank could readily access. This notion is still relevant for those countries that directly control their residents’ international transactions and manage exchange rates. By contrast, for countries with floating exchange rates, and where residents can freely engage in international transactions, international liquidity also includes the gold and foreign-currency assets and credits to which their residents have access.
- 2 The purpose of providing short-term finance is to prevent countries that face problems in accessing international liquidity during crises from defaulting on their foreign obligations or being forced to adopt drastic “adjustment” measures. It is not aimed at managing problems associated with sovereign debt issues, which are addressed in chapter V of this *Report*.
- 3 It should be noted that the issues of external imbalances and their adjustment in the context of the IMS are based on a concept of balance-of-payments equilibrium, whereby a country’s current account is, on average, balanced over time. This does not take into account the fact that developing countries, and especially the least developed among them, may have current account deficits for a protracted period of time as a result of their need to import capital goods and finance investment projects. Ideally, the related financing requirements should be met by long-term development finance, which is the focus of chapter VI of this *Report*.
- 4 Indeed, while there were several cases of currency devaluation by developing countries over this period to compensate for higher inflation rates, the devaluation of the French franc followed by the United Kingdom’s pound sterling in the 1960s signified growing problems with this system and presaged its eventual demise.
- 5 More precisely, countries were allowed to choose their exchange rate system as long as they avoided “currency manipulation”, even though the notion of currency manipulation was never defined.
- 6 Indeed, as noted by the then Governor of the Bank of Italy: “There is no official institution capable of supplying the international payments system with the liquidity required for further expansion of trade. This function has been taken over by the private banking system, and primarily by the U.S. banks, through operations carried out by their branches at home and abroad” (Carli, 1976: 8).
- 7 The amount of dollar credit outside the United States increases to \$9 trillion if non-bank financial borrowers are included, such as the German state agency Kreditanstalt für Wiederaufbau which in mid-2014 held a debt of \$100 billion.
- 8 These numbers are UNCTAD secretariat calculations based on data from the IMF’s *International Financial Statistics* database.
- 9 It should be noted that reserve adequacy differs from the concept of an optimal level of reserves. The latter balances the benefits from reserve holdings in terms of avoided potential losses in output and consumption from sudden liquidity shortages against the opportunity costs of holding reserves, such as implied resource transfers to reserve-currency countries. The resulting optimal level is strongly determined by country-specific, and often time-varying, risk attitudes.
- 10 This new form of the Triffin dilemma also raises the question as to the extent to which the international role of the dollar continues to confer economic benefits on the United States, which has been a matter of debate. One argument is that such demand for dollar reserves pushes up the value of the dollar and thereby slows down output and employment growth in the United States, especially in the country’s tradable sector, and that it also affects fiscal revenues (Pettis, 2013; Galbraith, 2014). However, the United States can settle its current account and fiscal deficits by printing money, and is therefore less vulnerable to foreign shocks, while other countries must adjust to its macroeconomic policies. In addition, a reserve-currency country usually earns investment income because yields on its foreign assets usually exceed those on its foreign liabilities. According to



- Gourinchas and Rey (2007), these benefits exceed \$30 billion each year for the United States.
- 11 For a critical assessment of the link between the role of the dollar as an international currency, the large current account deficit of the United States prior to the crisis, and the way in which the crisis unfolded, see, for example, Pettis, 2013; and *TDR 2009*.
- 12 Nevertheless, trade finance is the one area where the internationalization of the renminbi has become particularly visible. In 2013, it emerged as the second most used currency for settling cross-border payments in trade, attaining a share of almost 9 per cent (ECB, 2014: 32).
- 13 The euro is used in roughly one third of all foreign exchange transactions, down from 39 per cent in 2010, and the yen's share has oscillated around 20 per cent. The remainder comprises a basket of currencies from developed and developing countries, the composition of which is not further disaggregated by the data sources. It should be pointed out that the sum of the percentage shares will necessarily exceed 100 per cent since many transactions involve two currencies.
- 14 However, the cost of holding foreign-exchange reserves needs to be weighed against the possible macroeconomic costs resulting from exchange-rate appreciation that would occur in the absence of currency market intervention (see *TDR 2009*: 124–125).
- 15 For technical details of these three stages, see Mundell, 2012. For lessons from the experiences with the construction and functioning of the European Monetary System and the European Monetary Union, see *TDR 2007*.
- 16 For such a proposal, albeit limited to the European Union, Japan and the United States, see Cooper, 2006.
- 17 For example, rules-based managed floating targeting a stable real exchange rate may be designed to immediately compensate for emerging price and cost differentials through commensurate adjustments of the nominal exchange rate, thereby preventing the build-up of large current account imbalances. In such a setting, interventions in foreign-exchange markets would be of crucial importance for adjusting the nominal exchange rate. While many of the technical problems associated with this proposal have been addressed (e.g. Bofinger, 2011), the concrete terms for such a scheme require further discussion.
- 18 According to one account of Germany's and Japan's strategies, the Japanese authorities resisted the internationalization of the yen until the mid-1970s to safeguard their country's development model that required minimizing spillovers from international to domestic financial markets, and to prevent upward pressure on the exchange rate (Eichengreen, 2011: 44–45). But from about 1975 onwards, they started to facilitate the internationalization of the yen (see also Matsukawa, 1982). However, the removal of restrictions on domestic and international financial transactions did not produce the expected result, as it led Japanese corporations to access international bond markets while domestic banks replaced their corporate clients with real estate developers, triggering a massive boom and bust cycle in real estate. Germany maintained restrictions on purchases of money market instruments by non-residents in order to be able to address inflation fears by raising interest rates without triggering appreciation pressure, which would have jeopardized the country's export-led growth model (see also Rieke, 1982).
- 19 China's policymakers have adopted a gradual approach to the internationalization of the renminbi, with an initial focus on its use as a settlement and investment currency, to be followed by its use as a reserve asset. A scheme launched in 2009 to encourage import payments in renminbi has led to a rapid increase in renminbi use for trade settlement and the creation of renminbi offshore markets (first in Hong Kong (China) and then Singapore, Taiwan Province of China and some European countries). Moreover, the introduction of renminbi qualified foreign institutional investors has boosted its use as a store of value. The establishment of foreign currency swap arrangements (further discussed below) has furthered the possibility of holding the renminbi as a reserve currency in certain contexts.
- 20 See Zhou (2015) for a brief review of both the history of China's move towards capital account convertibility and the respective reforms planned to be launched in 2015. Zhou also argues that one of the lessons of the global financial crisis is that capital account convertibility should no longer mean "fully and freely convertible" currencies. Rather, it should imply retaining a number of capital account management instruments, such as macroprudential measures that help manage excessive foreign debt in the private sector and significant currency mismatches as well as capital controls on short-term speculative capital flows.
- 21 Some observers argue that China may face similar problems to those encountered by Japan: the failure of the yen to emerge as an international currency in the 1970s and 1980s was due not only to the reluctance of Japanese policymakers to internationalize the yen, but also to the fact that the yen had not first established itself as a regional currency (Park, 2010; Lee, 2014).
- 22 For a further discussion of the wide range of issues involved in internationalizing the renminbi, see, for example, the *Journal of Chinese Economic and Business Studies*, May 2013 – a special issue dedicated to this topic.
- 23 The SDR is currently composed of a basket of four currencies – the dollar, the euro, the pound sterling

- and the yen – which currently account for 41.9, 37.4, 11.3 and 9.4 per cent of the total basket respectively.
- 24 The need to develop private use of SDRs is often mentioned as an additional challenge (Mateos y Lago et al., 2009). However, as pointed out by Ocampo (2014), an SDR-based IMS could be combined with a multi-currency system where the SDR would be the global reserve asset while national or regional currencies could continue to be used in private transactions. However, moving towards such a mixed system would still require substantial institutional changes.
- 25 The last SDR allocation which took place in 2009 comprised the allocation of 21.4 billion SDRs that had already been approved in 1997 and a new allocation of 161.2 billion SDRs (equivalent to about \$250 billion). Since the allocation was based on IMF quotas, more than half of these funds went to developed countries. These allocations brought the stock of total outstanding SDRs to roughly 5 per cent of global non-dollar reserves. Moreover, the allocations in 2009 fell considerably short of the estimated amount required to maintain a stable supply of global reserve assets, which a range of studies estimated at \$200–\$300 billion annually. For comparisons of several such estimates, see Erten and Ocampo, 2012: 15.
- 26 In a sense, this would be akin to creating a development link in SDR allocations, as suggested by UNCTAD (1965). However, the potential use of SDRs as an instrument of development finance should be clearly distinguished from their potentially enhanced monetary functions emphasized here.
- 27 Technically, this could be done in either of two ways (Ocampo, 2011: 22): by allowing the IMF “to create SDRs in almost unlimited amount in the face of a major global disturbance” or by treating SDRs that the IMF had previously allocated but countries have left unused as deposits – or “excess reserves” – which the institution could lend to countries in need.
- 28 It should be noted that the agreed quota revision is relatively small, so that even after its implementation, quotas would still not reflect the increased shares of developing countries in the global economy (Ocampo, 2011: 23–24).
- 29 In the 1970s, the debate stalled because of a lack of agreement as to how the exchange-rate risk and potentially ensuing losses should be distributed among member States. Calculations of hypothetical losses during the period 1995–2008 suggest that these would have been small relative to the size of the United States economy, and would not impair adopting a similar scheme today (Kenen, 2010b).
- 30 For a detailed discussion of these facilities, see, for example, Marino and Volz, 2012.
- 31 The mechanisms discussed here concern the currency and maturity mismatches in gross international capital flows. The fact that the dollar plays a key role in resolving emerging problems has to do with its position as the dominant international currency, and this is not directly related to the large deficit recorded in the United States’ current account in 2007–2008. Indeed, at the same time, similar liquidity shortages needed to be addressed in terms of the euro, with the euro zone as a whole recording a basically balanced current account position, and in terms of the Japanese yen and the Swiss franc, with Japan and Switzerland recording substantial current account surpluses.
- 32 The country-specific account of Aizenman et al. (2011), for example, indicates that, despite using a large share of its sizeable foreign-exchange reserves, the Republic of Korea was able to stabilize its financial markets in October 2008 only after the Bank of Korea entered into swap arrangements first with the United States Federal Reserve and then with the Bank of Japan and the People’s Bank of China.
- 33 At their peak in December 2008, outstanding swap lines totalled over \$580 billion and involved 14 foreign central banks, with the ECB alone accounting for about four fifths of this amount (Fleming and Kluge, 2010; Bourgeon, 2015). The group of countries covered by these arrangements included four developing countries, namely Brazil, Mexico, the Republic of Korea and Singapore, but Brazil and Singapore never drew on their swaps (Bordo et al., 2014; Bourgeon, 2015).
- 34 The PBOC’s swap arrangements with developed-country central banks, such as the Swiss National Bank, have often served to develop offshore renminbi markets (SNB, 2014). They enable importers in the country of the PBOC’s partner central bank, as well as in that country’s neighbouring regions, to easily obtain renminbi-denominated funds if they wish to settle transactions in renminbi. As such, their main purpose has been to provide liquidity in case there is a shortage of trade finance and to lubricate the emerging offshore renminbi money markets.
- 35 According to an empirical analysis by Garcia-Herrero and Xia (2015), the choice of countries was influenced by the partner country’s economic size and geographical proximity, as well as by its size of exports to China and its signing of a free trade agreement with China.
- 36 See Wende P, “Por el swap con China, el BCRA incorporó yuanes a las reservas”, *Ambito Financiero*, 31 October 2014, available at: <http://www.ambito.com/diario/noticia.asp?id=765312>. In October 2014, the PBOC concluded a similar arrangement with the central bank of the Russian Federation (see PBOC, “Central Banks of China and Russia signed bilateral local currency swap agreement”, available at: [http://www.pbc.gov.cn/publish/english/955/2014/20141015162604364930184/20141015162604364930184\\_.html](http://www.pbc.gov.cn/publish/english/955/2014/20141015162604364930184/20141015162604364930184_.html)). Contrary to the

- arrangements with central banks of other countries such as Chile (see [http://www.pbc.gov.cn/publish/english/955/2015/20150528095203205835709/20150528095203205835709\\_.html](http://www.pbc.gov.cn/publish/english/955/2015/20150528095203205835709/20150528095203205835709_.html)), this arrangement is designed not only to facilitate “bilateral trade and direct investment”, but also to promote “economic development in the two countries”.
- 37 China has made similar arrangements with the Bolivarian Republic of Venezuela, whereby loans that extend over several years are initially deposited in the latter’s foreign-exchange reserves but are gradually used for development projects, especially in the oil sector. Other Chinese loans to the Bolivarian Republic of Venezuela may also boost the latter’s reserves, as their repayment will be in the form of oil and fuel (see Reuters, “China to lend Venezuela \$10 billion in coming months”, 19 March 2015, available at: <http://www.reuters.com/article/2015/03/19/us-venezuela-china-idUSKBN0MF2AD20150319>).
- 38 For a detailed account of these regional networks, see Allen and Moessner, 2010.
- 39 For a recent proposal that builds on the plan that Keynes presented to the Bretton Woods conference in 1944, see Davidson, 2007. For other suggestions as to how Keynes’ initial proposal might be employed today, see Mateos y Lago et al., 2009, and United Nations, 2009.
- 40 More ambitious approaches have called for amending Article IV of the IMF’s Articles of Agreement to introduce an obligation for member States to gear their domestic policies to achieving both domestic and global stability (Palais Royal Initiative, 2011), or giving the IMF the right to identify required measures for globally coherent macroeconomic policies and monitor progress (King, 2011). Such measures would obviously need to be backed by significant reform of the IMF’s governance and by changes in its approaches to surveillance and macroeconomic processes.
- 41 For a comprehensive review of regional monetary and financial arrangements, see UNCTAD, 2011; and Fritz and Mühlich, 2014.
- 42 Among the macroeconomic coordination and monetary integration mechanisms in Africa, which are not pegged to the euro and supported by the French Treasury, only the Common Monetary Area (CMA) is operational. This arrangement between Lesotho, Namibia, South Africa and Swaziland constitutes an integrated financial market within which there is a free flow of funds and access by members to each other’s capital markets (*TDR 2007*; and Fritz and Mühlich, 2014).
- 43 The SUCRE is an artificial unit of value along the lines of the SDR. It is calculated from a basket of currencies of the participating countries, weighted according to their economic size.
- 44 ASEAN+3 includes the members of the Association of Southeast Asian Nations (Brunei Darussalam, Cambodia, Indonesia, the Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam), plus China (including Hong Kong (China)), Japan and the Republic of Korea.
- 45 See [https://www.boj.or.jp/en/announcements/release\\_2014/rel140717a.pdf](https://www.boj.or.jp/en/announcements/release_2014/rel140717a.pdf).
- 46 For details, see AMRO’s website at: <http://www.amro-asia.org/>.
- 47 The maximum amount is determined by a purchasing multiple applied to a member’s contribution to the CMIM, where the country-specific multiples range between 0.5 (for China and Japan) and 5.0 (for a number of small member economies). For example, it is roughly \$34 billion for China, \$38 billion for Japan and about \$23 billion for each of the major ASEAN economies (Indonesia, Malaysia, the Philippines, Singapore and Thailand). The share of this amount that can be drawn without an IMF link has been increased in steps, from an initial 10 per cent to the current 30 per cent, and there are plans to increase it further to 40 per cent. This requirement has remained in place since the CMI’s inception in order to address moral hazard, which is seen as a problem due to the continued lack of regional surveillance that would have sufficient political authority, and insufficient human and financial resources (Rhee et al., 2013; Shimizu, 2013). For details on the 2014 amendment of the CMIM, see: [https://www.boj.or.jp/en/announcements/release\\_2014/rel140717a.pdf](https://www.boj.or.jp/en/announcements/release_2014/rel140717a.pdf).
- 48 The swap arrangement envisaged as part of the BRICS Contingency Reserve Arrangement (after its creators Brazil, the Russian Federation, India, China and South Africa), which, as of May 2015, was scheduled to start operating by the end of 2015, would be interregional in character. However, it would not include a central bank issuing an international currency, though this may change over time, with the renminbi assuming an increasingly important role as an international currency. But with agreed initial resources of \$100 billion, it will remain significantly smaller than even the CMIM, and it too would include an IMF link for withdrawals exceeding 30 per cent of a member country’s limit. For further details, see: <http://brics6.itamaraty.gov.br/media2/press-releases/220-treaty-for-the-establishment-of-a-brics-contingent-reserve-arrangement-fortaleza-july-15>.
- 49 Each member has one vote, with decisions requiring a 75 per cent approval for most of the agreements, and 80 per cent requirement for special agreements such as capital augmentation.
- 50 Historical precedents of such regional clearinghouses include the European Payments Union (EPU), which existed during the period 1950–1958, as well as to some extent the LAIA. A similar mechanism is

included in the SUCRE initiative launched in 2009, though it is not yet operational (for further discussion, see UNCTAD, 2011).

51 It is possible that intraregional imbalances would result from certain development strategies which could be taken into consideration by the member

countries when designing a mechanism to address those imbalances, such as if a country acts as a regional engine of growth.

52 It should be emphasized that the objective of this chart is purely illustrative, and does not reflect precise numerical evidence.

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