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Building a stable and equitable global monetary system

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Abstract

This paper argues that SDRs should become a more relevant instrument of international monetary cooperation. This requires transforming them into a pure reserve asset and the IMF into a fully SDR-funded institution. SDRs would then be issued counter-cyclically and treated as deposits of countries in the IMF, which can in turn lend to countries. This approach would correct basic deficiencies of the current global monetary system. Complementary reforms include a substitution account for an orderly and smooth transition from major reserve currencies to SDRs, and the issuance of SDR-denominated bonds as an alternative to other major short-term assets.

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Building a stable and equitable global monetary system

Bilge Erten and José Antonio Ocampo¹

This paper was originated as a contribution to the work programme of the Committee for Development Policy (CDP), a subsidiary body of the United Nations Economic and Social Council, on the United Nations development agenda beyond 2015. This research effort aimed at analyzing and proposing alternative development models that could contribute to a sustained improvement in human well-being worldwide. While the views expressed here do not necessarily coincide with those of the CDP or the United Nations, the paper has benefitted from the discussions conducted at various workshops and plenary meetings of the Committee. Additional information on the CDP and its work is available at <http://www.un.org/en/development/desa/policy/cdp/index.shtml>.

Introduction

The recent global financial crisis brought back the reform of the international monetary system into the center of global policy debates. Major concerns have been the problems generated by still having a national currency at the center of the global monetary system, the recessionary (or deflationary, as they are usually called) effects of the asymmetric adjustments of deficit opposed to surplus countries during crises, and the possible recessionary effects of the accumulation of large amounts of reserves as a precautionary measure by developing and emerging economies (“self-insurance”, as it has come to be called). One of the large holders of dollar reserves called for the gradual replacement of the dollar with the Special Drawing Rights (SDRs) at the center of the system (Zhou, 2009), bringing the world back to similar calls made during the early 1970s (Williamson, 1977). However, the collapse, at that time, of the Bretton Woods arrangement led to what effectively can be characterized as a global monetary “non-system”.

This paper argues that the most promising way to the reform of the international monetary system to increase its stability and equity characteristics is indeed to fully employ the SDRs, which remain as one of the most underutilized instruments of international economic cooperation. When they were created, the Articles of Agreement of the International Monetary Fund (IMF) were reformed to express the aspiration of “making the special drawing right the principle reserve asset in the international monetary system” (Article VIII, Section 7 and Article XXII). However, after a promising start, as the initial issue in 1970-72 represented about 8 per cent of global non-gold reserves, SDRs came to occupy a rather marginal role as a reserve asset, coming to represent only a fraction of one percentage point before the 2009 allocations. In its April 2009 London Summit, the Group of 20 (G-20) revitalized this dormant element of global monetary cooperation, leading to the large issuance of SDRs in history, which nonetheless brought its share in global non-gold reserves to only about 4 per cent. This also revived the policy and academic debates about the role of the SDRs in a more ambitious global monetary reform.²

1 This paper also draws from work by both authors for the UN Department of Economic and Social Affairs. We thank José Antonio Alonso and Norman Girvan for comments made on a prior version.

2 See, in this regard, United Nations (2009) and the symposium on the issue in the *Journal of Globalization and Development*, Volume 1, Issue 2, 2010.

Given the major problems that the current system faces, there are three distinct purposes for using this mechanism of international economic cooperation in an ambitious way. First, placing the SDRs at the center of the international monetary system could free the international monetary system from the vagrancies of having to depend on the monetary policy of the leading country (or, if we want, countries or regions), which may not be managed to take into account its international repercussions. The seignorage associated with the additional demand for global reserves would also accrue to the IMF member states as a group. Second, by issuing SDRs in a counter-cyclical way, new SDR allocations during crises would have the potential of reducing the recessionary bias associated with the asymmetric adjustments of surplus and 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 than accumulating international reserves through borrowing or building up current account surpluses.

There are also several potential benefits for developing countries in a new arrangement of this sort. First, although, given the current structure of IMF quotas, more than half of SDRs allocations are distributed to developed countries, developing and emerging economies benefit from such allocations, particularly because they tend to use them in a more active way. Second, 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 a criterion of demand for reserves in SDR allocation. Another would be to design mechanisms by which unutilized SDRs are used to provide or, as we would prefer, *leverage* financing for development. In the latter case, they can be also used to finance the provision of global public goods. In both cases, they would represent part of the alternative “innovative financing for development” that have been a subject of significant attention in recent years.³ It is important, however, to clearly separate between the monetary functions of SDRs to which we referred in previous paragraphs from their potential use as an instrument of development finance.

Any reform of the international monetary system should finally increase the voice and participation of developing countries in international economy decision-making, as called for in the Monterrey Consensus (United Nations, 2002). This implies a reform in the quota and vote share systems in the IMF to make them more coherent with today’s global economy, as well as dynamic, and to improve other aspects of their governance structures. A more inclusive and equitable system could also be improved by building a multi-layered architecture in which global institutions interact with a denser body of regional arrangements.

The paper is organized as follows. After this introduction, the next section will briefly analyze the current problems of the international monetary system, the growing demand for international reserves, and the history of SDR allocations up to date. The following section will make a novel contribution by focusing on the “market” for SDRs, that is, how and why SDRs have been transacted. A major implication of this section is that, if this is going to become a major instrument of international cooperation, the market for SDRs has to increase substantially. The subsequent section focuses on ways of making a more active use of SDRs for global monetary reform. The next section deals with the possible development dimensions of SDRs. The analyses of all these sections indicate that most interesting proposals imply changes in the IMF’s Articles of Agreement and a much larger “market” for SDRs. It is followed by a section which deals with governance reforms. Finally, the paper will conclude by drawing major conclusions and policy recommendations.

3 See, among others, Landau (2004) and Atkinson (2005). See also the initiatives of the Leading Group on Innovative Financing for Development (see in this regard, United Nations, 2011).

The paper covers only part of the broader agenda of global financial reform. There are, at least, four complementary issues not dealt with here: the need for stronger prudential regulation and supervision to prevent financial crises, adequate IMF credit lines and associated conditionalities, capital account regulations and international debt workout mechanisms (for an analysis of this broader agenda, see Ocampo, 2011 and Griffith-Jones and Ocampo, 2012).

Problems of the International Monetary System and the Demand for Reserves

The international monetary system shows three fundamental problems (Ocampo, 2010 and 2011). The first one, which was highlighted by John M. Keynes during the debates that led up to the Bretton Woods agreements, is that the present international monetary system has a bias against countries running balance of payments deficits (Keynes, 1942-43). The countries in external surplus have no strong incentive to adjust, and thus the burden of adjustment falls mainly on deficit countries. Adjustment generally takes place with a lag and rather abruptly when deficit financing suddenly dries out. The asymmetric adjustment tends to generate a global recessionary effect if the corrections that deficit countries need to adopt to balance their external accounts do not find financing in adequate quantities, and if those adjustments are not offset by expansionary policies in surplus countries. This problem can be called the *anti-Keynesian bias* of the system.

The second problem, which has become known as the *Triffin dilemma*, after the pioneering work by Robert Triffin (1961, 1968), arises from the fact that an *international* reserve system based on a *national* currency (the U.S. dollar) has some inherent instabilities. In particular, the only way that the rest of the world can accumulate net assets in dollars is if the United States runs a balance of payments deficit. But that can lead to a loss of confidence in the dollar. By and large, this has led to strong cycles in the value of the main international currency and in the U.S. current account deficit, which strongly affects the rest of the world economy. More generally, global monetary conditions are largely determined by the monetary policy of the U.S., which is designed with no regard to its global repercussions. According to the reformulation as a “general dilemma” by the late Padoa-Schioppa (2011, pp. 63-64), “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”.

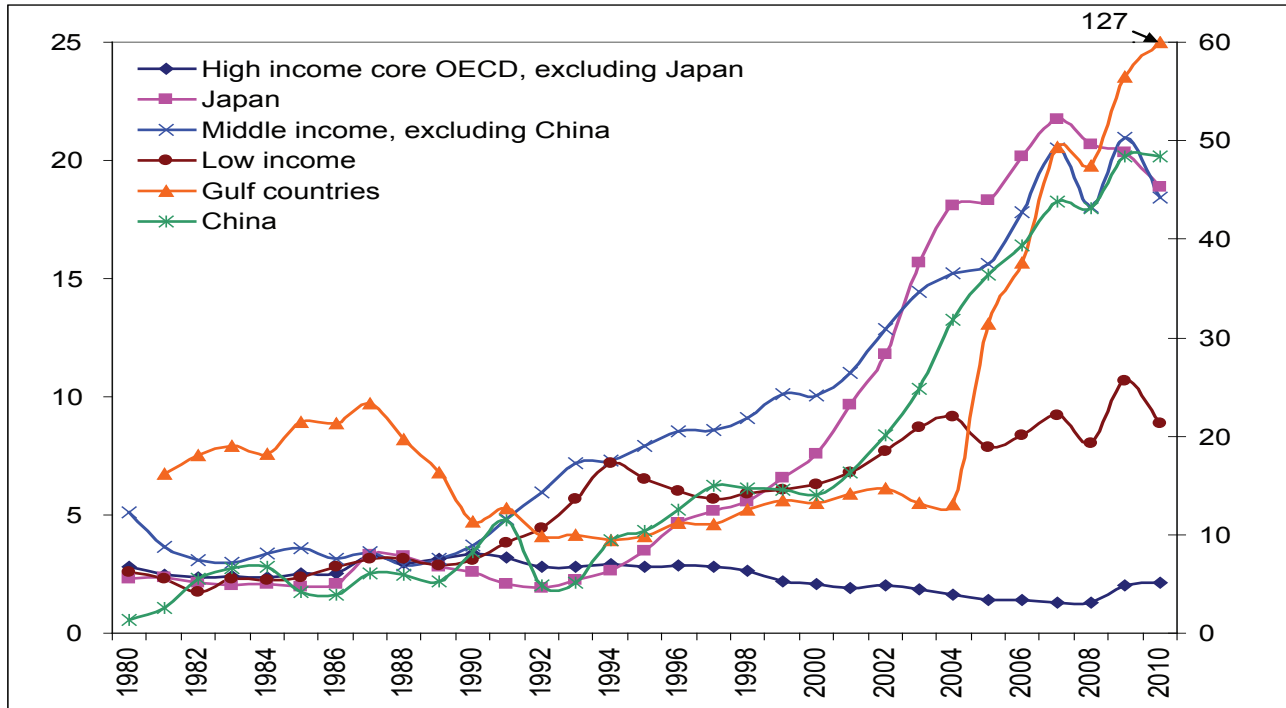
The third problem of the current international monetary system is its inequitable character. The need to accumulate international reserves forces developing countries to transfer resources to those countries that issue reserve currencies. This *inequity bias* has been magnified in recent decades by financial and capital market liberalization and by the strongly pro-cyclical behavior of the capital flows toward developing and emerging economies. This behavior has generated a massive accumulation of foreign exchange reserves as a form of self-insurance against abrupt interruptions in international financing. This accumulation can also be seen as a rational response by each country to a system that lacks a “collective insurance” in the form of adequate IMF emergency financing. It also generates a “fallacy of composition”, as the collective attempt by these countries to accumulate reserves may generate current account surpluses that act as a global recessionary bias, or increase the demand for “safe” assets which, if not matched by an increased supply, may have global financial repercussions, particularly on the risk premia of those assets considered “safe”. Inequity may thus lead to instability; for this reason, we can call this problem the *inequality-instability* link.

Table 1: Accumulation of foreign exchange reserves, 1982-2010

	Millions of US dollars										Percentage of GDP					
	1982-90	1991-97	1998-02	2003-07	2009	2008-10	1982	1991	1998	2003	2007	2010				
High income: OECD	43,582	35,752	62,539	147,718	366,984	201,903	2.58	3.23	3.81	4.95	4.85	6.34				
Core OECD	33,027	4,482	-15,369	407	201,532	80,120	2.33	3.22	2.66	1.84	1.31	2.13				
Japan	5,588	20,164	48,307	98,320	12,871	27,825	2.12	2.07	5.59	15.68	21.76	18.85				
Others	4,967	11,106	29,600	48,991	152,581	93,957	9.99	7.81	15.65	20.04	18.39	26.34				
High income: non OECD	2,630	18,023	12,018	103,910	75,754	105,948	17.14	21.67	31.88	37.56	54.51	111.57				
Gulf countries	-2,269	1,306	4,125	73,358	-15,650	44,698	18.06	12.64	12.48	13.21	49.31	127.08				
Excluding Gulf countries	4,898	16,717	7,894	30,552	91,404	61,250	14.85	29.61	44.15	64.22	61.99	99.37				
Middle income	6,289	55,601	64,135	566,392	617,384	599,862	4.20	5.64	10.17	17.05	26.32	28.94				
China	2,725	16,168	29,673	247,831	466,784	445,266	5.59	11.51	14.63	24.87	43.80	48.75				
Excluding China	3,564	39,433	34,462	318,561	150,600	154,596	4.04	4.93	9.12	14.51	20.52	20.04				
Low income	205	680	825	2,975	12,099	4,290	2.41	4.58	6.90	9.91	10.47	11.69				
World	52,706	110,056	139,517	820,996	1,072,221	912,002	2.66	4.26	5.82	8.30	11.99	15.17				
Excluding China and Japan	44,393	73,724	61,536	474,845	592,566	438,911	2.66	4.52	5.50	6.45	8.78	10.96				

Source: World Bank, World Development Indicators, based on information from IMF. The countries were classified according to World Bank list of economies reached online on 18 July 2011, which divided economies among income groups according to 2010 gross national income (GNI) per capita, calculated using the World Bank Atlas method. The groups are: low income, \$1,005 or less; middle income, \$1,006–12,275; and high income, \$12,276 or more.

Figure 1: International reserves by level of development, 1980-2010 (percentage of GDP)



Source: Total reserves minus gold series, World Bank, World Development Indicators, based on information from IMF.

Note: Data for China and the Gulf countries is reflected on the right axis

Reserve accumulation in developing countries has indeed risen sharply since the 1990s and diverged from the advanced country trends. Figure 1 and table 1 indicate that the foreign exchange reserves of low-income and middle-income countries were not unlike those of high-income countries in the early 1980s, about 3-4 per cent of GDP. The initial point of divergence took place in the 1990s following the 1980s debt crisis of Latin America and Africa, and intensified after the 1997-98 East Asian crisis. The essential reason, as already noted, is that many developing countries sought instruments to protect themselves against global financial instability and to manage pro-cyclical flows of capital which are particularly destabilizing. Together with the intentions to avoid conditionalities associated with IMF lending, this generated a massive accumulation of reserves.

Before the recent financial crisis in 2007, middle-income countries excluding China, held reserves equivalent to about 20 per cent of GDP and low-income countries about 9 per cent. China's reserve accumulation has doubled from about 20 per cent in 2002 to over 40 per cent in 2007, which is, of course, much beyond the "self-insurance" motive and reflects an explicit policy to keep an undervalued exchange rate and run current account surpluses. The resulting reserve accumulation process was a massive transfer of resources from developing and emerging world to reserve-issuing industrialized countries. The "self-insurance" motive did pay off, however, as reflected in the reduced vulnerability of many parts of the developing and emerging world during the recent global financial crisis. After the use of some reserves for liquidity purposes during the crisis, the share of reserves in GDP fell and then rose over 20 per cent for middle-income countries and over 1 per cent for low-income countries in 2009, though they declined slightly in 2010.

In contrast to this pattern of reserve accumulation, the trend for high-income core OECD countries remained fairly constant at about 2 per cent. The only high-income OECD country that followed a different pattern was Japan, particularly up to 2007. It has since then slightly reduced its reserves, which nonetheless still represented a little less than 19 per cent of its GDP in 2010. In turn, the most aggressively accumulating countries have been the Gulf countries, whose reserves reached 49 per cent of GDP in 2007 and an astonishing 127 per cent in 2010. This reflects the decision to save a large part of the windfall generated by high oil prices since 2004, in a significant break with past policy of overspending oil price booms. They were followed by China with reserves of close to half of GDP.

Overall, the world accumulation of reserves as a share of GDP increased from 4.3 per cent in 1991 to 12.0 per cent in 2007, and reached 15.2 per cent of world GDP in 2011, or from 4.5 per cent to 8.8 per cent and 11.0 per cent if China and Japan are excluded. During the period 2003-07, reserve accumulation was US\$ 475 billion on average when China and Japan were left out, and continued at a dissimilar pace in 2008-10, US\$ 439 billion. The associated amounts have been US\$ 821 and US\$ 912 billion with the inclusion of both countries.

SDRs are defined by the IMF as an “international reserve asset”.⁴ 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, and perhaps should be best considered as a credit line which 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, against the view of most countries (including the United States) opposed the idea of creating a pure reserve asset (Solomon, 1977, chapter VIII; Lombardi and Milsom, 2012).

According to existing rules, the IMF makes general allocations of SDRs following three criteria: (i) a *long-term* need, (ii) of a *global* character, and (iii) with the purpose of *supplementing* existing reserve assets. Five-year-period reviews are undertaken to decide whether there is such a need. So far there have been three general SDR allocations. The first was done in 1970-72 for a total amount of SDR 9.3 billion, and the second in 1979-81 for SDR 12.1 billion. The last round that took place in 2009 included two different decisions: (i) an allocation that had been approved in 1997, partly to compensate members that had joined after 1981 and never received SDRs before; this allocation had been included in the Fourth Amendment of the IMF Articles of Agreement, which was finally approved by the U.S. Congress in 2009; and (ii) in response to the global financial crisis, the G-20 agreed to boost liquidity through new SDR allocations, which involved the issuance of SDR 161.2 billion, equivalent to US\$ 250 billion.

Interestingly, although allocations are made according to the long-term needs, the 2009 allocations were clearly argued on counter-cyclical grounds (IMF, 2009b). The sudden stops and reversals in capital flows in several developing countries during the crisis increased the need for reserves as a buffer against these shocks. Given the large contraction in the global economy, the restricted availability of external financing was expected to last a long time. This was seen as a major justification for the allocation.

SDR allocations are made according to quotas of each country in the IMF, and therefore they are much larger for high-income countries. Table 2 shows that during the first set of allocations in 1970-72, high income countries received 74 per cent of total allocations (with a very tiny share for the non-OECD group),

4 See, for example, <http://www.imf.org/external/np/exr/facts/sdr.htm>

while middle-income countries received 23 per cent and low-income countries only about 3 per cent. The distribution improved slightly over time. With the second round of allocations in 1979-81, the share of high-income countries declined to 69 per cent (with a significant increase in the share of the non-OECD group) while the middle and low income countries' shares rose to 28 per cent and those of low-income countries marginally so. In 2009, the quota redistribution benefited slightly more the middle-income countries, with 29 per cent of the allocations, while the low-income countries actually saw their share decline from 2.8 to 2.0 per cent. The decline in the share of OECD countries was mostly reflected in the rise of the share of non-OECD, mainly the Gulf countries.

Table 2: SDR allocations by selected country groups according to the level of income, 1970-2009 (SDR million)

	Allocations (in SDR million)			Allocation to each group as a percentage of total allocations		
	1970-72	1979-81	2009	1970-72	1979-81	2009
High income: OECD	6,818	7,956	114,905	73.8	66.2	62.9
Japan	377	514	11,393	4.1	4.3	6.2
Excluding Japan	6,441	7,442	103,512	69.8	61.9	56.7
United States	2,294	2,606	30,416	24.8	21.7	16.7
High income: non-OECD	41	363	10,797	0.4	3.0	5.9
Gulf countries	1	286	8,835	0.0	2.4	4.8
Excluding Gulf countries	40	77	1,962	0.4	0.6	1.1
Middle income	2,144	3,359	53,347	23.2	28.0	29.2
China	0	237	6,753	0.0	2.0	3.7
Excluding China	2,144	3,122	46,594	23.2	26.0	25.5
Low income	230	338	3,604	2.5	2.8	2.0
Total allocations	9,234	12,016	182,653	100.0	100.0	100.0

Source: International Financial Statistics, the International Monetary Fund.

As the demand for reserves has ballooned, one additional complication of the reserve system is the growing scarcity of “safe assets”. The securities issued by the U.S. Treasury have so far been perceived as the safest assets, a fact that is facilitated by U.S. securities having the largest and most liquid market in the world. This has allowed the United States to pursue an entirely autonomous monetary policy. While the safe haven status of the dollar has not yet been disrupted, the ongoing global imbalances, in which the United States continues to run current account deficits, maintain the risk that confidence in the U.S. dollar may be eroded at some point in time. Furthermore, the euro crisis has generated a sense that the second global reserve asset is riskier than it had been perceived. Under these conditions, it can be argued that the demand for SDRs to *supplement* existing reserve assets has significantly increased. As it would be argued below, SDRs can also play a role in the prevention of a disorderly collapse of a reserve currency –an issue that came to the fore in the 1970s when proposals for an IMF “substitution account” were presented.

The “market” for SDRs (transactions of SDRs)

SDRs are “central bank money”, since essentially only central banks accept them as means of payment and private parties are not allowed to hold them under the current rules. In addition, SDRs can be used to pay the IMF and they can be used by a few other international organizations such as the Multilateral Development Banks and the Bank of International Settlement. The core difference of SDRs from other reserve assets is that they cannot be directly used to intervene in the foreign exchange market. They have to be converted into the currency needed to undertake those interventions.

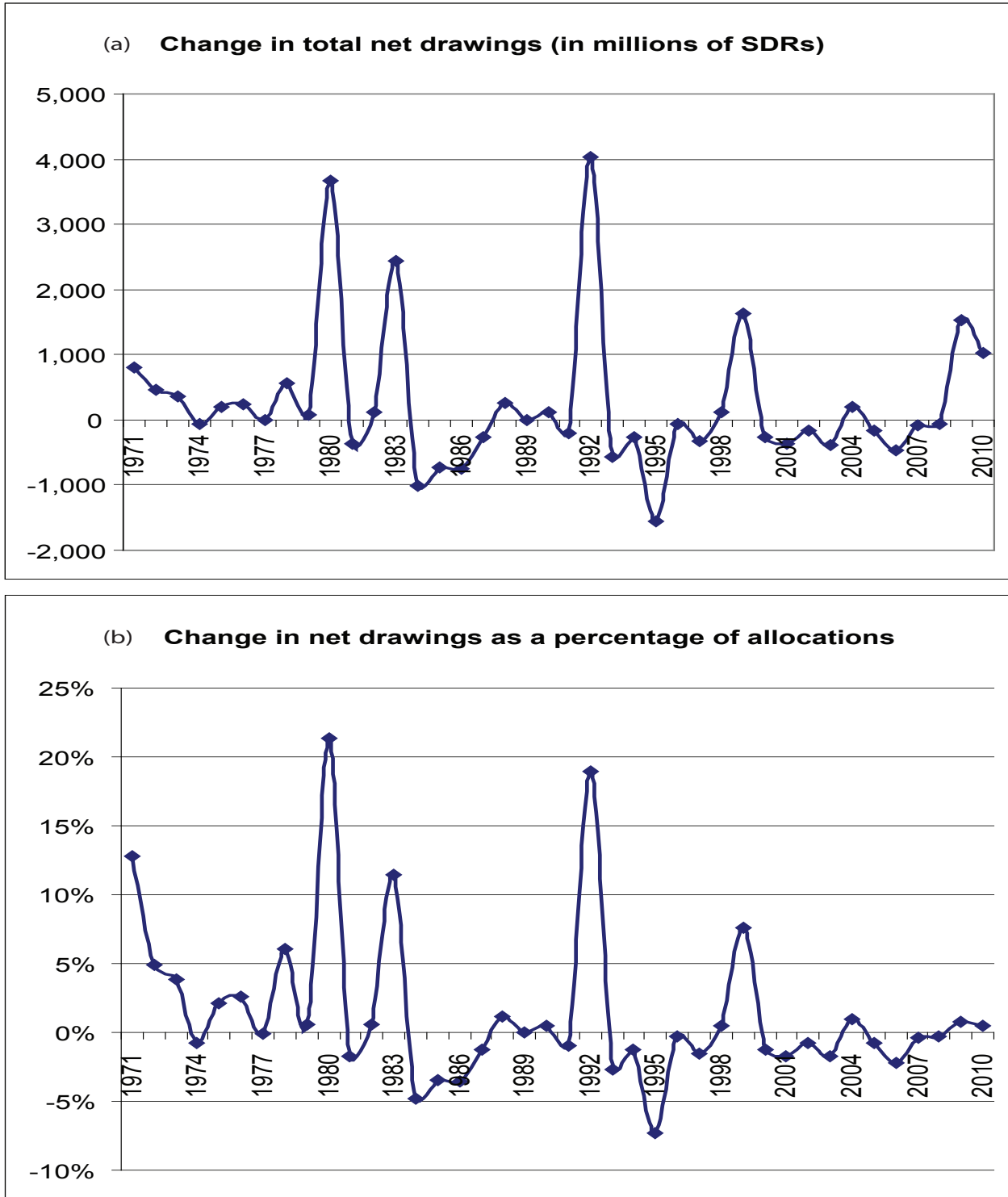
There are two ways in which SDRs are transacted: (i) transaction by agreement, and (ii) transaction by designation of the IMF. Transactions by agreement require a bilateral agreement between participant countries, after which the IMF typically mediates the transaction. If a member country has balance of payments needs which require to engage a large volume of SDR transaction that exceeds the system’s absorption capacity, the IMF would designate members with strong external positions to exchange SDRs for freely usable currencies in order to maintain the liquidity of the SDRs. The transactions by designation guarantee that the SDR market clears in the case that voluntary transactions fail to meet the demand. Under the current IMF Articles, the IMF has the legal right to designate members to provide reserve currencies and accept SDRs up to the point where their holdings above allocation (i.e., excess holdings) are equal to twice their allocation amount. For over two decades, all transactions have taken place by agreement and there has therefore been no need to use the designation mechanism.

Central banks differ in terms of the nature of their use of SDRs. Some use a passive holding strategy, which means that their net drawings rely on the transactions demand for SDRs involving two major objectives. First, central banks use SDRs to finance their balance of payments needs. This is most obvious during crisis periods, when international private financing dries out, and it results in converting SDRs into other reserve currencies through voluntary arrangements. Second, central banks use SDRs in transactions that involve the IMF, mainly to pay back the IMF; the IMF cannot use those SDRs to lend, an issue to which we return below. Third, some central banks have a more active management of their SDR holdings as part of their reserve portfolio strategy. This active strategy also involves voluntary agreements between members that wish to transact SDRs in return for currencies under the mediation of the IMF. These “market makers” involved in voluntary agreements include Austria, Belgium, Denmark, the European Central Bank, Finland, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Venezuela. All of these participants have two-way arrangements of buying and selling SDRs, except Germany, which has only a one-way arrangement to sell SDRs (IMF, 2009b).

The review of history indicates certain trends in the SDR market that are important for understanding how the market has so far functioned. The first important fact to notice is that there is a small but growing amount of SDR transactions, which tend to intensify during global crises. Figure 2 shows the *change* in net SDR drawings by IMF members, which is an approximation of the flow of SDRs.⁵ The peak points correspond to global crises of one character or another. They include: the U.S. dollar depreciation of the late 1970s, which led the United States to use part of its SDRs; the 1980-84 Latin American debt crisis; the crisis of the

5 Net drawings are estimated as the absolute value of all negative net SDR position of individual countries, and is the measure used here of the *stock* of drawings (see Figure 3). In turn, the change in net asset positions is considered as an approximation of the flow of SDRs (see Figure 2).

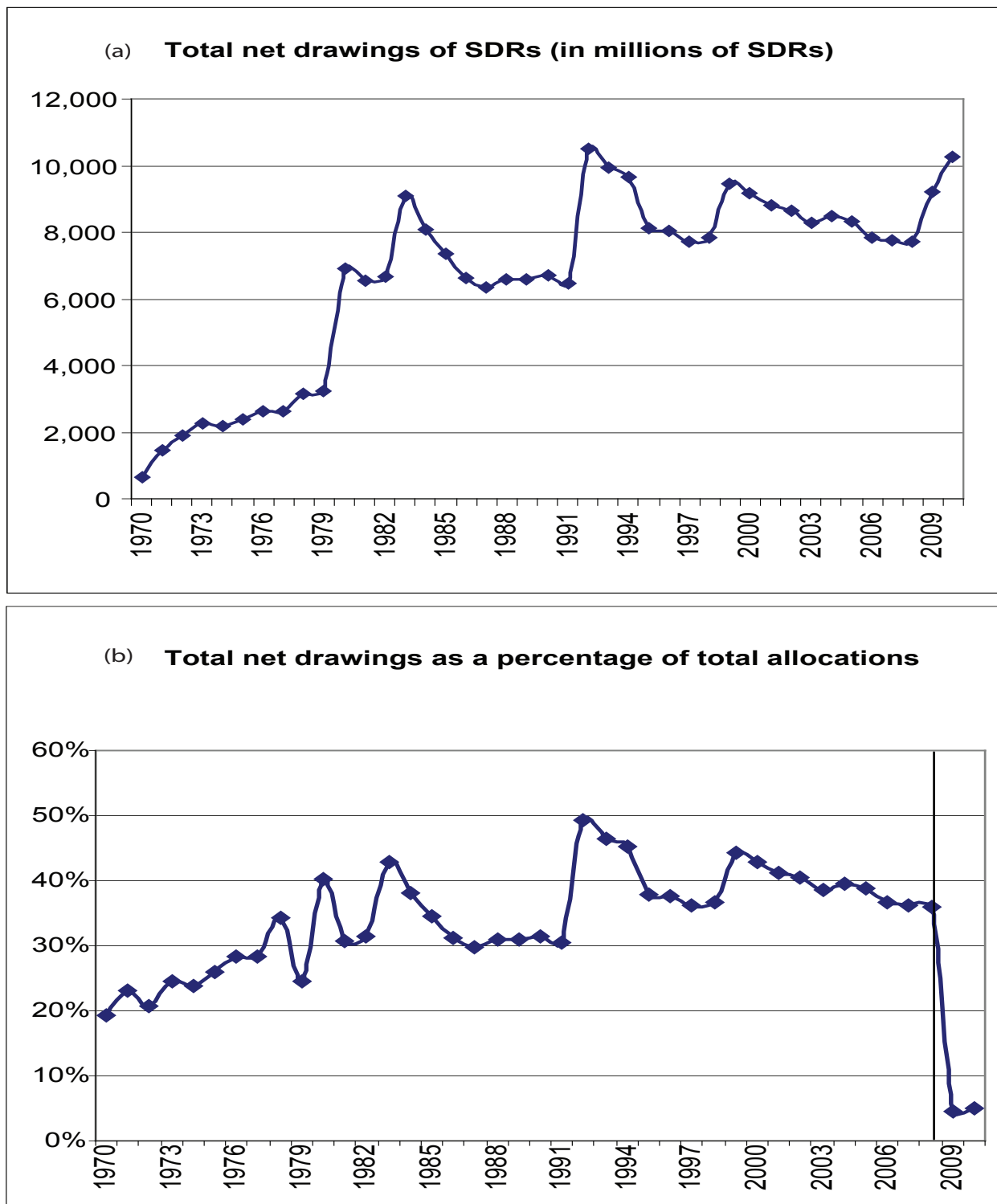
Figure 2. Change in total net drawings, 1971-2010 (in absolute amount and as a percentage of allocations)



Source: International Financial Statistics, the IMF.

Note: Figure 2b shows the change in total net drawings divided by total allocations.

Figure 3: Total net drawings of SDRs, 1970-2010 (in absolute amount and as a percentage of allocations)



Source: International Financial Statistics, the IMF.

European exchange rate mechanism in the early 1990s; the series of crises in emerging economies in the late 1990s and early 2000s; and the 2008-11 ongoing global financial crisis. In turn, the pronounced upward trend in the *stock* of net drawings shown in Figure 3 indicates that market for SDRs has grown over time, with accelerations during periods of global financial stress. Total net drawings as a percentage of total allocations have actually been large, fluctuating between 30 to 50 per cent since the early 1980s. The peak years of 1980, 1983, 1992, and 1999 coincide again with crisis periods. As a proportion of allocations, the market for SDRs of course fell substantially with the large 2009 allocations.

Table 3 shows the net SDR holdings of countries according to their levels of income at the peak years identified above, as well as 2008 and 2010. There are several interesting patterns that emerge from this disaggregation. Interestingly, high-income OECD countries excluding Japan have been large users of SDRs allocations, a fact that indicates that they are an important reserve asset even for the richest countries of the world. Such net use take place during global crises, but are still small relative to the large size of allocations they receive. Japan has been mostly in the buyer side of the market, accumulating SDRs above its allocations, except for 1992. The United States drew almost SDR 2 billion in 1980 and was a still a net seller in 1983 but has been a net buyer in subsequent peak years. In turn, high-income non-OECD countries have overall been net buyers of SDRs except for the year 1999. The Gulf countries play a large role in this regard. Excluding the Gulf countries, the rest had rather small net drawings in 1980 and 1992 in both absolute and relative terms.

In any case, developing countries tend to use their SDR holdings more frequently. According again to Table 3, middle-income countries had significantly large net drawings in all peak years. China has been the exception, drawing its SDR allocations only in 1980, and accumulating SDRs over its allocations since then. As a share of allocations to the group, the middle-income countries excluding China drew much larger shares compared to high-income countries, ranging from 18 to over 68 per cent depending on the peak year. In turn, the use of SDR drawings in allocations is highest for the low-income countries. During the recent financial crisis, they drew close to 80 per cent of their allocated SDRs, prior to the large 2009 issuance.

The role of high-income countries in the market for SDRs is again highlighted in table 4, which shows a list of the largest participants in SDR exchanges for the periods of highest SDR usage. It was predominantly the high-income countries and oil-rich middle-income countries which bought and sold large amounts of SDRs during peak periods. Among these, the United States was the largest drawer of SDRs in 1980 followed by the United Kingdom, Australia, and Canada. On the net holder side was Japan, followed by Germany, Belgium, Saudi Arabia, and Iran. Saudi Arabia remained among top five net buyers of SDRs in the subsequent peaks, but Iran was replaced by Libya. China joined the net buyers in 1999, and climbed to third largest buyer position in 2008 and 2010, following the U.S. and Japan. On the other hand, the United Kingdom stayed on the seller side of the market, and interestingly the largest seller until 2010, when Ukraine displaced it from that position. The other top five varied among Australia, France, India, Italy, and more recently Brazil and Serbia.

Three major conclusions can thus be derived from looking at the market for SDRs. First, despite their low share in allocations, developing countries tend to use their holdings frequently for their balance of payments needs. Allocations of SDRs and, particularly, asymmetric allocations –an issue to which we would return below– would thus have positive development implications. Second, SDRs are, in any case, an important reserve asset for developed countries, as reflected in their dominant role both on the buyer and seller side. Finally, however, the market is very small, as their peak net drawings have only reached slightly over SDR 10 billion, a minute proportion of global reserves.

Table 3: Net SDR holdings by country groups according to the level of income, 1980-2010

	Net Holdings (in millions of SDRs)										Net Holdings as % of allocations to each group									
	1980	1983	1992	1999	2008	2010	1980	1983	1992	1999	2008	2010	1980	1983	1992	1999	2008	2010		
High income: OECD	-3,248.5	-3,146.7	-4,265.2	-59.4	-746.8	619.6	-26.7	-21.3	-28.9	-0.4	-5.0	0.5	-26.7	-21.3	-28.9	-0.4	-5.0	0.5		
Japan	640.2	956.6	-96.2	1,043.8	1,077.0	1108.0	5.3	6.5	-0.7	7.1	7.3	0.9	5.3	6.5	-0.7	7.1	7.3	0.9		
Excluding Japan	-3,888.7	-4103.3	-4169.0	-1103.1	-1823.9	-488.4	-32.0	-27.8	-28.2	-7.5	-12.3	-0.4	-32.0	-27.8	-28.2	-7.5	-12.3	-0.4		
United States	-1,996.2	-99.5	1,284.7	2,639.4	1,164.6	1,582.4	-16.4	-0.7	8.7	17.8	7.9	1.2	-16.4	-0.7	8.7	17.8	7.9	1.2		
High income: non OECD	44.9	398.7	108.6	-13.2	512.6	496.0	17.4	98.7	0.7	-0.1	114.4	4.4	17.4	98.7	0.7	-0.1	114.4	4.4		
Gulf countries	63.0	329.5	137.7	-105.5	405.3	358.1	24.4	81.6	0.9	-0.7	90.5	3.2	24.4	81.6	0.9	-0.7	90.5	3.2		
Excluding Gulf countries	-18.1	69.1	-29.0	92.3	107.3	138.0	-7.0	17.1	-0.2	0.6	23.9	1.2	-7.0	17.1	-0.2	0.6	23.9	1.2		
Middle income	-1,866.9	-3,641.0	-3,777.1	-2,322.9	-1,891.9	-4,613.4	-42.8	-66.2	-25.6	-15.7	-33.7	-7.8	-42.8	-66.2	-25.6	-15.7	-33.7	-7.8		
China	-42.4	83.2	68.3	302.8	541.8	1,026.1	-1.0	1.5	0.5	2.0	228.8	14.7	-1.0	1.5	0.5	2.0	228.8	14.7		
Excluding China	-1,824.5	-3,724.2	-3,845.4	-2,625.7	-2,433.7	-5,639.5	-41.8	-67.7	-26.0	-17.7	-45.2	-10.9	-41.8	-67.7	-26.0	-17.7	-45.2	-10.9		
Low income	-372.3	-467.9	-508.2	-524.5	-447.0	-1,057.6	-82.6	-82.3	-3.4	-3.5	-78.7	-25.4	-82.6	-82.3	-3.4	-3.5	-78.7	-25.4		
Total net drawings	-6,917.9	-9,105.3	-10,509.9	-9,455.0	-7,699.7	-10,263.6														
Total allocations	17,230.8	21,249.5	21,278.2	21,376.7	21,433.3	203,902.5														

Note: (-) sign indicates net drawings, (+) sign indicates net holdings. The numbers are totals of each income group in millions of SDRs.

Source: International Financial Statistics, the International Monetary Fund.

Table 4: Largest net drawers and holders of SDRs at peak years, 1980-2010

Largest net drawers of SDRs (in millions of SDRs)											
1980		1983		1992		1999		2008		2010	
United States	-1,996	United Kingdom	-1,419	United Kingdom	-1,520	United Kingdom	-1,539	United Kingdom	-1,622	Ukraine	-1,304
United Kingdom	-1,168	Canada	-759	France	-962	France	-827	India	-679	United Kingdom	-967
Australia	-390	France	-658	India	-678	India	-678	Italy	-533	India	-681
Canada	-286	India	-577	Germany	-599	Italy	-580	France	-453	Serbia	-443
India	-188	Australia	-394	Italy	-529	Australia	-418	Brazil	-358	France	-394
Largest net holders of SDRs (in millions of SDRs)											
1980		1983		1992		1999		2008		2010	
Japan	640	Japan	957	United States	1,285	United States	2,639	United States	1,165	United States	1,582
Germany	452	Germany	330	Libya	220	Japan	1,044	Japan	1,077	Japan	1,108
Belgium	102	Saudi Arabia	291	Mexico	109	Switzerland	345	China	542	China	1,026
Saudi Arabia	88	Libya	99	Kuwait	104	Libya	314	Libya	526	Libya	533
Iran, I.R. of	41	Norway	89	Austria	69	China	303	Saudi Arabia	282	Singapore	248

Source: International Financial Statistics, the International Monetary Fund.

SDRs as an element of global monetary reform

There are several constraints that must be taken into account for a more active use of SDRs, many of which would require changes in the IMF Articles of Agreement, but others have to do with the nature of SDRs. All proposals also require a much larger market for SDRs, which can still follow the current scheme, that is to say, have the participation of governments only, or also allow for some participation by private agents. However, although participation by private agents could certainly increase the market for SDRs, it is not strictly essential, as long as countries (central banks) maintain the existing commitment to accept SDRs as payments from other countries (central banks). For this reason, in the proposals that we present, we assume that SDRs will continue to have their current character of “central bank money”. We will briefly return to the question of private use below.

The most important constraint to the greater use of SDRs relates to the fact that the IMF accounts are divided between the “general resources” and the SDR accounts. This severely limits the use of SDR allocations. In particular, under the current rules, and in contrast to other money creators (central banks), it is not possible to finance IMF lending using SDR allocations. The most important reform that should be introduced is, therefore, a change in the current rules that will make the SDRs the major and, indeed possibly, the unique form of financing of IMF lending, entirely replacing in the latter case both quotas and Arrangements to Borrow. The simplest way of doing so would be for the unused SDRs to be treated as deposits in (or lending to) the IMF, which would use these funds to finance its lending to member countries in need (United Nations, 2009; Ocampo, 2011). This would also be a step to fulfill Polak’s (1979) proposal to make the IMF a fully SDR-based institution. A substitution account would have to be created to allow the IMF to regulate changes in demand for national (or regional) reserve currencies by central banks, an issue that is critical in the transition to a more fully SDR-based system (see below).

An ambitious reform to address the problems of the current reserve system and the shortfall of safe assets would thus be to design an SDR-based global reserve system, or at least move to a fully SDR-funded IMF. The major advantages of IMF acting as a quasi-world central bank are threefold: (i) sharing seignorage (e.g. the seignorage would accrue to the IMF member states according to their quota distributions or alternative SDR allocation formula, instead of the reserve-issuing countries); (ii) delinking the creation of international reserve assets from any particular national or regional currency, thus helping to overcome the Triffin dilemma; and (iii) controlling liquidity in a counter-cyclical way.

Proposals for SDR allocations follow two models: one-time (e.g., IMF allocations for five-year periods when judged necessary) vs. regular allocations. In order to ensure a stable source of liquidity in world markets, in either case the SDRs should be allocated on a counter-cyclical basis. This means increasing the supply of SDRs in periods of global financial stress and reducing their supply, including by partly destroying them when financial markets become more stable. Such counter-cyclical allocations are crucial to offset any inflationary pressures that might otherwise arise.

Proposals of the amount of new SDR allocations vary based on the criteria used. The most recent IMF report uses three conventional criteria: reserve coverage of imports (which is not important today), coverage of short-term debt and broad money (IMF, 2011b). Their estimates suggest a considerable rise in the projected demand for reserve assets. While the 5-year estimates for 2009 (IMF, 2009b) range of of an additional demand of about US\$ 700–900 billion, the projection for the same period has gone up to US\$ 800–1,600 billion

starting in 2011. On an annual basis, the IMF recommends SDR allocations of US\$ 117-133 billion a year for three years beginning in 2014 to maintain a stable level of supply for global reserve assets.

Table 5 provides a list of studies that have proposed allocation of SDRs, their methods of estimation, and the amounts of issuance estimated. Regardless of differences in estimation techniques, it is seen that most recent studies propose a consistent amount of regular allocations ranging about US\$ 200-300 billion annually. Studies generally rely on an indicator of global demand for additional reserves with a precautionary motive. One of the effects of these regular allocations would be a significant diversification of reserves. For example, the IMF (2011a) estimated that an annual allocation of US\$ 200 billion would increase the share of SDRs in total reserves to about 13 per cent by the 2020s. Many analysts, notably the Stiglitz Commission, have made the case for regular allocations, and suggested that they should be in the range of US\$150-300 billion a year (United Nations, 2009, chapter 5). More recently, one of us has suggested that, given that average annual reserve accumulation in the period 2003-2008 excluding China and Japan, an allocation of something in the

Table 5: Estimates of needed SDR allocations by various authors

Study	Method of estimation	Proposed Amount to Issue
International Monetary Fund (June 2011)	Precautionary demand for reserves estimated based on (i) imports, (ii) short-term external debt, and (iii) broad money.	US\$ 117–133 billion annually for three years beginning in 2014.
Ocampo (2011)	Close to but slightly less than average reserve accumulation in 2003-08 (excluding China and Japan)	US\$ 250-300 billion annually
Stiglitz and others (2011)	Recommendation based on the previous issue of SDRs equivalent to 250 billion by the IMF in 2009.	SDR 150-250 billion annually over the next three years, which equals US\$240-400 billion at current exchange rates
International Monetary Fund (January 2011)	Half of the average precautionary demand for reserves over 2000-09 (Obstfeld, Taylor, and Shambaugh, 2008).	US\$ 200 billion annually
International Monetary Fund (2010)	Less than average reserve accumulation over 2000-9	US\$ 200 billion or more annually for some years
Kenen (2010)	Recommended “to raise the share of the SDR in total reserves”.	SDR 200 billion annually, which equals US\$320 billion at current exchange rates
Williamson (2010)	Annual average increase of the holdings of non-gold reserves over 2003-08.	SDR 457 billion, or more realistically SDR 200 billion annually, but asymmetrically distributed: about 80% of allocations to developing countries, and 20% to industrial countries, with allocations within each group determined according to IMF quotas.
Greenwald and Stiglitz (2008)	Global reserves were about \$3 trillion in 2008. Assuming the demand for reserves increases at the average rate of world trade (about 7%), this amount would satisfy the demand for reserves without a US payments deficit.	US\$ 200 billion annually
Bergsten (2009)	Seen necessary for a “more balanced composition of global reserve assets”.	Annual distributions totalling US\$1 trillion over the next five years
United Nations (2009)	Average annual reserve accumulation in 1998-2002 as lower bound, and that in 2003-07 as upper bound.	US\$150-300 billion annually

Source: Authors’ compilation.

order of US\$ 250-300 billion a year would be reasonable (Ocampo, 2011). A more recent recommendation by a group of experts is even larger: US\$ 240-400 billion (Stiglitz and others, 2011).

An implicit assumption in all these estimations is that, although the allocation of SDRs would provide alternatives to the Treasury securities issued by the United States and other reserve currency issuing countries, the rapid increase in the demand for “safe assets” by central banks implies that they meet the criterion of “supplementing” existing reserve assets.

In the transition towards an SDR-based reserve system, one of the technical difficulties that IMF faces is the creation of a “substitution account,” which would allow countries to exchange their dollar reserves and those denominated in other currencies for the SDRs and SDR-denominated assets issued by the Fund through off-market transactions. This would prevent an abrupt depreciation of the dollar or the euro if large holders of such reserve assets try to sell them in the foreign exchange market. In this sense, the substitution account would be essential to maintain the stability in exchange rate movements, and it would be also highly useful and perhaps an essential instrument in a multi-currency arrangement to prevent excessive exchange rate volatility.

By allowing countries to transform their dollar reserves or reserves denominated in other currencies into SDR-denominated assets in an off-market reserve pool, the creation of a substitution account is a necessary ingredient of a substantial reform of the international reserve system. Similar to the three-stage transition envisioned by Kenen (2010), one can think of three periods in which the functions of the substitution account change to eventually transform the SDR into a fully developed reserve asset. In the earlier period after which the substitution account is established, countries can exchange the reserve assets they have for SDRs issued for that purpose by the substitution account. The potential costs arising from maintaining the value of the reserves deposited in the account can be shared between the reserve-issuers (the United States and the Eurozone countries) and the reserve-holders (the majority being developing and emerging countries). In the subsequent period, each country that has a need to intervene in the foreign exchange market would be able to freely transfer some of its SDR claims for the currency of intervention through the substitution account, or by selling its normal SDRs allocations to the country issuing the currency that it needs to access. In the final phase, the substitution account can be consolidated with the general accounts of the IMF and any distinction between the SDRs created through substitution and SDRs created by periodic allocations would disappear. A substitution account could still be kept to help the IMF regulate changes in the demand by central banks for other reserve assets.

Some analysts have found the SDR-based reform of the reserve system inadequate because a major boost to the role of the SDRs relies on its transformation into an asset held by the private sector (Cooper, 2009; Eichengreen, 2009; Padoa-Schioppa, 2011). However, even aside from the fact that this imposes additional demands on the reform of the system, the private use of SDRs could generate problems of its own, particularly speculative changes in the demand for this global reserve asset, as well as strong opposition to a reform of the system by the United States. For this reason, it may be better to think of an SDR-based system in which national or regional currencies continue to play the major role in private transactions.

Indeed, the absence of private participation in the market for SDRs does not prevent their use as a central bank asset and payments instrument. As long as central banks agree to accept SDRs from one another in exchange for convertible currencies, the SDR performs the function of medium of exchange in inter-central

bank transactions. It could be argued that the inability of SDRs to be used for central banks to intervene in the foreign exchange market raises the question of whether SDRs are attractive assets for central banks to hold (Williamson 2009). However, this inconvenience can be overcome again as long as each IMF member maintains its obligation to freely accept SDRs in exchange for their currencies. One of the functions of a permanent substitution account could be for it to provide national or regional currencies for intervention by central banks.

The IMF had a framework to issue bonds that was approved in the early 1980s but was never used before 2009. When the IMF began facing cash flow problems in financing its administrative costs in 2008, the proposal to issue bonds was revived. In 2009, the IMF began issuing SDR-denominated bonds to attract funding from emerging economies (IMF, 2011). However, these bonds were designed to be traded only between IMF and the central banks of its members. They pay an interest rate linked to the SDR interest rate and have a short maturity, ranging from 12 to 18 months.

The SDR-denominated bonds bring several advantages for emerging and developing countries. First, they reduce the dependence of central banks on U.S. government securities, and thus allow countries to diversify the currency composition of their reserve holdings as the SDR itself is composed of four different currencies. As long as the interest rates earned by government securities of the United Kingdom, Japan, and the Eurozone countries are higher than the U.S. Treasury bills (as is currently the case), the SDR-denominated bonds are also an attractive investment. The SDR-denominated bonds also allow developing countries to limit their financial support for the IMF to a particular period, instead of an open-ended commitment through the New Arrangements to Borrow (NAB), thus also providing them leverage to push further quota reforms (Prasad, 2009).

A first and moderate step for the IMF to enhance private agents' participation in the SDR market is to expand the issuance of SDR-denominated bonds and to allow these bonds to be held by the private sector, with the IMF itself and/or major central banks acting as "market makers" that provide liquidity to the instrument. In the long term, once sufficient market depth and liquidity are established, the SDR-denominated securities could replace other global assets in pricing risk globally, and thereby become "an embryo of global currency" (IMF, 2011).

The development dimensions of SDRs

Development dimensions of SDRs as a monetary instrument

There are three development dimensions of SDR allocations as a purely monetary instrument. First and foremost, since developing countries tend to use their SDRs more frequently, a larger SDR allocation would benefit them in particular. It would basically give them an unconditional overdraft facility over which they can draw when external financing dries out.

Second, keeping SDRs as a strict monetary asset, there is the possibility of asymmetric allocation rules. This idea is similar to the proposals presented by developing countries in the debates on global monetary reform of the early 1970s (Committee of Twenty, 1974), but the reasons are different today. Beyond the fact that IMF quotas do not accurately reflect the share of developing countries in the world economy today, the

evolution of reserve accumulation indicates that, due to the procyclical shocks they experience from global financial markets, emerging and developing countries have a “revealed” preference for a much higher level of reserves. To overcome these problems, there is both a need to reform quota allocations at the IMF regularly to reflect the changing shares in the world economy, but possibly also to include as a criterion in SDR allocations the divergent demand for reserves among countries of different levels of development.

One alternative, which has been proposed by Williamson (2010) would be to issue to emerging and developing countries 80 per cent of SDR allocations (a proportion close to their demand for global reserves) and the remaining 20 per cent to industrial countries, with country allocations within each group following IMF quota distributions. Another alternative, as indicated, would be to explicitly introduce the demand for reserves into the criteria for SDR allocations. One simple way of doing so would be for quotas from middle and low-income countries to be weighted by a factor that represents the several times they tend to demand reserves as a proportion of GDP relative to high-income economies. For example, their quotas could be weighted by a factor of 5, which is in fact significantly below the recent historical ratio of the demand for reserves as a proportion of GDP in middle-income in relation to what is typical of high income countries;⁶ quotas for low-income countries could, of course, be weighted by a larger factor for strictly redistributive purposes. One benefit of any of these mechanisms of asymmetric SDR allocations is that they would reduce the transfer of resources from developing to industrial countries.

Third, Ocampo (2011) has proposed a “development link” in SDR allocations that avoids the fiscal implications of SDR donations. The alternative draws from a proposal by the Group of Experts convened by UNCTAD in the 1960s (UNCTAD, 1965) as well as one alternative version of that proposal presented by developing countries during the 1972-74 discussion on international monetary reform (Committee of Twenty, 1974; Williamson, 1977, chapters 5-6; Toye and Toye, 2004, chapter 10). It would allow the IMF to use the SDRs that are not utilized by member states, and which, as indicated above, would be treated as deposits of (lending by) countries in the IMF, to buy bonds from multilateral development banks, which would then finance development or global public objectives. Alternatively, countries with excess holdings of SDRs could invest in bonds of multilateral development banks. This proposal was also endorsed by the Stiglitz Commission (United Nations, 2009). Given that such bonds would be at market rates, they would be used for non-concessional lending by multilateral banks. However, if this source of financing could carry some grant element (that could be possibly financed by revenues from a currency transactions tax, but could also rely on traditional ODA), it would also help finance concessional lending by multilateral development banks. This can be done on an individual basis or collectively if there is a reform of the SDR mechanism.

Note that this “development link” does not require asymmetric issuance but would make a more positive use of allocations to developed countries and other countries with excess reserves, such as China and the Gulf countries. If adopted, the resources available for development finance could be proportional to unused SDRs allocated to high-income countries. If the IMF goes with US\$ 240–400 billion annual allocations, the funds going to industrial countries would be over US\$ 144–240 billion and a conservative estimate of US\$ 100-200 billion could be used to finance development and/or global public goods.

6 Indeed, for the period 2000-2010, reserves as a proportion of GDP were on average 15.9% in middle-income countries, excluding China, vs. 1.7% in high-income countries, excluding Japan. So, a simple ratio between the two would be 9.2 times.

Use of SDRs as an innovative source of development finance

The idea of using SDRs issued to industrial countries for development purposes and the provision of global public goods has been proposed by Soros (2002) and Stiglitz (2006), among others. In the Copenhagen climate change conference of 2009, George Soros also suggested using SDRs to create a “fast-start green fund”, an idea that was backed in January 2010 by the then IMF Managing Director, Dominique Strauss-Kahn and has been supported by civil society organizations (ActionAid, 2010). Again, the idea of using part of the SDRs for international aid goes back to the discussions of the 1960s and early 1970s.

Donating SDRs for development or climate change purposes is possible but costly for the donating country, since it would still have to pay interest on the donated SDRs to the IMF. An alternative would be to pay the interest from IMF accounts through a reassessment of gold reserves. Indeed, Soros (2009) called for this option if the industrial countries agreed to donate their unutilized SDRs from the 2009 allocation to a Global Green Fund.

The difficulty of all these proposals for funding global public goods or development is that they mix monetary and fiscal operations. Since SDRs are strictly a monetary asset that can only be used by central banks and international financial institutions under the current rules, their allocation for development purposes or global public goods means that they have to be donated or transferred by a central bank or an international financial institution. This essentially entails using them as a *fiscal* instrument, which goes beyond their function as a strictly monetary instrument. The fiscal use of SDRs can create problems in practice because each time the donation would have to be approved by national parliaments in each member country. Moreover, it might even be legally complex (or even illegal) to make a fiscal use of a central bank asset (Ocampo, 2011). Of course, a reform of the IMF Articles of Agreement could open the possibility for the use of SDRs for this purpose.

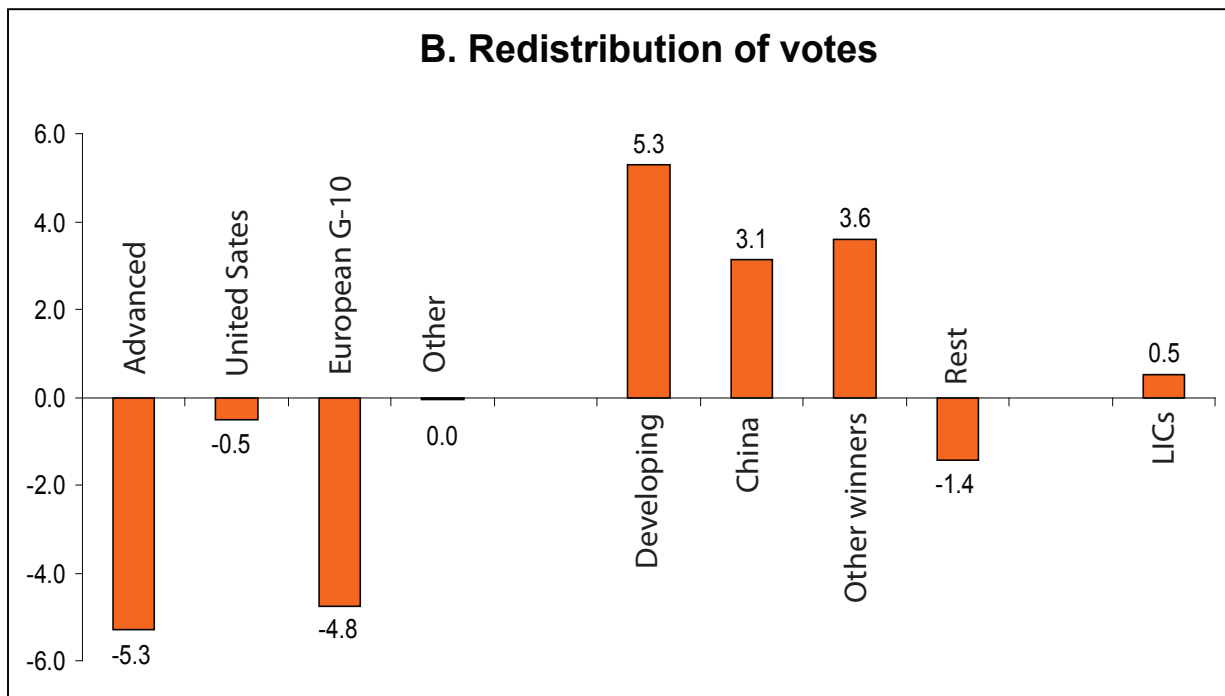
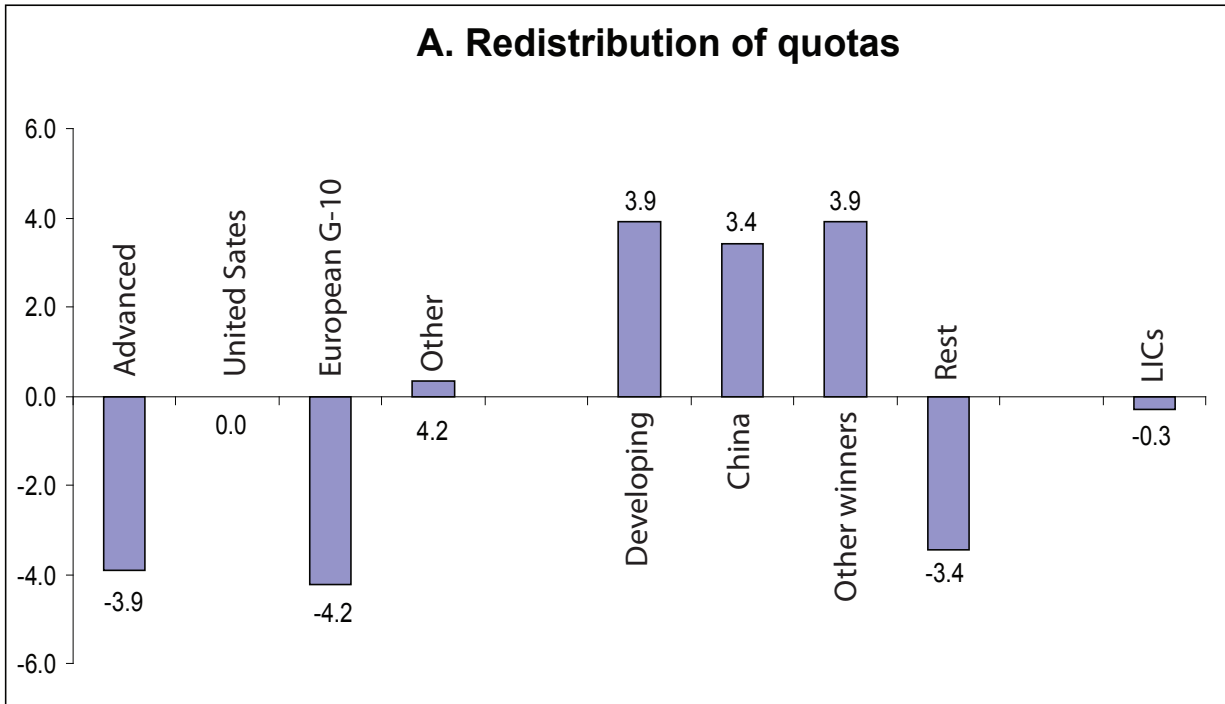
An alternative proposal is the creation of “trust funds”, which can be the capital, for example, of a “Green Fund” (but it can be also a development fund with other objectives, such as infrastructure). Industrial as well as other countries would place their unused SDRs into the trust funds as “equity”, possibly oversubscribing the required equity to guarantee the liquidity that is essential for a reserve asset. One of the advantages of investing the unused SDRs over donating them is that the transferring countries would not bear the cost of making interest payments to the IMF. The interest required could easily be obtained from the return on the equity of the Green Trust Fund (Bredenkamp and Pattillo, 2010). It would, of course, make sense for this Fund to prioritize its lending –whether concessional or not– to developing countries.

Reform of governance structures⁷

Substantive reforms of the international monetary system must be matched by the design of appropriate governance structures. As already noted, the call to increase the “voice and representation” in international economic decision-making goes back to the Monterrey Consensus, to which we must add the fact that developing countries’ shares in IMF quotas do not reflect their shares in the world economy today. In 2006 and 2008 modest agreements were adopted on reforming quotas and votes in the IMF Board, which entailed a redistribution of the quotas and a tripling of basic votes. In October 2010, just before the heads of state meeting in Seoul, the ministers of the G-20 agreed on, and the IMF Board approved in November 2010 a more ambitious reform. It

⁷ This section draws extensively from Ocampo (2011).

Figure 4: Redistribution of quotas and votes in the IMF by country groups (2010 governance and quota reform versus pre-2006 situation)



Notes : European G-10: Belgium, France, Germany, Italy, Netherlands, Sweden, Switzerland, Developing countries, Other winners: Brazil, India, Mexico, Turkey and Republic of Korea, Low-Income Countries (LIC).

included doubling the quotas, revising the allocation of quotas and voting power of developing countries while protecting those of the poorest countries, reducing by two the European representatives in the IMF Board and electing all of its members.

Relative to the pre-2006 situation (i.e., prior to the Singapore 2006 annual meeting), the accumulated increase in the quotas (3.9 percentage points) and voting power (5.3 points) of developing and transition economies was less than expected by these countries, and the large gains by some of them (China, Republic of Korea, Brazil, India, Mexico, and Turkey, in that order), which adds up to 7.3 and 6.7 percentage points in terms of quota and voting power, respectively, came partly at the expense of other developing countries (figure 4). Furthermore, although the quota and voting power of European countries was reduced, its over-representation continued to be a problem, as is the under-representation of some emerging economies relative to their actual share in the world economy. Given relative trends in the growth of different countries, this problem is likely to worsen over time. There is, therefore, a need for agreement on a transparent formula that would allow quotas to be regularly revised to reflect changes in the shares of different countries in the world economy

To these we must add other important proposals on governance made on various occasions, including by the 2009 Commission for IMF Governance Reform headed by Trevor Manuel (IMF, 2009a): a reduction in the threshold of votes needed to approve important IMF reforms from the current 85 per cent to, for example, 70-75 per cent; the creation of a Council of Ministers with effective powers to adopt the most important political decisions, thus replacing the International Monetary and Financial Committee; and a clear redefinition of the relations among this Council, the Board, and the Administration. The G-20 also agreed that the senior management of the Bretton Woods Institutions (BWIs) should be chosen on the basis of transparent and open processes, based on the merit of the candidates and not on their nationality. However, these principles were only very partially followed during the election of the IMF Managing Director in 2011 and the President of the World Bank in 2012, which therefore saw the continuity of the unwritten rule that has been in place for close to seven decades according to which the IMF is headed by a European and the World Bank by an American. It would also be useful for the staff of these institutions to be more diverse, not just in terms of nationality but also in terms of gender, education, professional experience, and schools of thought.

The broader issues on global economic governance relate, however, to what one of us has called “elite multilateralism” –i.e., to the G-20 (Ocampo, 2011). The creation of this G at a leaders’ level was, of course, a step forward compared to the G-7, in terms of representation of developing countries. But this solution also created problems of its own because of the ad hoc nature of the co-operation mechanism adopted, including the way in which the membership was defined, which implies the exclusion of some large countries (Nigeria is the most prominent case in terms of population) and (once again) the over-representation of Western Europe. Beyond that, however, this has created a distorted system of governance, by which a body that represents the full membership (the IMF Board) has become a mechanism to rubber stamp in some occasions the decisions made by a limited number of them (those that are G-20 members). It also represents a distortion of IMF governance, as most members of the IMF Board represent constituencies and not individual countries.

This preference for “Gs” over representative international institutions has deep historical roots in the case of major industrial countries, and reflects a revealed predilection of these countries for mechanisms over which they can exercise greater influence, but such bias may now be affecting other G-20 members. The basic problem is the challenge of overcoming 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 national democracies have shown that representative institutions can be effective. It is, of course, true that some decision-making processes may require small bodies, but this is not inconsistent with the principle of representation, as those small bodies can be embedded in larger representative institutions that elect their members according to agreed criteria.

Therefore, although Gs can play an important role in placing new issues on the agenda and facilitating consensus among major powers, and in general in steering changes that generate a consensus among the most influential countries, no structure of governance can generate legitimacy as long as decision-making processes are not inclusive. For this reason, the G-20 should be seen as a transition to a more representative, and thereby legitimate, mechanism of international economic co-operation, such as the Global Economic Co-ordination Council proposed by the Stiglitz Commission (United Nations 2009b, ch. 4; Ocampo and Stiglitz, 2011).

Finally, the global monetary architecture should rely more broadly on regional institutions. Indeed, in a heterogeneous international community, the creation of *networks* of global and regional institutions can provide a better system of governance than arrangements based on single global organizations. This is based on old federalist principles: regional and sub-regional institutions give stronger voice and a sense of ownership to smaller countries. These institutions are, therefore, more likely to respond to their demands. This has already been recognized in some areas, such as the system of multilateral development banks, where the World Bank is complemented by regional development banks and, in some parts of the world, by sub-regional (in particular, in Latin America and the Caribbean, as well as in Europe) and inter-regional banks (the Islamic Development Bank). Although the density of institutional arrangements is quite diverse around the world, their historical record is broadly positive.⁸

The creation of such an institutional network is particularly urgent in the monetary arena, where the IMF should make more active use of regional institutions, such as the Chiang Mai Initiative and the Latin American Reserve Fund, and support their creation in other parts of the developing world. The creation of a European Financial Stability Facility and the more permanent European Stability Mechanism are also major steps in that direction. Indeed, the IMF of the future should be designed as the apex of a network of regional reserve funds (or equivalent regional arrangements) rather than a mere global fund (Ocampo, 2006). Aside from its benefits in terms of participation by all countries, this design would be much better to promote macroeconomic policy dialogue and crisis prevention and management at the world level.

In the design of such a structure, 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. In contrast, as access to Chiang Mai swap credit lines beyond a certain limit (20 per cent of the agreed lines, now increased to 40 per cent) requires an IMF program, countries that may have used the initiative during the crisis (Indonesia and the Republic of Korea) chose not to do so as they were unwilling to agree on any such program. In turn, the use of the Latin American Reserve Fund has traditionally been delinked from any IMF program. The links between the IMF and regional arrangements must be subject, therefore, to flexible designs and possibly to a variable geometry.

⁸ See, in this regard, the contributions to Ocampo (2006), and the evaluation of the contribution of different regional mechanism to international monetary stability by McKay, Volz and Wölfinger (2011).

Conclusions

This paper argues that it is possible to make SDRs a more relevant instrument of international monetary cooperation by transforming it openly into a pure reserve *asset* (rather than an unconditional overdraft facility) and moving into a fully SDR-funded IMF. Under the recommended system, SDRs would be issued in a counter-cyclical way and would be treated as deposits of countries in (or lending to) the IMF, which this institution can in turn lend to countries. This is true even if SDRs are kept as a means of payment among central banks. Such a system would go a long way to correct some of the three basic deficiencies of the current global monetary system. This reform would benefit developing countries in particular owing to the fact that part of the seignorage associated with global monetary creation would be allocated to all countries, and that developing countries tend to use their SDR allocations more frequently.

Different estimates of SDR allocations indicate that a range of US\$ 200–300 billion a year is a safe, even a conservative estimate. If issued in a counter-cyclical way, the amount of issuance during crises can be substantially higher. The most recent Fund proposal is to allocate US\$ 117–133 billion a year for three years beginning in 2014.

Several development dimensions could be added to such reform, including: (i) asymmetric allocations of SDRs, which favor developing countries or take into account the demand for reserves in the allocation formula; (ii) allowing the IMF or member countries to use unutilized SDR allocations to buy bonds from MDBs, and (iii) converting the unutilized SDRs of industrial and other countries into equity of global funds for leveraging resources to finance development, climate change mitigation and adaptation or to provide other global public goods.

Complementary reforms include a substitution account which would allow an orderly and smooth transition from major reserve currencies to SDRs, and the issuance of SDR-denominated bonds as an alternative to other major short-term assets.

A major policy implication of this paper is that, if SDRs are going to become a major instrument of international cooperation, the market for SDRs has to increase substantially. The analysis of the SDR market has shown that net drawings of SDRs were only slightly over SDR 10 billion at their peak levels, which is a tiny proportion of global reserves. Also, although developing countries tend to use their holdings more frequently, the developed countries play a dominant role both on the buyer and seller side of the SDR market, indicating that SDRs are also an important reserve asset for developed countries, and that their increased supply would benefit these countries as well, especially during periods of financial turmoil.

All these reforms must be accompanied by major reforms of global governance. These include, first of all, the use of formal institutions that include all countries rather than only the largest of them. It also includes regular mechanisms to update IMF quotas, a reduction in the threshold of votes needed to approve IMF reforms, a redefinition of the relations among this Council, the Board, and the Administration, and strong rules that guarantee that senior management of the BWIs are chosen on the basis of transparent, open and merit-based processes. Finally, in terms of contributions to global stability as well as voice of smaller countries, the system should rely on a network of the IMF and regional monetary arrangements.

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