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Reforming the global monetary non-system

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Abstract: This paper proposes a comprehensive yet evolutionary reform of the global monetary *non-system* that evolved out of the breakdown of the original Bretton Woods arrangement in the early 1970s. It includes: (i) a global reserve system that mixes the multi-currency arrangement with an active use of the International Monetary Fund's Special Drawing Rights; (ii) stronger mechanisms of macroeconomic policy co-operation, including management of the exchange rate system and capital account regulations; (iii) additional automatic balance-of-payments financing facilities, and the complementary use of swap and regional arrangements; (iv) a multi-lateral sovereign debt workout mechanism; and (v) major reforms of the system's governance.

Keywords: reserve currencies, macroeconomic co-operation, balance-of-payments financing, sovereign debt workouts, global governance
JEL classification: F02, F33, F36

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1 The major issues

The recent North Atlantic financial crisis[1] showed how dysfunctional the current international monetary and financial architecture is for managing today's global economy, and led to calls to reform it. Similar calls were made after the sequence of crises of emerging economies of the late twentieth century that sparked in East Asia in 1997,[2] but they led to at best marginal action. This time reforms of international financial regulation have been important but those of the international monetary system have been limited.

The need to strengthen financial regulation and supervision has indeed been a clear priority in recent years. Under the initiative of the Group of Twenty (G-20) and the co-ordination of the Financial Stability Forum, the re-regulation of finance has been going on at an unprecedented scale in the industrial world, despite being plagued by delays in implementation and political economy pressures to weaken reform efforts. The emerging economies had undergone similar processes after their own past financial crises during the last decades of the twentieth century.

Two remarkable weaknesses of (and thus absences from) the international financial reform agenda have been the links between domestic financial regulations and cross-border capital flows, and the limited initiatives to introduce better international sovereign debt workout mechanisms. As discussed later in this paper, both issues have been partly dealt with in recent years in the context of the International Monetary Fund (IMF) and, in that sense, as part of global monetary reform.

The international monetary architecture, the centre of attention of this paper, has not received similar attention. Such architecture includes the global reserve system (the way international liquidity is provided), the management of the macroeconomic linkages among different economies, and balance-of-payments crisis management. The second may be understood as involving at least three separate issues: the consistency in the way different national authorities (regional in the case of the monetary policy in the Eurozone) run their macroeconomic policies, the exchange rate system, and rules on cross-border payments and capital flows. The third includes, in turn, the availability of emergency balance-of-payments financing and debt workout mechanisms. All of these reforms should take into account the asymmetries that characterize the global economy, particularly the size of the economies and the way business cycles and capital account boom–bust cycles are transmitted to different economies. Last but not least, these reforms should be part of a broad effort to improve the governance to generate a more inclusive system.

Prior to the North Atlantic crisis, rising global imbalances had led to the 2006 IMF initiative to launch a multi-lateral consultation on this issue, which did not render any significant results. In turn, some voices were heard in the early phase of the crisis to reform the global monetary system. The most prominent were those of the Chinese central bank governor (Zhou 2009) and the Commission of Experts convened by the President of the United Nations (UN) General Assembly on Reform of the International Monetary and Financial System and chaired by Joseph E. Stiglitz (United Nations 2009). These have also not been followed up. So, the most significant trends since the crisis have been the largest issue of Special Drawing Rights (SDRs) in history,

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[1] I use this term rather than 'global financial crisis' because, although it had global repercussions, the financial crisis concentrated in the United States (US) and Western Europe.

[2] This was accompanied by extensive academic debates. See, among others, Eatwell and Taylor (2002), Kenen (2001), and Ocampo et al. (2007).

the Mutual Assessment Process (MAP) launched by the G-20, the debates on capital account management that took place in the IMF Board in 2011 and 2012, and the debate on debt workouts that took place in the IMF Board in 2014 and in the UN in 2015.

Reforms of the international monetary system should obviously take into account the characteristics of the system that emerged at Bretton Woods and how it evolved in the seven long decades since then. Broadly speaking, it can be argued that the original Bretton Woods system had six distinctive features:

- A global reserve system based on a dual gold-dollar standard (gold exchange standard).
- A system of fixed exchange rates, but adjustable under 'fundamental disequilibria'.
- Convertibility for current account transactions, which would be achieved in a gradual way for countries that lacked it.
- The capacity of countries to manage capital flows to insulate them from speculative capital movements and, therefore, the absence of any commitment to capital account convertibility (or liberalization).
- Official balance-of-payments support, financed by quotas, but limited in size, as they were supposed to finance only current account deficits. No conditionality was initially associated with such support, but it was soon introduced, essentially of a macroeconomic character.
- Monitoring of policies of member countries through Article IV consultations, which were nonetheless weak vis-à-vis major countries—and thus lacked 'evenhandedness', to use current IMF terminology—and effectively no macroeconomic policy co-ordination or even consultation.

The system gradually evolved in several ways, particularly in increasing the magnitude of financing to partly manage balance-of-payments crises associated with capital outflows. However, the major reforms came with the unilateral decision by the United States (US) to abandon the first of these rules in 1971, the failure to agree and then apply a new system of exchange rate parities among major currencies, and the failure of the effort to create a new system in the Committee of Twenty negotiations that took place in 1972–74 (Williamson 1977). The system then evolved into what can be characterized by several authors as a 'non-system', the major features of which can be outlined as follows:

- A global reserve system essentially based on an inconvertible (fiduciary) dollar—which will be called here a 'fiduciary dollar standard'—but open in principle to competitive reserve currencies. This has been complemented by sporadic issues of SDRs, which were created in 1969, but which have played a very secondary role, in open contrast from the expectation then set in the IMF Articles of Agreement of 'making the special drawing right the principle reserve asset in the international monetary system' (Article VIII, Section 7; Article XXII).
- Freedom for each country to choose the exchange rate regime, as long as they avoid 'manipulating' their exchange rates, a term that has never been clearly defined, thus making this the clearest case of a non-system.
- Effective convertibility of the current account of most countries, which came late in many cases but finally achieved the objective of the original Bretton Woods agreement.
- A significant degree of capital account liberalization since the mid-1970s, although maintaining the capacity of countries to regulate capital flows, after a failed attempt to introduce capital account convertibility into the IMF Articles of Agreement in 1997.

- Step-by-step increase in the size of official balance-of-payments support, capturing the rising demands generated by capital account crises, and accompanied by increasing conditionality in the 1980s and 1990s, which moderated somewhat in the 2000s. The additional resources to finance larger programmes have come from a mix of quota increases and 'arrangements to borrow'; the latter system effectively broke down during the recent crisis, and has been succeeded by a series of bi-lateral agreements between the IMF and individual countries, which now include some emerging economies.
- Ineffective surveillance (as in the past) and limited macroeconomic policy co-ordination, which essentially takes place outside the IMF, in the G-7 and now in the G-20, although in the latter case with IMF support.

This paper reviews how to reform this global monetary *non-system* in what could be characterized as a comprehensive yet evolutionary reform. The next section looks at the global reserve system. This is followed in Section 3 by an analysis of the interlinked issues of macroeconomic policy co-operation, the exchange rate system, and capital account regulations. Section 4 takes a look at the two major crisis resolution issues: balance-of-payments financing and debt workouts. The final section looks at the governance of the system. Throughout the analysis, the particular issues associated with emerging and developing countries are underscored.

2 Reforming the global reserve system

The basic deficiencies of the current global reserve system are associated with three problems that were identified in a sequential way in the policy debate.[3] The first, underscored by Keynes (1969), is *recessionary bias*[4] generated by the asymmetric burden of adjustment to payments imbalances between deficit and surplus countries: whereas the former must adjust, particularly when financing dries out during crises, surplus countries do not face a similar pressure to correct their imbalances.

The second problem is associated with the use of a *national* currency as the major *global* currency. It was formulated in the 1960s by Triffin (1961, 1968) and it is thus widely known as the *Triffin dilemma*. The essential problem is that the provision of international liquidity requires that the country supplying the reserve currency run balance-of-payments deficits, a fact that may erode the confidence in that currency. Its major manifestation since the collapse of the original Bretton Woods arrangement has been the alternation of periods in which the US runs increasing current account deficits with others in which such deficits tend to be corrected, a cycle that is accompanied by significant variations in the real exchange rate of the US dollar. This implies, of course, that the currency at the centre of the system has an unstable value.

Having a fiduciary currency at the centre of the system also implies that world economy is hostage to the monetary policy of the main reserve issuing country, which is generally adopted with no regard to its international repercussions. This has obvious global implications. In the words of Padoa-Schioppa (2011: 64), 'the stability requirements of the system as a whole are inconsistent with the pursuit of economic and monetary policy forged solely on the basis of domestic rationales in all monetary regimes devoid of some form of supranationality.' There is also the risk that the 'growing demand for safe (Treasury) assets would led to indebtedness,

[3] A fuller discussion of these issues can be found in Ocampo (2014).

[4] I prefer this term to 'deflationary', which is generally used in debates on this issue, as this pressure is more likely to be reflected today in world economic activity than in price deflation.

which in time could undermine the confidence that is the basis for its reserve asset status' (Mateos y Lagos et al. 2011: 94). However, although this is a potential problem, the dollar has continued to be the dominant reserve currency.

The third flaw of the system is the *inequity bias* generated by the need of emerging and developing countries to 'self-insure' against strong boom–bust cycles of global finance through building up a large amount of foreign exchange reserves; this increases the policy space they have to undertake counter-cyclical macroeconomic policies during 'sudden stops' in external financing. Since foreign exchange reserves are invested in safe industrial countries assets, and particularly US government securities, reserve accumulation by these countries is nothing other than lending to rich countries at low interest rates. This is what generates the inequity of the system. Furthermore, beyond the rationale for self-insurance at the level of individual countries, reserve accumulation can generate 'fallacy of composition' effects, as it would strengthen the current account of emerging economies, thus contributing to the generation of global imbalances. So, this inequity contributes to the potential instability of the system.

There are potentially many ways to reform this system. The most ambitious would be to go to back to Keynes' proposal for an International Clearing Union or to create a global reserve bank that could issue a new supranational reserve currency.[5] However, negotiating the creation of a new global institution or a supranational currency would be quite a difficult task. So, there are essentially two possible reform paths. The first and, in a sense, inertial solution would be to let the system evolve into what it potentially already is: a multi-currency arrangement. The second would be to fully exploit the potential role of the SDRs, gradually approaching the aspirations of the 1969 reform of the IMF Articles of Agreement. In practice, these two alternatives can be mixed, and such a combination may be politically more acceptable for the issuers of reserve currencies, particularly for the US.

As already indicated, under the current system other currencies can compete with the dollar as international means of payments and reserve assets. However, this competition has been relatively weak. According to IMF data on the composition of allocated foreign exchange reserves, in mid-2015, 63.8 per cent were held in US dollars, 20.5 per cent in euros, 4.7 per cent in British pounds, 3.8 per cent in Japanese yen, and 7.2 per cent in other currencies. There have been important changes in the shares of the US dollar and the euro, largely associated with variation in the dollar/euro exchange rate. Since the outbreak of the global financial crisis, there has been a rise in the share of other currencies, from about 2 per cent in 2007 to the said 7.2 per cent in mid-2015. On top of that, over 80 per cent of foreign exchange transactions are managed in US dollars. The recent crisis has thus clearly shown that the 'network externalities' in the use of money continue to favour the US dollar, and that in today's world there is no alternative for the market for US Treasury securities in terms of liquidity and depth.

This is consistent with several recent evaluations of the role of alternative currencies. The euro has continued to be the secondary global reserve currency, showing resilience in this regard despite the deepening of the Eurozone crisis in 2011–12. On the other hand, for several years China has adopted a policy of internationalization of the renminbi, which includes the creation of swap arrangements with several central banks, allowing some payments of Chinese exports to be made in that currency, and using Hong Kong and London as major centres for renminbi transactions. The recent inclusion of the Chinese currency in the SDR basket is a recognition to its growing role as a reserve currency (IMF 2015b), but the possibility of a larger role for the

[5] On these proposals, see D'Arista (1999), Stiglitz (2006: chapter 9), and Lin (2013: Part IV).

renminbi depends on several conditions that can only materialize in the long-term: deep and liquid domestic financial markets, and a liberalization of financial and foreign exchange markets that Chinese authorities have adopted in a gradual way, as they generate major macroeconomic policy challenges (Yu 2012).

The basic advantage of a multi-currency arrangement is that it allows reserve holders to diversify the composition of their foreign exchange reserve assets, and thus to counteract the instability that characterizes all individual currencies under the current system. However, exchange rate flexibility among alternative reserve currencies would be both an advantage but also a potential risk. The first feature would make the system more resilient than the fixed gold–dollar parity that led to the collapse of the original Bretton Woods arrangement. However, if central banks around the world actively substitute currencies to enjoy the benefits of diversification, this could increase exchange rate volatility among major reserve currencies. This indicates that a multi-currency arrangement can be complementary to a more active use of the SDRs, as an IMF 'substitution account' can be created where central banks can substitute SDRs with the reserves in currencies they do not want to hold. This proposal was suggested for the first time in the 1970s to manage the instability of the US dollar, but it was not adopted because of the complexities involved in determining who would bear the potential costs of such a mechanism.

However, aside from diversification to manage the instability of the US dollar exchange rate, a multi-currency arrangement would not address any of the other deficiencies of the current system. The benefits from the reserve currency status would still be captured by industrial countries and gradually by China. It would not solve the recessionary bias of the current system, nor would it reduce the demand of emerging and developing countries for self-insurance. Finally, in the light of the growing demand for reserves, the dominance of the US dollar could worsen the net external liability position of the US and associated problems highlighted by the Triffin dilemma.

The second reform route would enhance the role of the only truly global reserve asset that the world has created: the SDRs. The rationale for doing so today is quite different from that when this asset was created in the 1960s. The issue of potential inadequate provision of international liquidity which had been at the centre of post-war debates is clearly not important today, but the world still needs (to use the terminology of the 1960s) a less 'erratic' and 'capricious' system for providing global reserves, and particularly one that is not hostage to the macroeconomic policies and balance-of-payments of the US.

Under current rules, the IMF makes allocations of SDRs on the basis of a long-term need for a global character, and with the purpose of supplementing existing reserve assets. So far there have been four general SDR allocations: in 1970–72, 1979–81, 1997, and 2009; the third was only effective when the Fourth Amendment of the IMF Articles of Agreement (of which it was a part) was approved by the US Congress in 2009. Allocations are made according to IMF country quotas, and therefore they are much larger for high-income countries. The share of high-income countries has gradually declined over time, but still was over 60 per cent in the joint 2009 allocations. Middle-income countries have increased their share, whereas that of low-income countries has actually declined (see Table 2 in Ocampo 2014).

SDRs are defined by the IMF as 'international reserve asset(s)' (IMF 2015c). However, under the current rules, countries have to pay interest on allocations of SDRs, but receive interest on holdings. In this sense, SDRs are peculiarly both an asset and a liability. Moreover, since countries that use them make net interest payments to the IMF, they should perhaps be considered as a credit line that can be used unconditionally by the holder—that is, an unconditional overdraft facility. This is, of course, a legacy of the debates of the 1960s, when

France in particular, against the view of most countries (including the US), opposed the idea of creating a pure reserve asset (Solomon 1977: chapter 8). Use of SDR allocations is quite active and works rather smoothly, with not only developing countries making frequent use of them but also industrial countries at different critical conjunctures (Erten and Ocampo 2013).

A more active use of this instrument should preferably make SDR allocations in a counter-cyclical way (Camdessus 2000; Ocampo 2002; United Nations 1999) but simultaneously guarantee that the supply of SDRs reflects the additional global demand for reserves (United Nations 2009: chapter 5). Most estimates indicate that average allocations for the equivalent of USD200–300 billion a year would be reasonable,[6] but even this size of allocation would only increase the share of SDRs in non-gold reserves to just over one-tenth in the 2020s, indicating that allocations would still largely complement other reserve assets.

Even a moderate move in this direction would go a long way to reduce the three major problems of the current system. First, the associated seignorage would accrue to all IMF members. Second, by issuing SDRs in a counter-cyclical way, it can contribute to reducing the recessionary bias associated with the asymmetric adjustments of surplus versus deficit countries. Third, SDR allocations could reduce the need for precautionary reserve accumulation by developing countries, and would represent a lower cost of building self-protection rather than accumulating international reserves through borrowing or building up current account surpluses.

The most important reform, in any case, would be to make *all* IMF lending and in fact all IMF operations with SDRs, thus making global monetary creation similar to how central banks create domestic money. This idea was suggested by the IMF economist Jacques Polak (1979) three decades ago. According to his proposal, IMF lending during crises would create new SDRs, but such SDRs would be automatically destroyed once such loans are paid for. The alternative I have suggested for some time is to treat the SDRs not used by countries as deposits in (or lending to) the IMF that could then be used by the institution to lend to countries in need (Ocampo 2010). Either of these proposals would involve eliminating the division between what are called the 'general resources' and the SDR accounts (Polak 2005: Part II).

The use of SDRs to finance IMF programmes would help consolidate the reforms of the credit lines that have been introduced during the recent financial crisis, particularly the creation of contingency credit lines (especially the Flexible Credit Line, FCL, and the use for contingency purpose of other lines such as standby facilities), the much larger levels of financing relative to quotas, and the reforms of facilities for low-income countries (see Section 4.1). It would eliminate the need for the IMF to get financing from its members in the form of 'arrangements to borrow' or bi-lateral credit lines that have been actively used after the North Atlantic crisis. In fact, it would also eliminate the need to make additional contribution to the IMF through quota increases as well as the need of the IMF to manage multiple currencies, most of which are useless for its main operations. Quotas would still have to be agreed to determine the size of access to IMF facilities as well as voting rights. In any case, for this reform to reduce the demand for self-insurance, it is essential that the size of IMF credit lines, their conditionality, and the stigma associated with borrowing from this institution be corrected.

Following the discussions of the 1960s and early 1970s, there are also ways of including a 'development link' in SDR allocations and in the way they are used by the international community. One mechanism would be to include the demand for reserves as a criterion in SDR allocation. A simple solution, suggested by Williamson (2010), would be to allocate a certain

[6] See a survey of different estimates in Erten and Ocampo (2013).

proportion to developing countries (say around 80 per cent), and then assign the shares of the allocation among developing and industrial countries, respectively, according to IMF quotas. Another would be to design mechanisms by which unutilized SDRs are used to provide or leverage financing for development, for example by allowing unused SDRs to be used to buy bonds from multi-lateral development banks or institutions that provide global public goods (such as climate mitigation and adaptation) (United Nations 2009).

Allocation rules could also be made to help correct the asymmetry between surplus and deficit countries. For example, countries with large surpluses and/or excessive reserves could be penalized by suspending their right to receive SDR allocations.[7] Of course, the definition of 'excessive reserves' would have to take into account the exceptional demand in developing countries for reserves.

Some analysts have suggested that a reform along these lines would require an increasing demand for SDRs, which can only come from its transformation into an asset held by the private sector (Cooper 2010; Eichengreen 2007; Padoa-Schioppa 2011). However, such private use of SDRs could generate problems of its own, particularly speculative changes in the demand for this global reserve asset. The reform of the system would also face strong opposition by the US. For these reasons, it may be better to think of a mixed system in which national or regional currencies continue to play the major role in private transactions, and the SDR performs the functions of reserve asset and medium of exchange in transactions among central banks. This would continue to require that SDRs be converted into other global currencies for central banks to intervene in the foreign exchange markets. Some private use could be partially allowed, for example by allowing deposits by financial institutions in central banks (either reserve requirements or excess reserves) to be held in SDRs.

As already pointed, under a system that mixes SDRs with a multi-currency arrangement, a substitution account should be created, allowing central banks to substitute SDRs with the holdings of specific reserve assets. This alternative was suggested by Bergsten (2007) before the crisis, going back to proposals that have been made since the 1970s. This instrument could also be seen as a transition mechanism of an ambitious reform effort (Kenen 2010b). An essential issue is how to distribute the potential costs of this mechanism, the problem that blocked its adoption three decades ago. However, these costs are not necessarily very high. Simulations by Kenen (2010a) based on historical data for 1995–2008 indicate that these costs would have been small during that period.

The most desirable reform would involve, therefore, counter-cyclical *allocations* of SDRs that help fund counter-cyclical IMF *financing*. It would also involve designing criteria for SDR allocations that take into account the very different demand for reserves by industrial versus developing countries. The introduction of a substitution account would in fact make this system complementary to a multi-currency system, which would make the reforms more attractive for the US. This mix is probably the best practical option for moving forward.

[7] The discussions of the early 1970s are illustrative in this regard. At the time, the US backed a 'reserve indicator' system, under which each IMF member would have been assigned a target level of reserves and forced to adjust to keep reserves around that target.

3 Macroeconomic co-operation

3.1 Macroeconomic co-operation to correct global imbalances

The main challenges of macroeconomic policy co-ordination are managing global imbalances. There were significant concerns with rising global imbalances prior to the crisis and escalating US net liabilities vis-à-vis the rest of the world. In these trends, although some saw important the implications for global financial stability, few saw a significant problem in the global monetary system as such;[8] some even saw it turning into a stable 'Second Bretton Woods' (Dooley et al. 2003).

Global imbalances reflect both structural as well as short-term phenomena. The strong pressure for the US to run persistent deficits is, of course, the main structural factor, and it is related at least in part to the Triffin dilemma. The surplus in oil-exporting countries is another structural feature, although it also has a largely cyclical dimension. Other structural phenomena are the surpluses in East Asia, including Japan, which are associated, at least in part, to their high savings rates. One of its major sources, the undervaluation of the Chinese renminbi, had a policy origin but has been largely (or fully) corrected.[9]

The asymmetric adjustments of deficit and surplus economies that characterize the global monetary system have been clearly at work and represent the most important phenomenon after the outbreak of the North Atlantic financial crisis, notably within the Eurozone. On the other hand, non-oil emerging economies were flooded with capital, which generated strong appreciation and rising deficits in several of them. In due time, particularly with the downward correction in commodity prices, several economies started to experience capital outflows, exchange rate depreciation, and, in some cases, recession. This is, in short, a reflection of the pro-cyclical boom–bust cycles that emerging and developing countries experience under the current global financial order.

Overall, therefore, through the evolution of payment imbalances since the Asian crisis, we see at work several features (deficiencies) of the international monetary system: the Triffin dilemma, the asymmetric pressures on deficit versus surplus countries to adjust, and pro-cyclical capital flows to emerging/developing countries. A fourth phenomenon is also at work: the cyclical demand for recycling of the surpluses in oil-exporting countries during periods of high oil prices.

To manage these complex issues, the world counts on insufficiently developed mechanisms of macroeconomic policy dialogue and co-operation. The IMF is the major instrument of co-operation of a multi-lateral character, but most co-operation over decades has taken place outside the IMF and has not been particularly effective. This continued to be so during the crisis, when the G-20 decided in Pittsburgh in September 2009 meeting to self-designate itself as 'the premier forum for our international economic co-operation'. It is complemented by the informal co-ordination among central banks of major developed countries, which has been critical since the outbreak of the subprime crisis in the US in 2007. Macroeconomic co-operation has thus taken place predominantly through the mechanisms of what I have called 'elite multi-lateralism'

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[8] My contributions and those of my then colleagues at the United Nations were some of the few inputs that tied these problems to the instability and inequities of the global reserve system. See Ocampo et al. (2007: chapter 4), which was based on a previous UN report (United Nations 2005). Another important exception is the study by Stiglitz (2006: chapter 9).

[9] This is partly due to nominal appreciation but even more to relative wage movements, which are not generally captured in traditional estimations of real exchange rates.

(Ocampo 2011) rather than through the formal multi-lateral organization that the world has created for that purpose.

G-20 co-operation was very successful in the initial phase of the crisis, when it assumed the form of a 'Keynesian consensus', particularly in averting a new Great Depression. However, in relation to fiscal policies, the consensus broke down in the June 2010 G-20 Toronto meeting, when it became clear that there was a deep division between countries that continued to defend expansionary policies to face the weakness of aggregate demand and those that placed the priority on public sector debt sustainability. The consensus on monetary policy has been more persistent, except for the temporary lapse of the European Central Bank, which partly reversed its monetary stimulus in 2011. The need for continued monetary stimulus in the advanced economies has generated a major disequilibrium vis-à-vis emerging economies, as reflected in a new financial boom, which in turn generated the strong exchange rate pressures faced by these economies—a 'currency war', to use the term then coined by the then Brazilian Finance Minister Guido Mantega.

The MAP launched in Pittsburgh in 2009 is the major instrument of G-20 macroeconomic policy co-operation. In 2011, this led to an agreement that 'the persistently large imbalances that require policy action' are: '(i) public debt and fiscal deficits; and private savings and private debt (ii) and the external imbalances composed of the trade balance and net investment income flows and transfers, taking due consideration of exchange rate, fiscal, monetary, and other policies' (Group of Twenty 2011a). This was followed by the determination of the indicative guidelines against which each of the indicators would be assessed, explicitly 'not targets' but 'reference values' that determine which countries would be subject to an in-depth review (Group of Twenty 2011b).

In practice, the main technical support is provided by the IMF, which was asked 'to assess the coherence, consistency, and mutual compatibility of G-20 members' policy frameworks' and involves three different activities: assessing the submissions of individual countries, aggregating them to assess their mutual consistency, and making policy recommendations (IMF 2011c). This is combined with proper IMF activity, the strengthening of surveillance, both multi-lateral and bi-lateral. This includes the Consolidated Multilateral Surveillance Report, the Spillover Reports for the 'systemic 5' (US, United Kingdom, Eurozone, Japan, and China), and the External Sector Reports assessing global imbalances. The External Sector Report, issued for the first time in 2012 (IMF 2012b; see the most recent edition, IMF 2015a), considers, aside from exchange rates, a detailed examination of current accounts, reserves, capital flows, and external balance sheets. In turn, the major instrument of bi-lateral surveillance continues to be Article IV Consultations. Its major changes are the more in-depth consideration of financial issues, and theoretically more 'candid' assessments, particularly for major economies. This was in part a response to the analysis of the IMF's Independent Evaluation Office according to which the lack of strong assessments of major developed countries was a major flaw of the IMF in the run up to the crisis (IMF-IEO 2011). In 2010 it was also decided that 25 jurisdictions with systemically important financial sectors must be subject to Financial Sector Assessment Programs (FSAPs).

It is quite clear that the world has never developed an elaborate system of surveillance and macroeconomic policy dialogue such as the one put in place since the North Atlantic financial crisis. It is also true that there has been an improvement in evenhandedness in the treatment of different IMF members, and in fact the more systemic economies are now subject to particular attention. Whether there is 'traction' in this process, to use again a typical IMF term, and particularly in relation to major economies, is of course the major question. The system that has been put in place continues to rely essentially on a mix of stronger surveillance and peer pressure. However, such forces continue to be weak forces, as reflected in the limited effect that

IMF views have had on the policies of individual countries or regions, which is evident from the incapacity to moderate fiscal austerity in the Eurozone or the limited practical attention to the spillovers generated by the expansionary monetary policies of developed countries on emerging markets. So, at a future stage, it may be essential to move to a more specific target for specific macroeconomic indicators. This is what I suggest in Section 3.2 in relation to the exchange rate.

3.2 The exchange rate non-system

Exchange rate stability was seen as an essential element of the Bretton Woods arrangement. This objective was explicitly incorporated into the IMF Articles of Agreement, as it was also seen as crucial for guaranteeing another purpose of the IMF, 'to facilitate the expansion and balanced growth of international trade'. The system of fixed but adjustable pegs worked well for more than a quarter century, with some flexibilities. The system included the principle that modifications of the exchange rate parities would have to be subject to consultation, but this never worked in practice.

The major problem after the breakdown of the original arrangement in the early 1970s is that it was followed by a non-system, as all countries are essentially free to choose any exchange rate regime they prefer. The only constraint, according to Article IV of the Agreement is that countries should 'avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members'. This is also the focus of the June 2007 decision on bi-lateral surveillance, which replaced the 1977 decision on surveillance of exchange rate policies that had been adopted after the collapse of the Bretton Woods arrangement. The essential problem is that the IMF has failed to determine what 'manipulation' means.

The centrality of exchange rates is derived for their effects on international trade, but also their central role in correcting payments imbalances. Of course, exchange rate movements may reflect divergence in other macroeconomic policies rather than in exchange rate policies as such. In relation to the first issue, a major concern is that there is no mechanism linking world trade and exchange rate rules. Some have suggested that exchange rate issues should be brought into the World Trade Organization's (WTO) dispute settlement mechanism (Matoo and Subramanian 2008). However, this may end up weakening one of the few successful mechanisms of enforcing international agreements. This decision would also leave aside the fact that exchange rates have many other macroeconomic determinants and dimensions, notably their role in financial transactions, which is essentially why they should be under IMF jurisdiction and be part of broader mechanisms of macroeconomic policy co-ordination.

In relation to other objectives, the exchange rate non-system has also failed to meet two additional objectives set out in the IMF Articles of Agreement: to 'lessen the degree of disequilibrium in the international balance of payments' and 'to promote exchange stability'. One basic reason for this is that exchange rate movements are essentially determined in the contemporary world by financial flows, which may follow boom–bust patterns with little relation to 'macroeconomic fundamentals. In turn, there is a significant level of 'excess volatility' of exchange rate movements since the North Atlantic financial crisis, including the most important bi-lateral exchange rate, that between the two major reserve currencies. It is unclear what purpose the high level of volatility between the world's two most important currencies serves.

The system could therefore be improved by introducing elements that enhance the capacity of exchange rates to contribute to correcting global imbalances and to provide a reasonable level of stability, which is of course crucial for international trade. Returning to fixed exchange rates among major currencies is, of course, impossible, given the magnitude of capital flows. It would also be inconvenient, given that exchange rates must serve additionally to adjust different priorities of macroeconomic policies among countries. The best system would be one of reference rates among major currencies, which has been suggested by Williamson (2007) among others. This implies that major countries would follow some form of managed floating around multi-laterally agreed parities or bands. One of the advantages of such a system is that it would also give some guidance to markets, which may help avoid extended periods of deviation from the equilibrium. Interventions in foreign exchange markets and other macroeconomic policies would support the movement of exchange rates towards the agreed parities or bands (i.e. reinforce depreciation if the currency is perceived to be overvalued and appreciation if it is undervalued). Intervention rules would provide an implicit definition of what manipulating the exchange rate means: adopting macroeconomic policies that move the exchange rate in the opposite direction to the agreed reference rate band.

In this framework, the process leading to the determination of exchange rate parities would have to take into account all macroeconomic determinants of the exchange rate, and would thus summarize a significant amount of information. A simpler approach would be to look directly at payments imbalances, and particularly at *current* account imbalances, which, as we know, is equivalent to looking at savings investment imbalances. Indeed, as Derviş (2010) has pointed out, the definition of current account target zones that the US proposed in 2010 was a recognition that the focus should be on the effects of overall economic policies on national savings and investment, not just on exchange rate policies.

Even better would be to look at payments imbalances among countries together with global macroeconomic imbalances—that is, measures of the global output (employment) gaps and inflationary or deflationary pressures. Furthermore, they could include the broader set of indicators chosen by the G-20 for its MAP. In any case, complexity may not be a good starting point for an incipient process. For that reason, a simple set of indicators may be better. This is why the reference exchange rate proposal is a good idea, complemented with information on current account deficits and global output gaps.

3.3 Capital account regulations

The central role that capital flows play in determining exchange rates and exchange rate volatility brings into focus an additional leg of international monetary reform: the management of the capital account. This issue links with broader concerns of financial stability, which the recent crisis placed at the centre of the global agenda and which included the transformation of the Financial Stability Forum into the Financial Stability Board, with a major responsibility of co-ordinating efforts among the G-20 countries to re-regulate finance. Paradoxically, however, *cross-border* finance was left out of the agenda entirely. It was, nonetheless, taken up for debate in the IMF, and thus as part of global monetary reform. The principle that regulating (or managing) cross-border capital flows is a useful instrument of macroeconomic adjustment under certain conditions was adopted as an IMF 'institutional view' in 2012 (IMF 2012c). Managing the capital account has, of course, been authorized all along by the IMF Articles of Agreement and, as indicated earlier, the 1997 initiative by the then managing director of the IMF, Michel Camdessus, to introduce a commitment of countries to capital account convertibility was defeated.

The essential problem is that capital flows, like finance in general, are highly volatile and pro-cyclical. Indeed, according to an IMF survey (IMF 2011b: chapter 4), capital account volatility has increased over the past three decades and tends to be higher in emerging market economies than in advanced economies. Cyclical swings in net flows, risk spreads, and availability of long-term financing are some of the major determinants (and, under certain conditions, *the* major determinants) of business cycles in emerging economies (Ocampo et al. 2008; Prasad et al. 2003). These countries face further problems of their domestic financial markets being significantly more 'incomplete' and plagued by variable mixes of currency and maturity mismatches in portfolios; also, their capital markets are shallower and small relative to the magnitude of the speculative pressures they face.

In turn, some of the major determinants of net flows to emerging economies are monetary conditions and risk perception in advanced economies (generally called 'push factors'), generating significant net flows when interest rates are low and there is low risk aversion in those economies. On top of that, portfolio decisions in industrial countries may be entirely de-linked from demand for capital by emerging and developing countries and can have severe effects given the relative sizes of capital markets. Indeed, according to data from the Bank for International Settlements (2015), advanced economies represent nearly 90 per cent of the global market for domestic and international debt securities versus only 11 per cent by emerging economies. So, a small change in portfolio allocation in the former can have major repercussion on the latter.

The earlier official IMF documents in the 2011–12 debate on the subject (IMF 2011a) recognized a positive view of the regulation of inflows by recipient countries ('capital flow management measures', CFMs, in IMF terminology). In particular, following extensive academic research on the topic, they supported the view that this regulation improves the liability structure of countries, as the share of more volatile flows is reduced, and increases the policy space for restrictive monetary policies, though it may be ineffective in reducing the total size of inflows and in modifying the exchange rate. In contrast, the regulation of outflows was considered to be generally ineffective. On the basis of these analyses, the IMF proposed some guidelines on the regulation of capital inflow (see IMF 2011a: Box 1). These guidelines correctly pointed out that capital account regulations should be recognized as part of the 'macro-prudential' family of regulations and should be seen as complementary to, and not a substitute for, appropriate macroeconomic policy. However, regulations were regarded as a sort of 'intervention of last resort', once other macroeconomic options had been exhausted. The guidelines also indicated that preference should be given to regulations that do not discriminate according to the residence of the agents involved.

The debates generated by the initial guidelines served, in late 2012, as the basis for the discussion of what came to be known as the IMF's *institutional view* on liberalization and management of capital flows (IMF 2012c). This view recognizes that 'there is no presumption that full liberalization of capital flows is an appropriate goal for all countries at all times', and that liberalization 'needs to be planned, timed and sequenced' (IMF 2012c: 13, 35). It also indicated that capital account regulations on inflows can be useful in managing the risks associated with large inflows. However, it also underscored that they should be 'targeted, transparent, and generally temporary' (IMF 2012c: 36). It also agreed that regulations on outflows can be useful in crisis conditions, but again should be temporary. Finally, in both cases, regulations should avoid discrimination based on residence, a condition that may be impossible to fulfil, as agents demand assets and liabilities in different currencies based on residence. From the IMF perspective, this institutional view would be used for policy advice to countries, but was not expected to be used in Article IV Consultations and, of course, did not eliminate the capacity that countries have to regulate capital flows as allowed by the IMF Articles of Agreement.

The institutional view also recognized that push factors are important, and that the source countries should thus 'better internalize the spillovers from their monetary and prudential policies' (IMF 2012c: 36). However, it gave no guidelines as to actions that they should undertake to avoid inducing large capital outflows towards emerging economies, arguing that this view should 'foster a more consistent approach to the design of policy space for CFMs under bi-lateral and regional agreements' (IFM 2012c: 33), including rules on the liberalization of capital flows of the Organisation for Economic Co-operation and Development (OECD) and investment rules in free trade agreements.

Going beyond the 2011–12 IMF debate, capital account regulations should be seen as part of the *normal* toolkit of macroeconomic interventions that should be used *simultaneously* with other macroeconomic policies to limit excessive capital inflows and avoid domestic overheating or exchange rate overvaluation.[10] Furthermore, capital account regulations should be seen as a continuum, which include macro-prudential regulations of a strictly domestic character (those that affect domestic assets and liabilities in the domestic currency), regulations that relate to the use of assets and liabilities denominated in foreign currencies in the domestic financial system, and those that regulate cross-border capital flows as such. The particular mix between these three forms of macro-prudential regulations depends on the policy objectives of the authorities and the characteristics of the domestic financial system of the countries involved (Ocampo 2011; Ostry et al. 2010, 2011). This also implies that there should be no presumption on preference of regulation of inflows versus outflows, or between price-based versus quantity-based regulations, and that regulations should be used pragmatically and modified dynamically to avoid their elusion. This more pragmatic view is implicit in the only framework on this issue adopted by the G-20 (Group of Twenty 2011c).

4 Crisis resolution

4.1 Balance-of-payments financing

The major issue in the design of IMF credit facilities since the 1960s, and particularly since the major crises in emerging economies of the last decades of the twentieth century, has been balance-of-payments support in the face of capital account crisis. The two essential elements of this policy were the acceptance of a much larger scale of financing relative to quotas—'exceptional access' in IMF terminology—and, to a lesser extent, the search for preventive or precautionary financing instruments to mitigate and hopefully avoid the contagion effects of crises. These elements were present in the major reforms adopted after the North Atlantic financial crisis, notably the reforms adopted in 2009that were possibly the most ambitious in the IMF's lending history (IMF 2009a). To this one should add the changing design of special facilities for low-income countries. The 2009 reforms have been adjusted later to improve their novel features. The design of new credit facilities has been accompanied, in turn, with debates about IMF conditionality, which were particularly heated after the crises of emerging economies that sparked in East Asia in 1997.

Exceptional financing came with conditions, including stronger procedures for decision-making and programme evaluation, a rigorous analysis of debt sustainability, and the perception that the country has good prospects of regaining access to private capital markets (IMF 2003). A major concern of these principles on 'exceptional access' is that they create a bias towards larger members, which could not be reconciled with the principle of uniformity of treatment of member states. The lack of formal debt workouts that countries could use to manage unsustainable debt burdens has, of course, been a basic constraint to a proper application of these principles, particularly that of macro-relevancy and parsimony (see also Section 4.2).

[10] See, for example, the contributions to Gallagher et al. (2012) and the paper by Gallagher and Ocampo (2013).

The creation of successful precautionary facility in 2009, the FCL, came after several failed attempts—the 2003 Contingent Credit Line, the 2006 proposed Reserve Augmentation Line, and the 2008 Short-Term Liquidity Facility. The FCL is aimed at countries with 'solid fundamentals' but a risk of facing capital account problems associated with contagion, and lacks ex-ante conditionality. Although the proposal was positive in many respects, doubts were raised about the prequalification process and the scale of resources. Although three countries rapidly used this credit line, the fact it was not used by others could indicate that it is not sufficiently attractive. Its terms were improved in August 2010, when the scale of resources was increased and the period for which it can be used was extended.

Because of the limitations of these facilities, particularly in terms of potential beneficiaries, perhaps even more important were those reforms aimed at a broader set of members: the doubling of the size of other credit lines agreed in 2009, the wider use of ordinary IMF agreements (i.e. standby agreements) for preventive purposes (the so-called high-access precautionary arrangements), and the creation in 2010 of the new Precautionary Credit Line, for countries which the IMF deems to have good policies but which do not meet the criteria of the FCL; this facility was later transformed into the Precautionary and Liquidity Line, to allow countries to use it to obtain funds of rapid disbursement for six months.

For the poorest countries, the structural adjustment lines created in the mid-1980s were transformed in 1999 into the Poverty Reduction and Growth Facility, and in 2009 into the Extended Credit Facility. Aside from this facility, which provides help to countries with their balance-of-payments difficulties that last various years, other facilities were made available for shorter-term difficulties: the standby lines, which can now be used for dealing with external shocks, and a Rapid Credit Facility, for limited support during emergencies (like a natural disaster or a temporary external shock). Perhaps more important was the decision adopted in December 2009 to change the design of the concessional loan lines from a single design to a menu of options (IMF 2009c), which recognizes the different situations faced by low-income countries in terms of debt vulnerabilities and their macroeconomic and public finance management capacity. This includes the possibility that those countries with limited vulnerability and high capacity can eventually access non-concessionary facilities.

Fund lending has thus clearly met its counter-cyclical objective since the North Atlantic crisis, indicating that the decisions adopted at the onset of the crisis have been steps in the right direction. A novelty was the fact that, for the first time since the 1970s, the IMF included among its borrowers high-income countries, but this has been accompanied by the demand by several middle-income countries of IMF facilities, including the preventive credit lines, and the steady demand by low-income countries that absorb in any case a limited amount of resources.

However, these reforms have been insufficient in two ways. The first is that the resources available for IMF lending have lagged behind other global aggregates over the past three decades. This is true relative to world gross domestic product, but particularly to world trade and remarkably vis-à-vis any financial aggregate. This is despite the international financial system demanding the IMF be more active as a source of emergency financing, particularly to manage capital account shocks. Hence the importance of quota increase, but even more, as argued above, of using the emission of SDRs as a source of resources for IMF lending. The second is the need to continue making progress in designing financing facilities that are automatic and have simpler prequalification processes. These conditions are particularly important to overcome the stigma associated with borrowing from the IMF, which is closely related to its conditionality.

Debates on IMF conditionality are, of course, as old as the Fund, and their focus has changed over time. It may be argued that some macroeconomic conditionality is necessary to guarantee that countries could return to sustainable balance-of-payments positions and repay their loans to the IMF. However, the extension of conditionality beyond the strict macroeconomic realm, to include structural adjustment, which became a typical pattern in the 1980s and 1990s, should be rejected. The fact that policies would generally involve adjustment—'austerity', the typical term used in recent debates—is, in a sense, unavoidable. Nevertheless, it has been argued through time that it should certainly be less severe or its nature should be different when crises originate in adverse external shocks rather than in expansionary domestic policies and, even more, when deficits are expected to be temporary and self-reversing. The low-conditionality compensatory financing facility created in the 1960s as well as the oil facilities of the 1970s were designed to face the case of external shocks, but the low conditionality features of the compensatory facility were gradually dismantled and it ceased to be used since the turn of the century; it was eliminated in 2009.

Criticisms of the structural adjustment features of IMF programmes were common already in the 1980s but became frontal after the East Asian crisis.[11] The primary criticism was that the features were rigid and uniform, and reflected orthodox views on economic reforms, the effects of which—particularly in their capacity to accelerate growth—are highly controversial. They were also seen as excessively intrusive on domestic decision-making processes, and therefore violated the principle of 'ownership' of policies by countries that became widely recognized as a precondition for them to be effective. Furthermore, some critics also underscored the fact that some conditions often reflected pressures from influential countries on what they wanted specific borrowing countries to do.

The reforms adopted in 2002 and 2009 in this regard were steps in the right direction. The new guidelines on conditionality approved in 2002 (IMF 2002) introduced three basic principles: (i) member countries' *ownership* of policies; (ii) the requirement that structural conditions should be *macro-relevant* and focus on the core competencies of the IMF (monetary, fiscal, and exchange rate policies, as well as financial system issues); and (iii) the need to streamline conditionality, called 'parsimony', which implies that conditions must be *critical* to achieve programme goals. The additional reforms introduced in March 2009 were to eliminate structural performance criteria for all programmes, and thus the relationship between IMF disbursements and structural conditionality, and to eliminate ex-ante conditionality for the FCL.

Overall, therefore, there have been advances since the mid-2000s in reducing the volume of structural conditionality and focusing on the macro-relevant areas that are the competence of the IMF.[12] Eliminating structural benchmarks and the creation of a preventive credit with no ex-ante conditionality were major steps forward. This is very important, as conditionality, both current and historical, is the reason why borrowing from the IMF carries a stigma. Much more still has to be done in designing automatic credit facilities with no conditionality and making them available to a larger set of countries. There has probably been some advance in moderating the pro-cyclical effects of adjustment policies, but the story in this regard is more mixed. It has certainly not been true of some of the European programmes, but it can be argued that this is

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[11] For early criticism of the high costs of structural adjustment, see Cornia et al. (1987). The best-known criticism after the East Asian crisis is that of Stiglitz (2002).

[12] See, in particular, the 2007 evaluation of structural conditionality by the IMF's Independent Evaluation Office, officially released in 2008 (IMF-IEO 2007), which showed advance in relation to middle-income countries but not to low-income countries, and highlighted that conditionality needed to be even more focused and relevant. See also the IMF's 2011 evaluation (IMF 2012a) of the advance in the application of the 2009 decision on structural performance criteria and focus on core IMF competencies.

because of the reduced degrees of freedom that countries have because of their membership in the Eurozone or their decision to maintain a currency board (e.g. as in the case of Latvia).

The counter-cyclical role of IMF lending should be complemented by other mechanisms, as part of a global financial safety net. Notable among them, because of their broad-based coverage in the emerging and developing world, is counter-cyclical lending by multi-lateral development banks. Swap facilities are also essential and play a major role in the case of Federal Reserve facilities for other industrial countries, and notably between the Federal Reserve and the European Central Bank. They should also be used more broadly for emerging countries, as it was shortly after the North Atlantic crisis when the Federal reserve extended temporary swap facilities to a few of them (Brazil, Mexico, the Republic of Korea, and Singapore). There is also a growing use of swap facilities between China and other emerging and developing countries, which will undoubtedly grow in the future. The new BRICS Contingency Reserve Arrangement, formally launched in 2015 by Brazil, Russia, India, China, and South Africa (BRICS), is a new addition to the safety net.

Regional mechanisms also have an important role to play. An old, small but well-functioning one is the Latin American Reserve Fund (FLAR, of its Spanish acronym), in which eight countries participate, and which may be expanded to include a broader regional coverage. The Chiang Mai Initiative of ASEAN (Association of Southeast Asian Nations) plus three, and the European Union mechanisms, notably the European Stability Mechanism for Eurozone members inaugurated in October 2012, are the largest regional mechanisms in place. As discussed in the following sections, the association with IMF programmes and their conditionality beyond a certain level of lending has been a basic constraint to the use of the Chiang Mai Initiative, and this rule has been adopted by the BRICS Contingency Arrangement. Therefore, mechanisms without a tie to an IMF programme, which include the swap mechanisms and FLAR lending, are better in this regard.

4.2 Sovereign debt workout mechanisms

The second element of a well-structured crisis response architecture is a system to manage debt overhangs. The absence of an effective mechanism of this sort forces debtors to adopt excessively contractionary adjustment policies during crises, and may have negative long-term effects in terms of access and cost of financing. For all these reasons, the availability of facilities to manage problems of illiquidity must be complemented by mechanisms to manage insolvencies—the role that bankruptcy procedures play at the national level. The dividing line between 'liquidity' and 'solvency' is not easy to draw, as the lack of liquidity financing may lead to insolvency. This is, in fact, a major argument in favour of having effective instruments to manage illiquidity problems.

However, advances made in improving emergency financing during recent crises have not been matched by the development of an institutional framework to manage the debt overhangs of countries. The only regular mechanism of this type in place is the Paris Club, which deals exclusively with official creditors. This is mixed with voluntary re-negotiations with private creditors and ad hoc debt relief initiatives (the Brady Plan and Highly Indebted Poor Countries Initiative, and its successor, the Multilateral Debt Relief Initiative). The problem with this patchy non-system is that debt restructuring generally (or even always) comes 'too little and too late', according to the IMF's own evaluation (IMF 2013), that is, after over-indebtedness has had devastating effects on countries and thus on their capacity to service debts. This is also an inefficient outcome from the point of view of both debtors and creditors, as it does not treat all of them with uniform rules.

The lack of a multi-lateral framework for dealing with international debt crises involving private creditors has been a major concern of many analysts for decades. Initiatives to manage these problems proliferated after the 1994 Mexican crisis and, particularly, after the crises of the emerging economies in the late-twentieth century, following two different approaches, which have been referred to in the literature as 'contractual' and 'statutory'. The most important attempt to introduce a statutory regime was the 2001–03 IMF proposals for a Sovereign Debt Restructuring Mechanism, which failed. One important outcome of the discussion at the time was that it led to changes in the contractual approach, in particular the rapid spread of collective action clauses in debt contracts issued in the US market (they were already in place in the United Kingdom). In recent years, particularly after the difficulties faced by Argentina in US courts in 2013 with its restructurings of 2005 and 2010, several new initiatives were put in place. The first was an additional reform along the statutory approach: the agreement in 2014, backed by the International Capital Market Association (ICMA 2014a, 2014b) and the IMF (2014), to include clauses that facilitate the aggregation of debt contracts and a new pari passu clause that avoids the problems of interpretation of old clauses that were subject to judicial decisions against Argentina in US courts in favour of 'holdouts'. Eurozone bonds also require aggregation clauses since 2013. The UN also adopted in 2015 basic principles on sovereign debt restructuring (United Nations 2015). Therefore, the basic framework continued to be the voluntary negotiations of individual countries that have debt overhangs with private creditors.

What this implies is that the contractual approach has dominated actions in this field. It is unlikely, however, that this decentralized and market-orientated route will produce the desired effects. A first problem is that incentives remain for both debtor countries and creditors to delay restructurings, which may negatively affect debtors and their long-term capacity to pay, and may result in recurrent re-negotiations. A second problem is that its effects will only appear gradually, as a significant part of the debt stock lacks collective action clauses and only a small part has aggregation clauses. In any case, aggregation does not exclude the possibility of blocking majorities in individual issues, and may not include other creditors aside from bondholders, particularly syndicated bank lending. A third problem is that credit default swaps may reduce the incentive to participate in debt re-negotiations, and introduces a whole new set of actors into the process.

Additional complications are associated with the reduced importance of the traditional division between external and internal debt generated by the increasing participation of international funds in the domestic debt markets of emerging economies. Furthermore, the traditional separation between official and private creditors has been made more complex by the rise of the official lenders that are not members of the Paris Club (notably China). This may imply that, in the future, aggregation may have to truly include *all* obligations, including even multi-lateral lending, with proper seniority rules, favouring in particular creditors that provide funding during crises.

The statutory approach would involve the creation of an international debt court of some form, with clear rules on priority of claims and inter-creditor equity principles that would be legally enforceable in the main financial markets. It would have to adopt the principles of a fresh start and equitable sharing of haircuts. Nonetheless, intermediate solutions can be adopted, such as case-by-case mediation or eventually arbitration panels convened by the parties under international-agreed arbitration rules (Kaiser 2013). Any mechanism in place would have to follow two basic principles: comprehensiveness of debt restructurings, and impartiality of the mediation and arbitration processes.

The best alternative, in my view, would be to mix the voluntary and statutory solutions, by creating a mechanism similar to the WTO dispute settlement,[13] in which there is a sequence of voluntary negotiations, mediation, and eventual arbitration with pre-established deadlines, thus generating strong incentives to reach agreement. The process should start with the declaration of moratoria by the debtor country, which would unleash the negotiations. The process could involve, aside from bondholders, other creditors, including official ones. The mechanism could be created as an independent body under the UN system, but also as a system of *independent* mediation and arbitration within the framework of the IMF, similar again to the WTO dispute settlement mechanism. This implies that the debt resolution organ would operate independently of the Executive Board and the Board of Governors, and with strong provisions to avoid interference from IMF staff, directors, or member states.[14]

Under any system, three complementary mechanisms are desirable. The first is an international debt registry. The second is the creation of effective mechanisms for creditor co-ordination for individual re-negotiations, a problem that has become more complex given the diversity of creditors. The third is a sovereign debt forum, which can be a multi-stakeholder process organized under the umbrella of the UN Financing for Development programme, thus providing for the participation not only of governments and international institutions but also of the private sector and civil society.

5 Governance of the system

Substantive reforms along the lines analysed in previous sections must be matched by the design of appropriate governance structures. There are, in this regard, three interrelated issues. The first one is the design of the apex organization. The second is the reform of 'voice and participation' of developing countries in the Bretton Woods Institutions (BWIs)—in the case of the international monetary system, in the IMF. The third is the design of a multi-layered architecture, with active participation of regional and sub-regional institutions.

In the first area, the major step, as already pointed out, has been the decision of the G-20 to self-designate itself as the premier forum for international economic co-operation. The creation of this G-20 at a leaders' level was, of course, a step forward compared to the G-7, in terms of representation of developing countries. But this 'elite multi-lateralism' also created problems, as ad hoc self-appointed bodies cannot replace representative institutions in a well-structured international institutional architecture.

This preference for 'Gs' over representative international institutions has deep historical roots, as it reflects the revealed preference of major industrial countries for institutional mechanisms over which they can exercise direct influence. It is possible that this may have also become the view of some emerging economies that are G-20 members. The basic issue, of course, is the tension between representativeness and the legitimacy associated with it, on the one hand, and power structures, on the other. This issue is sometimes expressed as the tension between inclusiveness and effectiveness, but this is clearly a wrong way to pose it, as representative institutions can be effective. This is, after all, a basic defence of democratic systems. It is true that effective decision-making may require small bodies, but this is not inconsistent with representation, as

[13] My own early ideas on the subject were included in Herman et al. (2010).

[14] This is what is implicit in Krueger's (2002) late proposal during negotiations regarding the Sovereign Debt Restructuring Mechanism.

those small bodies can be embedded in larger representative institutions that elect their members according to agreed criteria.

In terms of leadership, the G-20 has played an important role in several areas: co-operation at the onset of the crisis to adopt expansionary policies and avoid the strong recession from turning into another Great Depression; putting in place a new mechanism of macroeconomic co-operation, the MAP; steering change in financial regulation; avoiding the competitive protectionist responses that characterized the Great Depression; and putting in place a mechanism of international tax co-operation, the Base Erosion and Profits Shifting process, led by the OECD. On effectiveness, the record is more mixed: quite good in the early phases of the crisis but weaker since then. Performance is rather poor in three other dimensions: representation (ad hoc representation is, as already pointed out, sub-optimal relative to that which can be achieved in representative treaty-based organizations), contribution to the coherence of the global system of governance, and lack of an effective secretariat that can support continuity in governance and support evenhandedness in the treatment of members with different power.[15]

For all these reasons, the G-20 should be transformed into a more representative and thereby legitimate mechanism of international economic co-operation. In this regard, the best proposal on the table is that of the UN Commission of Experts on Reforms of the International Monetary and Financial System to create the Global Economic Co-ordination Council (United Nations 2009: chapter 4). According to this proposal, the Co-ordination Council will be set in the framework of the UN *system*, to which the BWIs belong, and formed on the basis of constituencies elected through weighted votes. So, although designed in the framework of the UN system, its voting structure will be made along the lines of the BWIs, correcting of course for the problems of representation that these organizations face today. The proposals by the Palais Royal Initiative have elements in common with those of the UN Commission, but centre on designing an apex organization for the international monetary system, and thus with less reach than the proposed Global Economic Co-ordination Council (Boorman and Icard 2011).

The reforms of voice and representation of developing countries in the BWIs should continue. This includes, first of all, concluding the 2010 IMF reform, which doubled the quotas, revised the allocation of quotas and voting power of developing countries, reduced by two the European representatives in the IMF Board, and decided that all of its members should be elected. The approval by the US Congress in December 2015 of the additional contribution of the US finally facilitates this process, but obviously the capacity of Congress to block international reforms—in this case for five years—should continue to be a major concern of the international community. In any case, this reform was still short of what is required. In particular, although the quota and voting power of European countries was reduced, its over-representation continued to be a fundamental problem, as is the under-representation of some emerging (particularly Asian) economies relative to their actual share in the world economy. So, this can only be understood as a first step of a longer-term process, which has to regularly guarantee that quotas are at the level necessary to face the demand for balance-of-payments financing and that their distribution is regularly adjusted to reflect changes in the shares of countries in the global economy. The reform has to also include revised rules on allocation and use of SDRs, according to the proposals previously made. Indeed, as already indicated, if SDRs are more actively used, there will be no need to increase traditional member quotas.

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[15] On these issues, see Ocampo and Stiglitz (2011) and Woods (2011), and the several contributions to Derviş and Drysdale (2014).

There are other issues of governance that have to be address, including those proposed by the 2009 Commission for IMF Governance Reform (IMF 2009b) and by the IMF's Independent Evaluation Office (IMF-IEO 2008). They include the creation of a Council of Ministers envisioned by the Articles of Agreement, with effective powers to adopt the most important political decisions, thus replacing the International Monetary and Financial Committee; a clear re-definition of the relations between this Council, the Board, and the Management, including re-orienting the Board towards formulating strategy and monitoring policy implementation rather than the executive day-to-day functions it now oversees; and reducing the threshold of votes needed to approve important IMF reforms from the current 85 per cent to, for example, 70–75 per cent. A crucial, additional reform, is guaranteeing a transparent and open process to select the IMF managing director, based on the merit of the candidates and regardless of nationality; the selection of the managing director in 2016 will show whether these principles are followed.

Finally, a dense multi-layered architecture that relies more broadly on regional institutions offers interesting opportunities. Indeed, in a heterogeneous international community, the creation of *networks* of global, regional, and national institutions can provide a better system of governance than arrangements based on single global organizations. What this means is that the IMF of the future should be conceived as the apex of a network of regional and interregional reserve funds (Ocampo 2002, 2006). A system such as this would be closer in design to that of the multi-lateral development banks, where the World Bank co-exists with several regional development banks and, in some parts of the world, with several sub-regional institutions, and some interregional banks (e.g. the Islamic Development Bank and now the New Development Bank).[16] Interestingly, the structure of such a network would also be closer in design to the European Central Bank and the Federal Reserve System than to the current IMF.

Regional arrangements could take different forms—payments agreements, swap lines, reserve pools, common central banks—and exhibit different degrees of multi-lateralization. FLAR, the Chiang Mai Initiative, and the European Stability Mechanism are three frameworks already in place, the last case complementing the role of the European Central Bank. The BRICS Contingency Reserve Arrangement is an additional mechanism of an interregional character.

Careful consideration should be given to the links between global and regional arrangements. In this regard, during the recent crisis, Europeans chose rescue packages that mixed resources from the IMF and the European Financial Facility (the predecessor of the European Stability Mechanism). In contrast, as access to Chiang Mai swap lines beyond a certain limit (30 per cent) requires an IMF programme, this rule may block the use of this mechanism, as countries may be unwilling to agree on any such programme. Curiously, the BRICS Contingency Reserve Arrangement adopted a similar rule. In contrast, the use of FLAR facilities has traditionally been de-linked from any programme with the global institution. The links between the IMF and regional arrangements, therefore, must be subject to flexible designs—a 'variable geometry' to use a term that has become common in relation to the design of the world trading system.

[16] See, in this regard, the contributions to Ocampo (2006), and the evaluation of the contribution of different regional mechanisms to international monetary stability by McKay et al. (2011).

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