LOW INCOME COUNTRIES VULNERABILITIES AND THE NEED FOR AN SDR-BASED INTERNATIONAL MONETARY SYSTEM

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Abstract

The global financial crisis, the weakening role of the dollar and the increasing importance of China in the global arena are calling for a reform of the international monetary system (IMS) in the direction of a greater multilateralism. We agree with the necessity to reform the IMS and we advance a proposal based on a greater role of the Special Drawing Rights (SDRs), focusing on the potential benefits that a new monetary order could brings to Low-Income Countries (LICs). Given their extreme vulnerability to external shocks and their dependence on the exchange rate vis-vis the US dollar, poor countries would benefit from the creation of a more stable multi-currency monetary system. The new SDRs will created exogenously - with a disproportionate allocation to LICs -, but also endogenously, through the substitution account and the overdraft facility. Finally, we discuss the superiority of this proposal in the context of the current foreign assistance framework.

JEL classification: O11; O19; F55; F35; F33;

Keyword: International Monetary System; Low-Income Countries, SDR; Key Currency; Reserves

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Ministers asked the IMF to continue to explore options to improve the international monetary system, including through a greater role for SDRs and expansion of the SDR basket to include emerging markets currencies. They called for regular allocations of SDRs to complement the reserves of members. Ministers emphasized that reserves have played an important role in cushioning the impact of the crisis.

G24 Communiquè, April 14, 2011

1. INTRODUCTION

The policy discussion about the reform of the international monetary system (IMS) mainly focuses around the China - US dispute and sees the exorbitant privilege of the United States or, alternatively, the excessive Chinese saving rates as the main sources of rising global imbalances. In other words, macroeconomic imbalances are often confined to a huge US current account surplus financed by China and few other oil-producer countries. Even if the sino-american relationship clearly accounts for the largest share of global imbalances and therefore justifies on its own the growing debate about the reform of the IMS, the current international monetary order imposes costs on several developing countries, which have accelerated the accumulation of reserves for precautionary reasons. Thus, also Low-Income Countries (LICs) could take advantage by a reform of the IMS towards a multipolarity and a diversification of reserve assets from the US dollar. In particular, as the initial quotation makes clear, developing countries are asking for an increasing role of the Special Drawing Rights (SDR), revamping the original proposal advanced in 1970s to allocate the SDR disproportionally to poor countries as way to provide them unconditional liquidity and development finance (Grubel 1972; Maynard 1973; Helleiner 1974; Maynard and Bird 1975; Bird 1979)[3]. Those proposals about a wealth-redistributive allocation of SDRs were almost abandoned for years, before regaining momentum in recent times, first in response to the emerging

[3] The 1968 Rio de Janeiro agreements introduced the SDRs in the international monetary system, but they also brought about the issue of how to distribute them across member countries. The choice was basically between solutions which redistribute or not wealth between nations. The latter are based on the long-run demand for reserve of member countries and imply a neutral inter-country distribution of resource allocation. The former, instead, were politically unfeasible for the fear of global inflation and of the loss of control on international aid by national legislators, creating a missing opportunity to help poor countries.

markets crisis of the late 1990s and to the needs to finance the achievement of the Millennium Development Goals (MDG), then following the widening of global imbalances in the new millennium[4]. The current international situation and the awareness of the global extent of poverty in LICs, together with promising reforms in the IMF agenda towards developing countries, make the SDR aid link extremely actual to "*help reduce international poverty and meet the financing needs of poor countries*" (Bird 2010, p. 73)[5]. Nevertheless, as the break up of the Bretton Woods system and the establishment of the Committee of Twenty (C-20) on the Reform of the International Monetary System in the early 1970s was a missed opportunity to secure a link between the creation of SDRs and foreign assistance, even the current global financial crisis might not fully result in a comprehensive reform of the IMS, also in the interest of developing countries. The following words, written more than thirty years ago by Maynard and Bird (1975, p. 611), referring to the discussion of monetary issues in the 1960s and 1970s look extremely actual: "*relatively few references to the special interests on LDCs can be found in the academic literature of the period. It was thought self evident that the economic development and the trading prospects of the LDCs depended on the efficient functioning of the international monetary system* [..., which] *was thought to be determined by the policies and practices of major industrial countries* [...] *Also, it was felt that the provision of conditional liquidity and the handling of balance-of-payments adjustment problems in the case of the LDCs could be safely left to the IMF. Hence much of the literature dealing with LDCs and the international monetary system refers to relations, often uneasy, between the former and the IMF*".

The renewed interest in the SDR and the lack of voice by poor countries has been reflected in agreements reached at the G-20 Summit held in London in April 2009, when a new allocation of

[4] In 2002, George Soros and the United Nations with the Zedillo report advocated the use of SDRs for development assistance purposes, especially because of the high cost of holding reserves faced by developing nations, a point stressed also by Stiglitz (2003). Similarly, Clark and Polak (2004) make a strong argument in favour of the efficiency gains of the SDRs as a costless reserve asset An extensive review of these and other proposals is in Aryeetey (2004).

[5] Similarly, Akyuz (2010) argues that a one-time allocation of SDRs to LICs according to their needs is the best way to help them meeting their crisis-induced financing gap. Stiglitz and Greenwald (2010), instead, propose to tax SDRs allocations to countries with a current account surplus, to partially stabilize global imbalances, and to use the associated revenues to finance developing countries' needs.

SDR 182.7 billion has been approved[6]. However, as in the past the allocation has been based on country quotas, without following any wealth-redistributive policy, as suggested by the SDR aid link. As a result, LICs received SDR 7.7 billion and their share in total SDR assets at the end of 2009 remained stable at 4.2 percent.

On the whole, the use of SDR has been limited, suggesting that the overall scheme as it is does not fully serve the needs of advanced and developing countries alike. Between September 2009 and July 2011, just 24 of the 186 IMF member countries have mobilized more than 50 percent of their SDR holdings. Similar to what happened after the first SDR allocations, when developing countries made greater proportionate use of the facility (Helleiner 1974), 37 of the 44 LICs reduced their holdings of SDR, while low-income countries as a group reduced their SDR holdings by almost one billion (-11% of their allocation), suggesting that they have used the SDR to partially finance their balance of payment problems[7].

A greater role played by the SDRs in the IMS might be helpful to LICs for two order of reasons:

1. a direct benefit is the provision of development finance, which might help both to lighten the external constraint and to bridge the gap towards the MDGs and the investment in infrastructure,
2. an indirect benefit through the stabilization of the IMS, which can result in a lower demand of precautionary reserves by poor countries and in reduced vulnerabilities to external shocks.

[6] Between August and September 2009, following the G-20 pledge to support growth in emerging and developing economies, a new SDR allocation has been implemented to provide additional liquidity to the global monetary system: a General and a one-time Special SDR allocations for, respectively, SDR 161.2 and 21.5 billion increased the cumulative total of SDR to 204 billion.

[7] In particular, Central African Republic, Chad, Kenya, Malawi, Mauritania, and Myanmar spent SDRs for more than 90% of their end-2009 allocation to reach different targets in terms of external and fiscal balance. The government of Malawi, for instance, was forced by the worsening foreign exchange shortage to resort to extraordinary external financing, including the selling of the 2009 special allocation of SDRs in November 2009, to address the balance of payments pressure (IMF 2010a). In Mauritania, it is was the deterioration of the fiscal position, driven by declining revenues in 2008 and 2009, which forced authorities to use the SDR allocation to help close the fiscal financing gap (IMF 2010b). Differently, Central African Republic authorities have decided to use part of the SDR allocation (lent through BEAC) to pay off part of the more expensive domestic debt, improving debt sustainability and possibly freeing resources, in terms of interest savings, to be used for additional social spending. In particular, CAR partially replaced an expensive commercial bank credit, whose interest rates were about 15 percent (IMF 2010c).

In this paper, we are going to explore both issues. As we will argue, the strong relationship between the IMS fragility and the LICs vulnerabilities makes the issue of the IMS stabilization the key point of our analysis. The creation of a new SDR scheme should be the priority of a global policy aimed at gradually reforming the IMS and, as a by-product, this could help mitigating the LICs vulnerabilities.

As a second step, however, it becomes critical to design an efficient allocation and distributional mechanisms. On the one hand, there should be a wealth-redistribution effect towards developing countries, in the spirit of the original aid link proposals. On the other hand, the standard drawbacks of traditional aid assistance must be avoided: LICs could have access to an unconditional overdraft facilities, below a predetermined quota, obtained once the new SDR deposits are exhausted from exogenous shocks, avoiding the political element and the volatility in foreign aid.

The paper will proceed as follows. The next Section focuses on economic vulnerability and external financing in LICs (sub-section 2.1) and points out that, under the current IMS, LICs are accumulating costly international reserves (sub-section 2.2); as a result, developing countries, especially the most vulnerable ones, demand a diversification in the currency composition of their reserve assets (sub-section 2.3). The second part of the paper moves from the recurrent need to reform the IMS (Section 3), considering the inadequacy of the original SDR scheme (sub-section 3.1) and the repeated failures to improve it (sub-section 3.2). In Section 4 we advance a proposal for a greater role of SDR in the IMS. First, we suggest that SDR must be created through an enlarged set of channels: not only the traditional exogenous one, but also two endogenous channels: the overdraft and the substitution account facilities, that are demand driven (sub-section 4.1). Second, we analyze how the new-SDR as supernational money improves its distribution and uses (sub-section 4.2). Third, we show the potentiality of the new scheme for the governance of the IMS aimed to stabilization, innovation, and better redistribution of monetary resources (sub-section 4.3). The new SDR scheme, aimed at providing external resources to deficit countries, with an explicit

focus on LICs, will be evaluated in the context of the aid effectiveness debate (Section 5). Finally, concluding remarks are summarized in Section 6.

2. ECONOMIC VULNERABILITY, INTERNATIONAL RESERVE HOARDING, AND DIVERSIFICATION

2.1 EXTERNAL FINANCING AND ECONOMIC VULNERABILITY IN LICS

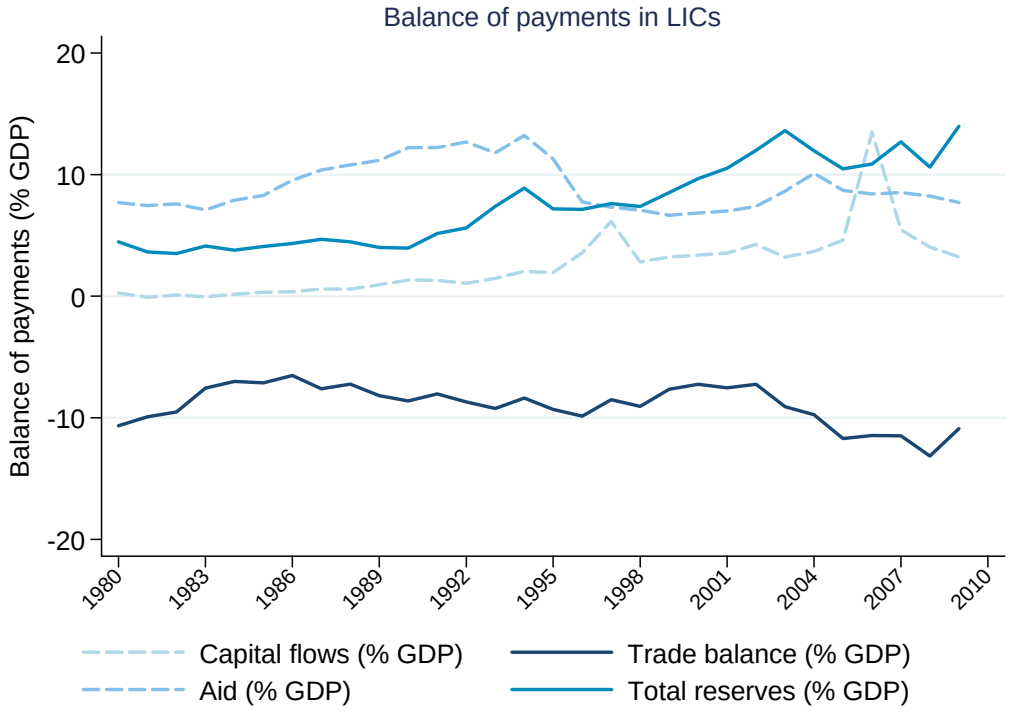
Low-income countries are generally net importers and are characterised, on aggregate, by a structural trade deficit, which worsened in the last decade and reached more than 10 percent of GDP. The trade deficit has been traditionally financed through official development assistance and concessional loans. Debt flows, in particular, were responsible a build-up of an unsustainable external debt, which has been reduced thanks to bilateral and multilateral debt relief initiatives, especially from the mid 1990s to 2006 (Arnone and Presbitero 2010). Starting from the mid-1990s, debt relief, remittance flows and private capital flows started to partially offset the importance of foreign aid as a source of external financing (Figure 1).

Nevertheless, in the last twenty years, LICs increased their level of international reserves. Even if emerging markets account for the largest share in the world reserves (almost USD 5 trillions), also many LICs have now accumulated more reserves than suggested by the standard rules of thumb: in 2009 the median coverage ratio in LICs was equal to 4.7 months of imports, well above the threshold of three months (IMF 2011a). Hence, also as a way to insurance against balance of payments risks, a share of external financing has been used by LICs to accumulate reserves, at the cost of avoiding alternative uses, such as productive investment, external debt reduction, and a lower reliance on costly internal financing.

Since independence, poor countries have been extremely vulnerable to exogenous shocks - sharp swings in commodity prices or export volumes, volatile external financing flows, and natural disasters - as the recent 3F (food, fuel and financial) crisis have once again make clear (Deaton 1999; Easterly *et al*. 2003; Raddatz 2006; Allen and Giovannetti 2011; Berg et al. 2011). Financial

globalization has further increased macroeconomic and capital flows volatility, especially in poor countries with underdeveloped financial markets, increasing output volatility and causing welfare losses (Prasad et al. 2007; Dell'Ariccia et al. 2009, IMF 2011c). The demand for liquidity by developing countries is well testified by the reliance on IMF lending facilities during the current global crisis, notwithstanding the associated conditionalities, a possible *stigma* effect, and the poor records in terms of output growth (Dreher 2006; Bird 2007; Presbitero and Zazzaro 2011).

Figure 1: Balance of payments of Low-income countries, 1980-2010



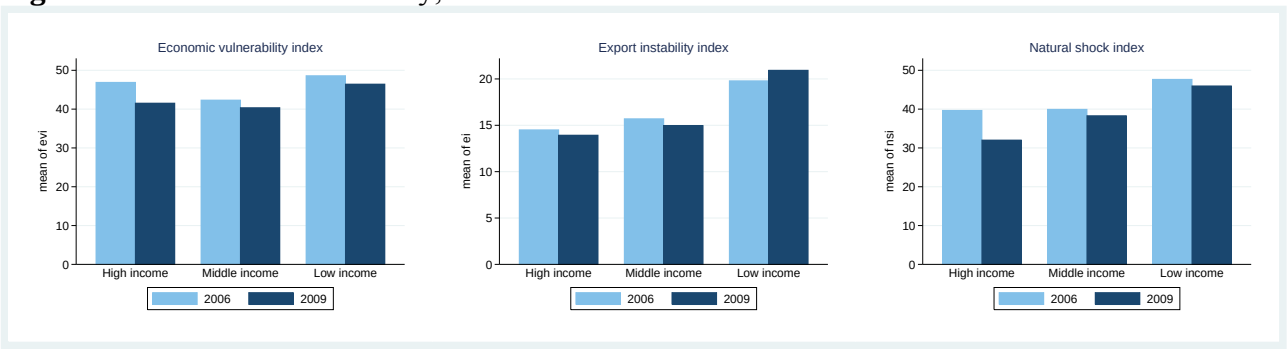
Notes: authors' elaboration on World Bank data. Data are GDP-weighed averages across countries. Capital flows include the financial account and private capital flows

Notwithstanding a decline between 2006 and 2009, the exposition to the risks posed by exogenous shocks, as measured by the Economic Vulnerability Index (EVI) calculated by the United Nations[8], is higher in low-income countries than in middle- and non-OECD high income countries (Figure 2).

[8] The EVI is a composite index made by seven indicators: 1) population size, 2) remoteness, 3) exports concentration, 4) the share of agriculture, forestry and fisheries in gross domestic product, 5) homelessness owing to natural disasters, 6) instability of agricultural production, and 7) instability of exports of goods and services. For more details, see Guillaumont (2011).

In particular, the main sources of vulnerability are the instability of exports revenues, which is increasing and 25 percent higher in LICs than in other countries, and the exposition to natural shocks. Furthermore, at least with respect to Sub-Saharan Africa, the fragility of many of those countries depends on the concentration of export revenues in no more than three commodities and on their status of net importers of natural resources, which make African countries highly exposed to food and fuel shocks (Allen and Giovannetti 2011).

Figure 2: Economic vulnerability, 2006 and 2009



Notes: authors' elaboration on UNDESA data.

The vulnerability of a country is a result of three components: 1) the size and frequency of exogenous shock, 2) the exposure to shocks, and 3) the capacity to react to shocks (Guillamount 2011). In this framework, monetary and exchange rate conditions play a major role for several reasons. First, the trade balance is strongly dependent on the exchange rate vis-a-vis the US dollar, given the status of net importers of commodities and the very concentrated export base of several LICs. Second, many poor countries, at least before the recent multilateral debt relief initiatives, were also heavily indebted, and the value of stock of their external public debt is linked to the exchange rate. Thus, a devaluation, which might be necessary to increase competitiveness and reduce the current account deficit, has an adverse effect on debt service and on capital flows. A large external debt, in fact, is one of the reasons of macroeconomic instability and of capital flight (Alesina and Tabellini 1989; Cerra, Rishi and Saxena 2008), and could partially explain the Lucas (1990) paradox, according to which capital flows from poor to rich countries.

Therefore, the dependence of the balance of payments on the exchange rate of national currencies vis-a-vis the US dollar impacts on the extent and on the frequency of the shocks. In this vein, the creation of a more stable IMS, with a larger use of SDR to price international trade and with poor countries pegging their exchange rates to the SDR, could bring positive side-effects also for LICs, reducing exchange rate volatility (IMF 2011d; Obstfeld 2011). The capacity to cope with exogenous shocks, by contrast, depends, among other things, by the level and composition of international reserves. Facing the ongoing threat of the global financial crisis, in fact, developing countries are increasing the demand for international reserves. Fluctuations in commodity prices, capital flows sudden stops and reversals, public debt accumulation in the US and Euro area and weak growth prospects are elements which increase the demand for reserves, whose estimates for developing and emerging countries range between USD 800-1,600 billion over 2012-2016 (IMF 2011b). However, as we are going to discuss, this does not come for free, so that a reform of the IMS, in the vein of the one discussed in Section 4, appears of first-order importance, even in the interest of LICs.

2.2 The Costs of Hoarding Reserves

Similarly to what happened after the Latin-American and East-Asian crisis, the current boom in reserve accumulation is consistent with self-insurance motives, given that countries with more reserves have been more able to smooth domestic investment and absorption during the recent food and financial crisis (IMF 2011a)[9]. The need for protection increased substantially, especially in recent years, given that financial openness and financial development multiply the risks and place extraordinary demands on central banks' foreign exchange reserves (Obstfeld et al. 2010).

Nonetheless, hoarding reserves bears a social cost, since liquidity is invested in short risk-free foreign assets instead of being channelled in productive investment[10]. In a multi-country perspective, the accumulation of reserves invested by developing countries in industrialized

[9] Reserve accumulation is generally due to two competing reasons: (1) the creation of a liquidity buffer to cope with capital outflows, terms of trade shocks and self-fulfilling financial crisis (Aizenman and Lee 2007), and (2) the necessity to avoid exchange rate appreciation due to "mercantilist" trade policies (Dooley et al. 2005).

[10] For instance, Caselli and Feyrer (2007) estimate an average return to capital in poor countries of around 7 percent, compared with 0.3 percent yield on a one-year T-Bill.

countries issuing reserve assets (notably, the US) is one of the flaws of the current IMS, the so-called *inequity bias* (Ocampo 2010a, 2010b), according to which developing countries lend to rich countries at low interest rates. Reserve accumulation bears also costs in terms potential exchange rate valuation losses and of maturity mismatch between long-term foreign liabilities and short term international reserves. More broadly, large transactions in reserves could have destabilizing effects on interest rates and exchange rates, increasing systemic risks (Obstfeld 2011).

Several authors have tried to quantify the cost of reserves. Rodrik (2006) calculates that the increase in reserves occurred in the early 1990s in developing countries (where reserves reached almost 30 percent of GDP and 8 months of imports) has been translated in an income loss close to 1 percent of country's GDP[11]. For the new millennium, the cost of reserves has been estimated to have averaged about 0.5 percent of GDP (IMF 2011a). Akyuz (2010) estimates that the annual cost of borrowed reserves for developing and emerging economies is about USD 130 billion, more that the total annual budget of official development assistance[12].

In addition, the accumulation of reserves in the current IMS makes LICs even more dependent on the US dollar, fuelling macroeconomic imbalances and exposing them to risks of large capital losses in case the US dollar sharply depreciates. In brief, "*foreign-exchange reserves seem to offer an unfavourable risk-return trade-off*" (Angeloni et al. 2011, p. 5)[13].

2.3 International Reserves Diversification and SDR Holdings

The general sentiment in developing and emerging countries, well represented by the initial quotation and by the China's central bank governor in March 2009 (Zhou, 2009), and the recent change in the currency composition of reserves suggest that developing countries are in fact

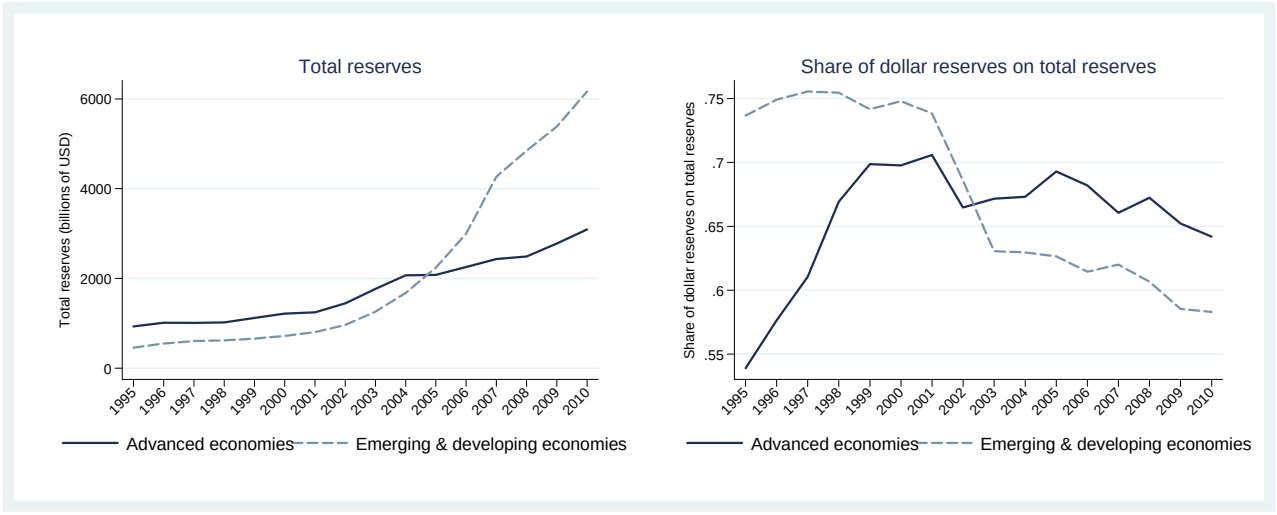
[11] Levy Yeyati (2008) argues that the net costs of reserves should consider that an increase in reserves, reducing the probability of a sovereign crisis in indebted countries, lowers the spread paid on the stock of outstanding public debt.

[12] Alternative estimates suggest that the annual cost of owned reserves for developing countries, calculated as the difference between investing reserves in lower yielding US treasury bonds and higher yielding investments, is US 300 billion (Eurodad 2010).

[13] Other than country-specific costs, it is important to bear in mind that reserve accumulation poses threats to the stability of the IMS, as the current events make clear. Countries issuing the key reserve currency face lower yields and could have incentives for larger deficits and debt accumulation. If, and when, debt sustainability is no more granted, the reserve currency looses its function as store of value. Moreover, the financial system may underprice overall risks because of lower yield on the reserve assets (IMF 2010d).

expressing a demand for diversification. Lacking data on currency composition for single countries (for confidentiality reasons), we can use the data published in the IMF COFER database to have a glimpse of the recent trends. In 139 reporting countries, total international reserve increased from almost 1,400 billions of US dollar in 1995, to more than 2,000 billions in 2001 and to 9,258 billions at the end of 2010. During the same period of time there has been a reversal in the relative weight of industrialized and emerging and developing countries in reserve accumulation: developing and emerging countries' stock of international reserves accounted for one third of the total amount in 1995, increased up to two third in 2010 (Figure 3, left panel) and are expected to keep following a rising trend (World Bank 2011).

Figure 3: International reserves in advanced and developing countries



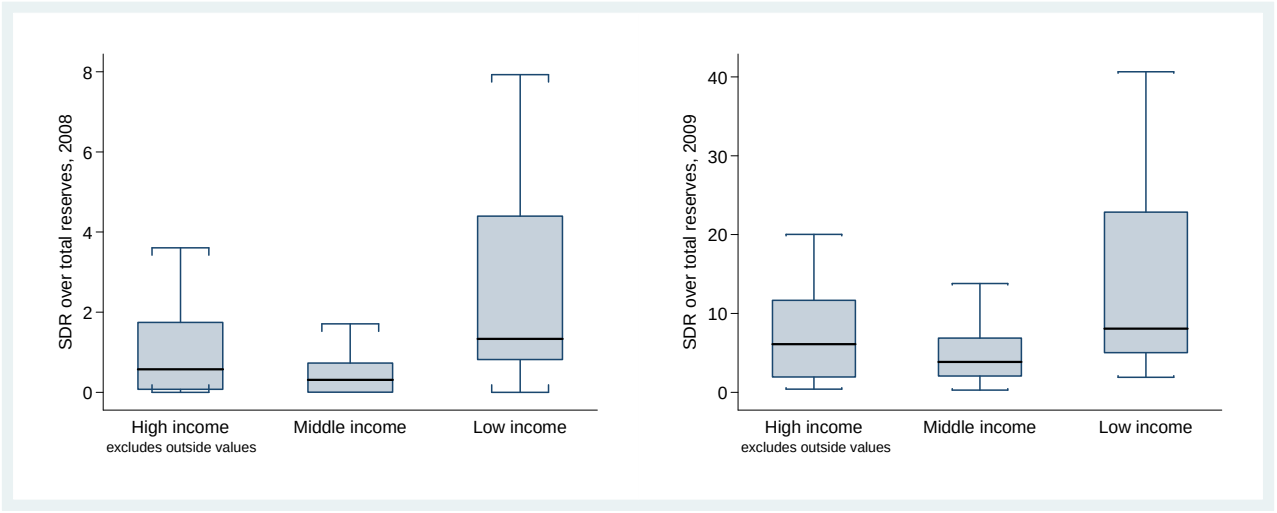
Source: authors' elaboration on IMF data (http://www.imf.org/external/np/sta/cofer/eng/index.htm)

At the same time, the share of US dollar-denominated reserves slightly declined in the last decade, even if the dollar remains well above 60%, suggesting the lack of any significant trend away from the dollar as a key currency (Figure 3, right panel; Galati and Wooldridge 2009; Alessandrini and Fratianni 2009b, Benigno 2010). Interestingly, the importance of the US dollar in the currency composition of reserves hold by advanced economies sharply increased up to 2001, when it stabilized. By contrast, in developing countries and emerging markets the role of the dollar in reserve hoarding shrunk from 75 percent in the late 1990s to less than 60 percent in recent years.

This trend, read together with the increasing holdings of US Treasury securities by China and oil exporting countries, suggests an underlying demand for diversification in currency composition by poor and vulnerable countries.

It is possible to calculate the weight of SDR allocations in international reserves: even if the relative importance of SDRs before the 2009 allocations was extremely low and it increased to about 7 percent, on average, at the end of 2009, the picture is quite heterogeneous across countries (Figure 4). The SDR share in total reserves is much more variable and, on average, larger in LICs than in middle- and high-income countries, confirming a potential demand for currency diversification by poor countries.

Figure 4: The share of SDR in total reserves in 2008 and 2009, by income levels

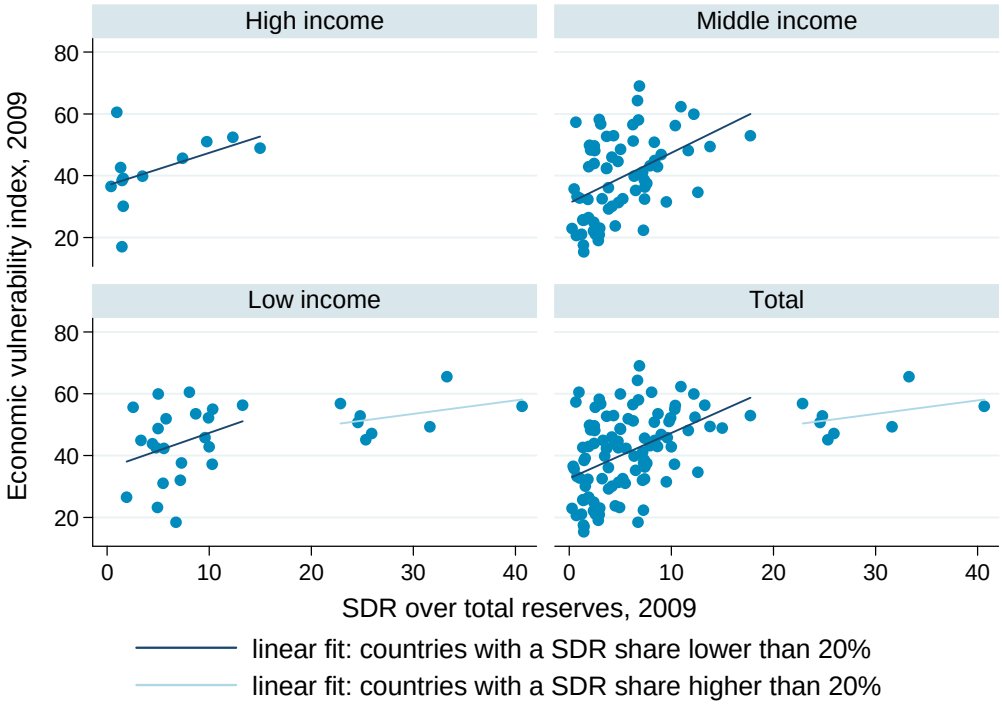


Notes: authors' elaboration on IMF and World Bank data.

This potential demand for a lower dependence on the US dollar and a higher exposure on a supernational asset like SDR based on a basket of currencies is more likely to happen in countries particularly exposed to economic vulnerability. The positive correlation between the share of SDRs in total reserve and the index of economic vulnerability for low-, middle- and non-OECD high-income countries suggests that the diversification of reserves from the key currencies and towards a basket currency is driven by precautionary purposes of most vulnerable countries, which aim at insuring against exogenous currency-driven shocks (Figure 5). The positive correlations between

the SDR share and vulnerability is partially weakened in LICs by a set of countries which, even with similar level of vulnerabilities of the other poor countries, own a much larger proportion of SDRs in their stock of reserves. However, this result is likely to be the outcome of a lower capacity of some poor and vulnerable countries to accumulate US-denominated reserve assets, rather than of a higher demand for SDRs. In fact, with respect to the sample of LICs, those countries are characterised by a level of reserves (over GDP) lower than the average and by a current account deficit (over GDP) greater than the average[14]. Thus, balance of payments problems or the excessive costs of reserves make those countries particularly exposed to external shocks. This situation emphasize the supplementary role of SDR: additional SDR allocations can help filling the external financing gap, meeting precautionary purposes.

Figure 5: The share of SDR in total reserves and economic vulnerability, by income levels



Notes: authors' elaboration on IMF, World Bank and UNDESA data. The Economic vulnerability index is a composite index calculated by UNDESA and available at: http://webapps01.un.org/cdp/dataquery/selectCountries.action (last retrieved: August 2011). SDR over total reserves is calculated as the ratio (times 100) between the SDR allocations and total reserves (including gold) in 2009.

[14] Those countries are Burundi, Sierra Leone, Zambia, Central African Republic, Mauritania, Congo DR, Liberia and Malawi. According to the WEO data, their average current account balance in 2008 was -18.1% of GDP, while the average value for the other LICs was -8.8%. Similarly, their level of reserves was 10 percent of GDP, lower than the ratio of 14.9% of the other low-income countries.

The hypothesis that SDR have been in fact a useful tool to face the exogenous shocks related to the global crisis, for which we have provided some anecdotal evidence in the Introduction (see footnote 6), is supported by the analysis of the negotiations made in SDRs after the 2009 allocations. Out of 110 countries (with the exclusion of OECD economies), only 13 sold SDR by more than 50 percent of their allocation. Those countries are far poorer, more exposed to natural shocks, with a more concentrated export base and with a greater reliance of agriculture than countries which sold a smaller share of SDR holdings or which increased SDR holdings (Table 1).

Table 1: Changes in SDR holdings after the 2009 allocations and economic vulnerability

	Change in holdings between September 30, 2009 and July 31, 2011 (percentage values)		
	- 50% or less	negative changes, up to 50%	Positive
Economic Vulnerability Index	43.8	40.9	41.7
Export concentration	0.472	0.442	0.437
Agricultural concentration	20.8	16.8	18.2
Natural shock index	42.5	40	37.5
GNI per capita (USD)	2,170	3,600	8,546
Number of countries	13	73	24

Notes: authors' elaboration on IMF and UNDESA data. The Economic vulnerability index is a composite index calculated by UNDESA and available at: http://webapps01.un.org/cdp/dataquery/selectCountries.action (last retrieved: August 2011). *Export concentration* is measured as Herfindahl-Hirschmann indices derived from three-digit SITC product categories; *agricultural concentration* is the share of agriculture, forestry and fisheries in GDP; the *natural shock index* takes into account the percentage of homeless and an index of agricultural instability. All measures, including GNI per capita refer to 2009. For additional details, see: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_definitions.shtml#evi (Last retrieved: August 2011).

3. THE RECURRENT NEED OF REFORMING THE IMS

3.1 THE INADEQUATE OLD SDR SCHEME

Proposals on how to reform the IMS have been discussed throughout the past century. The debate on the stability of the IMS has resurrected again during the current global financial crisis. The main unresolved issue to address has remained substantially the same as in the past: how to design a stable framework for the international monetary exchanges, consistent with the evolution of the economic and political relationships across countries. In the complex sequence of events, two milestones can be identified: the Bretton Woods Agreements in 1944 and the IMF Annual Meeting

in Rio de Janeiro in 1967. The former established the gold-dollar standard, while the latter introduced the SDR as a net addition to international reserves. This solution was made necessary by the intrinsic instability of the Bretton Woods system, as clearly pointed out by the Triffin (1960) dilemma, according to which the country issuing the key currency can not guarantee the availability, the convertibility and the confidence in its currency as international money in the long run. The Bretton Woods system collapsed for the unilateral decision of the United States to terminate the convertibility of the dollar to gold in 1971. That choice happened in coincidence with the first allocation of SDR 9.3 billion, distributed between 1970 and 1972. That coincidence, together with the effort of the Committee of Twenty on the Reform of the International Monetary System, could have been taken as an opportunity to bring the SDR at the centre of the IMS. However, the result of the discussions inside the C-20 revealed the lack of capacity of the SDR to reach its target of *"supplement[ing] existing reserve assets"* and "*avoid[ing] economic stagnation and deflation as well as excess demand and inflation in the world*".[15] As a result, the dollar became the dominant currency, with the gold loosing importance, because of its inconvertibility, and the SDR emarginated by their operational and quantitative limitations. The dollar standard has been partially mitigated by a shift towards flexible exchange rates (Obstfeld and Rogoff 1995) and, only after thirty years, by the birth of the Euro.

Forty years since the break up of the Bretton Woods system, the international framework has changed substantially, but the concerns about the instability of the IMS, the need for reforms and the issues at stakes are still the ones which neither the Bretton Woods agreements, nor the introduction of the SDR have solved: providing the IMS with a supernational money to supplement existing reserve assets and to solve the common target of the global economy. The elimination of the convertibility of dollar into gold did not solve the Triffin dilemma, since the trade-off between availability of and confidence in the US dollar as a key currency kept on being a potential source of instability. As expected, the external position of the United States gradually deteriorated. The US

[15] IMF, Articles of Agreement, XXIV, section 1 (a).

passed from being a net creditor to be a net debtor to the rest of the world, weakening their monetary leadership. As long as the dollar started showing signs of decline as a dominant key currency, no other national currency proved to have the characteristic to replace it. The euro is the second most important currency in international trade and in the financial markets, but the Eurosystem is badly weakened by the poor institutional integration and fiscal stabilization problems. The yen and the pound are relegated to a marginal role in international trade, a situation similar to the currencies of the new creditor countries, such as China, given that the yuan still lacks full convertibility (Galati and Wooldridge 2009; Bank of International Settlements 2010).

The signals pointing to an IMS no more based on a dominant key currency are evident, especially as long as the financial system becomes more developed and globally integrated, but also vulnerable to crisis of confidence. The factors behind the leadership of a currency, before concentrated in the United States, are now shared in a multipolar world economy and require a multilateral cooperative agreement, able to provide the IMS with a greater degree of monetary supranationality.

In other words, the issue of a supernational money, confronted but never solved in the past, is again at the centre of the policy discussion. There is an inverse correlation between the strength of the US dollar as a dominant currency and the likelihood to find the agreement on the fiduciary super national money. As long as the dollar was a strong currency, issued by the country leader of the world economy, any proposal of a supernational money has never been taken in serious consideration, as happened with the Keynes Plan (1943) at Bretton Woods and, among others, with the Triffin Plan (1960). This inverse correlation is confirmed by the inadequate results of the Ossola Commission. Nominated in 1964 with the official mission to reform the gold-dollar system, after three years of discussion the Commission produced only the creation of the SDR, as a compromise solution. At the end, it is not surprising that the current weakening of the dollar standard brings again the attention on the principles which inspired the Keynes Plan and on the necessity to improve the SDR scheme in order to overcome the constraints which made it ineffective.

Even before the SDRs were allocated, the gap between their ambitious targets and their limited effective potentiality looked evident to Machlup (1968). The definition by the IMF makes clear that: *"SDR is neither a currency, nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members"*[16]. Each central bank is entitled to transfer SDR to a corresponding central bank in exchange of an equivalent value of national currency, needed to intervene in the exchange market. Therefore: instead of introducing new supernational money, SDR simply allows bilateral transactions with the only purpose of activating national existing key currencies. For this reason Machlup considered the SDR scheme merely as a "giro system". Moreover, contrarily to its mission of supplementing the exceeding amount of dollar, SDR obtains the result of an activator of the use of the dollar as key currency of the system.

3.2 The Difficult Road to Improve the SDR

The need of strengthening the mechanics of the SDR in the direction of assuming the features of currency was already claimed in the early Seventies. Hirsch (1973) advocated a wide range of possibilities of widening the SDR system: regular annual allocation, better distribution with assignment of a part, such as one-half, to the World Bank to furnish a link to development aid, substitution account to reduce excessive accumulation of dollar, symmetrical currency intervention through a clearing system, overdraft facility, and a set of agreed rules designed to protect the system. Steps toward a more comprehensive SDR system were tried in the Seventies, facing the difficulty to erode the lasting strength of the dollar standard in that period. Two attempts of allowing central banks to replace a part of international reserves in dollar assets in a substitution account denominated in SDR at the IMF, proposed by the Committee of Twenty in 1974 and renewed by the Interim Committee of the IMF in 1978-1979, never came to light because of the final opposition of the United States and the IMF Board to share the corresponding exchange rate risk (Kenen 1981, Micossi and Saccomanni 1981, Boughton 2001). The Seventies ended with a second allocation of 12,1 billion of SDR distributed in 1979-81. Since then the SDR became almost

[16] See: http://www.imf.org/external/np/exr/facts/sdr.htm

forgotten and lost weight in the total reserves with no new allocation. In 2008 they represented less than 0.5 percent of international reserves (Williamson 2009; Obstfeld 2011). Given that SDRs are allocated to IMF member countries in proportion of their quotas, LICs own less than one SDR billion (4.2% of the total SDR 21.4 billion allocation).

The recent SDR revival was piloted by the Governor of the Central Bank of China Zhou Xiaochuan (2009), who influenced the G20 at the London meeting, held in April 2009, to decide a new allocation of 204 billion of SDR, as specified in the Introduction. The decision followed the old scheme: one-off supply, pre-determined quota of distribution, no-money role but subordination to the use of national currencies. Notwithstanding, the door for a serious reconsideration of the IMS reform based on the new SDR has been re-opened (Kenen 2010a, 2010b; Ocampo 2010; IMF 2011d). Xiaochuan's intervention is very significant. First, it officially confirms that the greatest creditor country has no ambition of monetary leadership, at least in the medium term. Second, it explains the worries of a dollar standard crisis and the need to diversify its international reserves away from dollar assets. Third, it is in favour to move concrete steps toward a supernational money standard. Consequently Xiaochuan recommends the improvement of the old scheme so as to make the SDR a true supernational money, which is more than an artificial basket currency as it is now. SDR should be registered as a liability of the issuing institution and backed by assets in its balance sheet and they should be exchanged through a settlement system between central banks.

The lines of reform advocated by Xiaochuan are not new. They are based on the same root shared by numerous old plans for centralization of international monetary reserves[17]. It is not surprising that the basic idea for a higher degree of supernational monetary management is still the same after 50-60 years, being obscured by the protracted dominance of the dollar system. Nevertheless it would be irresponsible to accumulate further delay of reducing the asymmetries of the key-currency system in the present situation, with high risk of implosion of the dollar standard and consequent

[17] *"What all these plans, beginning with the Keynes Plan and including all other prototypes and variant, have in common is that an international financial institution is charged with the function of creating - through the acquisition of claims or other assets (or fictitious assets) – additional deposit liabilities that would be accepted by the central banks as part of their monetary reserves"* (Machlup 1966, p.335).

global monetary crisis. The vested interest of China expressed by Xiaochuan has stimulated a revival of the reform of the IMS based on the evolution of the SDR scheme (Williamson 2009; Ocampo 2010; Bird 2010; Kenen 2010a; DeAnne 2010; IMF 2011d).

4. A FEASIBLE NEW SDR SCHEME IN A MULTI-CURRENCY SYSTEM

We agree to consider a larger role for the SDRs as a good starting point to take the historical opportunity to mitigate the fragility of the current IMS, under the condition that the overall framework for the creation, allocation and distribution of SDRs would be substantially revised. In doing so, the most difficult task to deal with is still the same: how is it possible to improve the super national management without substantially decrease national sovereignty, and to gain support for the cooperative agreement required to maximize the international convergence of interests?

In our opinion, the best compromise in this direction is given by the application of five principles that inspired the Keynes Plan: gradualism, banking approach, multilateralism, complementarity and symmetry of adjustment, as recalled by Alessandrini and Fratianni (2009a). The gradual approach is widely shared in all recent plans. Gradualism does not forbid the outline of an ambitious plan; it requires the realistic attitude to proceed step-by-step. On this ground our approach is eclectic, open to gradual expansion as result of learning by doing and of the feasibility allowed by evolution of the global situation. In the next three sections we will outline how these principles apply to our proposal for a feasible new-SDR scheme.

4.1 EXOGENOUS AND ENDOGENOUS CREATION OF SDRS

The aim of the scheme is the realization of a multi-currency system based on a significant role played by the new SDR as supernational money. Under this framework, there would be two alternative channels through which create the SDR, one exogenous and the other endogenous. The former is the existing one, which works through the creation of a predetermined quantity of SDRs, as happened in the three allocations decided in the past. Each central bank registers in its balance sheet the amount of SDR received pro-quota in the assets and an equal value in the liabilities that

leaves the door open to future SDRs liquidations. The same values are registered with the opposite sign in the IMF balance sheet. In the old scheme, these are fictitious assets and liabilities, and the Fund passively registers the exchanges between central banks of SDRs for national currencies. For a more active role of the IMF in the management of the new SDR, this channel could be managed in a flexible way for stabilization and development purposes, as discussed in sub-section 4.3.

To take a decisive step towards a greater degree of super nationality, it is necessary to add an endogenous channel of SDR creation to the existing framework. There are two ways to endogenously create SDRs: the overdrafts (OD) and the substitution account (SA). With the former, the SDR assumes an important credit function, consistently with the *banking principle* introduced by Keynes with the supernational bank money (1930)[18] and in his Plan 1943), re-stated in the Triffin Plan (1960) and reaffirmed by other plans of the 1960s-1970s[19]. The possibility of creating an OD facility for the SDR deposits is often overlooked in the current proposals (Xiaochuan 2009; Bird 2010; DeAnne 2010)[20], probably because of concerns about inflationary bias and governance issues, which will be discussed in sub-section 4.3. We believe, instead, that the OD facility should assume a pivotal role in the new-SDR framework in order to stabilize the IMS and to re-equilibrate it in favour of LICs.

The introduction of a SA facility to exchange foreign currency reserve assets for new-SDR denominated claims, already proposed in the 1970s[21], has re-gained momentum in the current reform proposals (Kenen 2010b), under the necessity to reduce the excessive accumulation of dollar assets by the central banks of creditor countries. Being endogenously created, the SDR replace their passive role as "*potential claim*" to use national currencies with a new and active role of main

[18] Alessandrini and Fratianni (2009a) update the supernational bank money SBM as the basis for IMS reform.

[19] See Grubel (1963). Inside the Fund, Polak (1979) proposed a mechanism through which the IMF could create (temporary) additional financing during balance of payments crisis. More broadly, Polak's goal was to eliminate the role of national currency holdings altogether and re-create the IMF as a financial institution based solely on the SDR as a financing technique (Boughton 2011).

[20] An exception is the scheme proposed by Ocampo (2010), in which the overdraft drawing facility is discussed as an ambitious instrument to reduce the asymmetry of the IMF. According to Ocampo, the overdraft facility could be used by IMF member countries unconditionally and for a determined period of time. Besides, Truman (2010) proposed for a temporary role of the IMF as a lender of last resort.

[21] For a brief description of the substitution account, see IMF (2010d).

reserve asset in the IMS and a possible substitute of national currencies, as stated at the time of their original introduction, but never realized. In this way, the new SDR-denominated claims would enter with important redistributive effects in the portfolio allocation of central banks.

Thus, the SDRs are no more exclusively *supply-driven*, as it happens with the traditional exogenous channel, but they become also *demand-driven*, since they can be created as a result of a specific request by a central bank. Moreover, it will be possible to coordinate and meet the financing needs at global level with the ones of single countries or areas. Both the endogenous channels - the OD and the SA facilities - would contribute to the creation of SDRs, but with a key difference. The overdrafts will determine an additional amount of international liquidity and, form this point of view, can be assimilated to the exogenous channel. By contrast, the SA facility will produce a composition effect, without affecting the level of international liquidity. In both cases, however, the result of the creation of SDR-denominated deposits is the increase of the degree of super nationality and diversification in the composition of international reserve assets, in the interest of advanced and poor countries alike.

4.2 NEW-SDR ALLOCATION AND USE

Under the new scheme, each central bank has an SDR-denominated account at the IMF, with the possibility to have access to an overdraft facility in case of assets depletion. The allocation of supply-driven SDR could be pro-quota, as happened so far. However, the exogenous creation of SDRs should be based on the country's world share in merchandise trade and financial markets and, in order to meet poor countries' financing and development needs, the new framework should introduce an aid-link and/or go hand-in-hand with a reform of IMF quotas towards an increased multilateralism (sub-section 4.3).

The SDR-denominated deposits are used by central banks to settle payments related to their balance of payments. According to the gradualism principle, in a first step the mechanism works only indirectly through the foreign currency market. The central bank of the surplus country buys foreign currency in exchange for national currency, to avoid an undesired exchange rate appreciation. A

current example is the Bank of China, forced to accumulate US dollar-denominated assets (usually T-Bonds) amongst its international reserves. Under the new scheme, the Bank of China could decide to convert US dollars into SDRs: 1) selling the T-Bonds in the open market (the money obtained is registered in the deposit account of the Bank of China at the FED), and 2) asking the FED to convert the dollar in the deposit account into SDR. In this framework, the IMF is a clearing house which move the SDR availability from the FED to the Bank of China.

The use of a supernational money in a multi-currency system has three important implications. First, the acceptance of the multilateral principle. The debit/credit relationships between central banks are no more exclusively bilateral, through key-currency reserves, but become also multilateral, *via* the clearing system managed by the Fund. Second, the principles of gradualism and complementarity are observed, since the new-SDR are not imposed as the only instrument to hold and use international reserves, but they could be freely chosen by central banks as an alternative to reserve assets denominated in the key-currency. Third, the creation of the new-SDR introduces the conditions to mitigate the *anti-Keynesian bias* (Ocampo 2010a; 2010b) - the asymmetry in the external adjustments naturally implied in a system based on a dominant currency which, especially in times of crisis, generates a global deflation. Going on with the previous US-China example, the Chinese authorities' choice of accumulating SDR-denominated reserves (instead of US dollar assets) implies a reduction in the US monetary base. The *exorbitant privilege* of the country issuing the key currency is eliminated, since the use of a supernational money imposes an external monetary constraint to the United States, as happens for all the other deficit countries. The Triffin dilemma is automatically solved (Alessandrini and Fratianni 2009a; 2009b). In this way, the US external position becomes similar to the one of LICs' structural deficit countries, reducing the *instability-inequity bias* (Ocampo 2010a).

The OD facility contributes to attenuate the external constraint for deficit countries and can play a significant role for LICs' development financing. The availability of additional borrowed reserve allows countries with balance of payments deficits to take more time to find the right adjustment

policy, with less pressure to adopt either penalizing restrictive policies or controversial devaluations of their exchange rates. Given that the value of the new SDR will be determined by a basket of currencies[22], the value of SDR-denominated loans is more stable with respect to bilateral or multilateral single-currency loans, reducing the vulnerability of poor countries to exchange rate swings, especially in case of an SDR-peg. The same condition applies to SDR deposits, whose value is more stable, with positive effects in terms of reduced volatility in the reserve portfolio of creditor central banks.

4.3 Supranational Governance

The establishment of new channels, through which the SDRs can be created and distributed, brings new opportunities for the reform of the global governance of the IMS. Any tentative of reform, however, should be gradual and follow the convergence of the interests of the leading central banks. At the centre of the reform proposal there is the role of the Fund, with respect to its monetary sovereignty in terms of instruments and goals and according to the risks it could take. Our proposal, which builds on several plans for reform advanced a long time ago, aims at giving a leading role to the IMF, in order to avoid the proliferation of international institutions with similar and overlapping targets[23]. With the *banking principle*, the IMF acquires two typical banking functions: the monetary one, thanks to the new-SDR deposits, and the credit function with the overdraft facility OD. Besides, the substitution account SA makes the new SDR convertible into national currencies. The most important concern of this scheme is the fear of the inflationary consequences of the OD. Similar considerations have been raised when the Keynes and Triffin plans were discussed. However, the credit function can be easily controlled and bounded within the necessity to create development opportunities and wealth redistribution across countries. To this aim, it would be possible to choose a limited (soft) level of supernationality: this soft approach could even be long-

[22] As in the existing system, the value of the new-SDR will be determined by a basket of the most important currencies: the US dollar, the euro, the Japanese yen, and the pound sterling, weighted by their respective shares in the global trading and financial systems. In the next future, to increase the SDR attractiveness, currencies of other emerging markets could be added to the basket, such as the yuan, once fully convertible (IMF 2011d).

[23] As envisaged, for instance, by the creation of an International Monetary Policy Committee, chaired by the IMF Managing Director and composed by central bank governors and experts (DeAnne 2010).

lasting, but, in any case, is better than the current situation of instability of the IMS. Two main limitations could mitigate the decisional autonomy of the IMF.

The first limitation can be established with forms of controlled endogeneity in the new SDR creation process, imposing some sort of supply conditions to satisfy the SDR demand. One or more levels of interest rates should be decided on the amount used in the OD. Alternatively, it is possible to adopt a quantitative ceiling, which could be incremental on the ground of conditionality: a first part of the OD is unconditional, while, after a certain drawing, it becomes conditional to the implementation of specific adjustment policies. Similar arrangements were already envisioned by the Keynes in his Plan, while the Triffin Plan extended the ceilings to a fixed annual growth rate of the supernational money. It is self-evident that further steps towards a greater discretional flexibility can be taken as long as there is a convergence in the global governance of the IMS.

In this vein, a reassurance comes from the second limitation, which in practice reduces the Fund discretionary power and leaves monetary sovereignty to the central banks. This limitation is the result of two characteristics of the new SDR, which are a basket currency and, according to the complementarity principle, operates inside a multi-currency system. Since the value of the SDR is defined by the exchange rates of the basket currencies, it is reasonable to argue that the interest rate, which is paid on the new SDR deposits and which provides the basis for the calculation of the interest rates on the OD, will be the weighted average of the policy rates set by the central banks issuing the currency inside the SDR basket. Hence, in the new scheme the IMF works as a *de facto* central bank of the main national central banks, with a solid anti-inflationary reputation. Their monetary policy decisions are internationally mediated in the value of and in the interest rate on the new SDR. On the one hand, this arrangement represents a potential advantage for the central banks of the main industrialized countries, which could focus more on the goals of internal stabilization, with less direct responsibilities at a global level. On the other hand, also the central banks of the other deficit and surplus countries could benefit from the presence of a more stable set of parameters of international monetary policy.

Further degrees of discretionary flexibility can be given to the IMF for the allocation of new SDR, based on the financing and development needs of the global economy or of specific areas. Thanks to a multilateral vision of the demand for international liquidity, during a recessionary phase the IMF could decide either to allocate a larger quota of new SDR deposits or to allow a greater use of the OD facility to the countries mostly affected by the negative external shock. If the latter is perceived to be a temporary shock, the IMF could increase the unconditional OD limit. Differently, in case of a structural slowdown, the Fund could allocate a disproportionate amount of new SDR, with the standard conditionalities or including collateral requirements. With respect to LICs, this is equivalent to the introduction of an SDR aid link mechanisms.

The latter point on guarantees raises some interesting issues which should be carefully considered.

First, the demand for collateral reduces the credit risk taken by the IMF with the OD.

Second, the kind of required guarantees can change across countries. The central banks of advanced and emerging markets can use government bonds with a solid reputation as collateral. In the process of determination which kind of securities are accepted as collateral, the IMF might assume an important role as a supernational authority, in competition with rating agencies. This could bring great advantages in terms of transparency and capacity to smooth the financial markets turbulence. Since these same collaterals are difficult to obtain for the central banks of poor countries, the IMF could extend the access to the OD facility only jointly with the country acceptance to participate into an assistance program financed by the World Bank or by a regional development bank. This sort of arrangement goes into the direction of strengthening the cooperation between international financial institutions, leaving at each institution its specific tasks according to its competencies.

Third, the Fund can build a portfolio of government bonds which might allow a direct intervention in financial markets with open market operations. With this instrument, the Fund could assume a new direct role of market stabilization, which must be conducted in agreement with the central banks.

The acquisition in the IMF balance sheet of foreign currency-denominated assets, while the corresponding liabilities are new SDR deposits, raises the problem of the exchange rate risk. The same issue comes from the creation of the substitution account SA, and motivated the decision to drop the SA proposal in the 1970s (sub-section 5.2). In the new scheme, the IMF executive board must decide whether to bear the exchange rate risk or to sell the foreign currency assets to the respective central banks in exchange of SDRs. The latter decision implies a monetary restriction in the country imposed by the external constraint, similar to the one discussed in the sub-section 6.2. Thus, the IMF has the discretionary power to assess the opportunity, the modalities, and the timing of the imposition of an external constraint to a given country, according to its specific macroeconomic framework and to the status of global imbalances.

Other that the advantage of avoiding the asymmetry of the missing adjustment in the key-currency country, it is important to evaluate the opportunity to impose the external adjustment on deficit countries. We believe that this decision makes sense in a time of global inflation, which requires a contraction of the global demand. By contrast, the same choice may be dangerous in the opposite recessionary scenario, because it would magnify the global deflationary bias discussed by Ocampo (2010b). In this situation, the burden of the adjustment should be passed to surplus countries, a result extremely difficult to obtain in a stable exchange rate system. Other than the possibility to appreciate the exchange rate, the instruments that the IMF can use are the disincentives and its activity of moral suasion. Among the former, it is possible to envision: a) the temporary exclusion from the SA facility, which implies a lower diversification of the reserve portfolio, b) the lack of remuneration of the new SDR beyond a certain threshold, and c) a negative interest rate above a second higher threshold, as in the Keynes Plan, where the symmetry of the burden of adjustment between surplus and deficit countries was a key point.

However, the most efficient way to obtain symmetry of adjustment is investing in the activity of moral suasion and in the creation of a collaborative approach by the surplus countries to maintain the global public good of the stability of real and financial transactions. The Fund should convince

surplus countries to adopt an adjustment program aimed at increasing their imports by surplus, with benefits of sustaining the global demand in case of world recession and reducing global imbalances, other than avoiding the revaluation of their exchange rates.

5. THE NEW SDR-BASED SCHEME IN THE INTERNATIONAL AID FRAMEWORK

In order to devise sensible proposals for easing the external financing constraints of LICs, two aspects must be analysed. The first one is the political and institutional feasibility of the scheme; the second one is its potential advantages with respect to the current framework under which foreign assistance is granted.

The choice of reforming the IMS granting a larger role to the SDRs, disproportionally allocated to poor countries, has to be assessed in the context of the aid effectiveness debate. The restoration of the SDR aid link envisaged in the proposed scheme or the extension of the unconditional OD facility, in fact, will be another way to allocate foreign assistance to LICs. According to a growing consent in the development literature on the ineffectiveness of foreign aid in triggering investment and growth in recipient countries (Rajan and Subramanian 2008; Doucouliagos and Paldam 2009), an increase in international aid might not be the most efficient solution.

Nevertheless, some scholars are raising dissenting voices, suggesting that aid has a positive and statistically significant causal effect on growth over the long run (Arndt et al. 2010; Minoiu and Reddy 2010). More specifically, it has been shown that the efficiency of donor agencies is highly heterogeneous (Easterly and Pfutze 2008) and that the impact of aid is heterogeneous across donors, depending on their geo-strategic interests (Headey 2008). For instance, Bobba and Powell (2007) show that aid provided to political allies is ineffective for growth, whereas aid extended to countries that are not allies is highly effective. Similarly, bilateral aid from Nordic countries, whose lending is generally allocated to poorer countries and is free from self-interest considerations, has been shows to have a robust and long-run effect on GDP growth (Minoiu and Reddy 2010). In addition, also the

mode of delivery matters (Ouattara and Strobl 2008), at least for some aspects, such as short-run growth (Clemens et al 2004) and bureaucracy quality (Selaya and Thiele 2011).

If this is the case, the expansion of the exogenous and endogenous channels to supply new SDR, if properly designed as a pre-determined allocation of foreign assistance related exclusively to economic needs and to balance of payments disequilibria, could be a tool to deliver aid in a more efficient way than traditional bilateral or multilateral conditional assistance - a point already raised by Gruebel (1972).

First, the SDR aid link could qualify as developmental assistance and overcome the concerns related to policy-driven aid, which still matters for IMF concessional lending (Barro and Lee 2005; Barnabeck Andersen et al. 2006; Presbitero and Zazzaro 2011)[24].

Second, as an automatic budget support instrument provided by a multilateral institution, the new SDR scheme should avoid the negative effects of donor fragmentation on the quality of government's bureaucracy (Knack and Rahman 2007).

Third, acting as a predictable line of credit to tap the external financing gap, the scheme will limit the adverse effect of aid volatility on growth (Robe and Pallage 2001; Bulir and Hamann 2008). Under this aspect, the SDR scheme partially mimics the Flexible and Precautionary Credit Lines recently established by the Fund with the aim of providing fresh money without the standard ex-post policy conditionality, in order to prevent crisis and limit the *stigma* effect of borrowing from the IMF. Nevertheless, the new SDR scheme can be superior to the existing lending arrangements, since it does not require any Washington consensus-alike conditionality (up to a certain threshold of the overdraft), neither *ex-ante* qualification criteria, which reduce the pool of potential applicants. However, since the creation of SDR through the overdraft is unconditionally available for each country up to certain thresholds, there will be a serious problem of moral hazard, for which *ex-post* credible sanctions are required.

[24] The influence of industrialized nations in international organizations, like the World Bank, in fact, was one of the reasons why the aid-link channelled through development agencies was originally unsuccessful in gaining wide support (Maynard and Bird 1975).

Finally, the assistance provided through the new SDR scheme can be considered as conditional budget support, since the costs/penalties associated with a structural deficit position should force countries to pursue structural reforms to adjust the current account imbalances. Under this aspect, the poor economic performance of conditional loans and structural adjustment programs (Morrissey 2004; Easterly 2005; Dreher 2006) calls for a radical re-design of the incentives which should orientate government polices, in partnership with donors, towards a more sustainable current and fiscal balances in order to reduce global imbalances and the demand for costly precautionary reserves.

6. CONCLUDING REMARKS

On the one hand, the global financial crisis, the weakening role of the dollar and the increasing importance of new creditor countries, like China, in the global arena are calling for a reform of the international monetary system in the direction of a greater multilateralism. On the other hand, development financing for LICs is flawed by the extreme vulnerability of poor countries to exogenous shocks and, as a consequence, by a recent trend of international reserve accumulation for precautionary purposes, which is a costly way for developing countries to finance the US and the rich world (a sort of "reverse" foreign aid). This situation imposes significant costs on the budget of poor countries and magnifies the global imbalances, creating an *inequity-instability bias* (Ocampo 2010a).

In this paper we have linked both problems - IMS fragility and LICs' vulnerability - proposing a reform plan aimed to obtain the combined effort of reducing the IMS instability and consequently of helping LICs to relieve their external constraints. The main feature of the reform is focused on the substantial revitalization of the Special Drawing Rights to become true supernational money. Our proposal is wider than those recently formulated by many sides, both official and academic ones. The justification for a wider approach is supported by two considerations.

First, there is a consideration of realism, which is based on the need to prevent the announced crisis of the dollar standard and its catastrophic consequences. The destabilizing effects of a monetary disorder would crash on the world economy already in depression from the global financial crisis. Moreover it would be unequally distributed among countries, since LICs' vulnerability would expose them to suffer the heaviest impact. The high risk of a monetary global crisis asks for a monetary global solution. This one asks for the introduction of new supernational money, which covers the long-run advocated need to improve the global governance of IMS, with adequate flexibility to reduce the world economy instability and the LICs' vulnerability.

Realism raises the second consideration that is feasibility. In the paper we have offered several reasons supporting our feasibility approach. First of all, the increasing weakness of the dollar as dominant currency and the difficulty to find new substitutes offers a unique opportunity to overcome obstacles that have historically stopped any move in the direction of supernational money. Second, the SDR is an instrument already available, with high potentiality of improvement in the direction of becoming true supernational money. Third, there is a plethora of proposals on this ground, accumulated during seventy years of dollar dominance and forty years of SDR segregation, which helps to fish solutions to reinforce the SDR on a wide approach, based on political and institutional feasibility and suitable to be realized step by step, following the evolution of the convergence of interests of the leading countries to cooperate.

The best platform to envisage our open approach is based on the application of the five principles that inspired the Keynes Plan. The main features of new SDR scheme are summarized as follows:

1. The new SDR is managed by IMF in a more active way, intermediating deposits e credits in SDR (banking and multilateral principles).

2. Different channels of SDR creation are activated: the traditional exogenous one, supply driven, and two endogenous ones, demand driven. All of them offer opportunities of IMF discretional management as needed (gradual principle): a) the exogenous distribution pro-quota could be adapted to the situation of the global liquidity and the development needs of

developing countries; b) the demand driven overdraft facility could be subjected to some degrees of conditionality; c) the demand driven substitution account facility could be used for external adjustment purposes (symmetry principle).

3. The feasibility of the project is supported by two characteristics of SDR, which is valued as a basket of currency and operates in a multi-currency system. The IMF discretionary power is *de facto* limited (complementary principle) and the national sovereignty of the leading central banks is preserved and could be more oriented to internal stabilization problems.

4. The fact that SDR operate in a multicurrency system reduces the cost of accepting this reform to all key currency countries. Dollar and all the other leader currencies will maintain a share in international reserves held by central banks. Moreover, the United States will preserve the role of the dollar as main means of international payments, with its higher weight in the SDR currency basket. The new SDR should be valued by the United States as a unique opportunity to preserve the brand name of the dollar, preventing its announced decline.

5. With respect to the development and monetary needs of LICs, a greater role played by the SDRs in the IMS might be helpful for at least three reasons:

5.1 a direct benefit is the provision of development finance, thanks to the aid link and the unconditional OD facility, which might help both to ease the external constraint and to bridge the gap towards the MDGs and the much needed investment in infrastructure;

5.2 an indirect benefit through the stabilization of the IMS, which can result in a lower demand of precautionary reserves, a less dependence from the US dollar, and in reduced vulnerabilities to external shocks;

5.3 an efficiency gain with respect to the existing fragmented foreign assistance framework: coordinated, unconditional (at least up to a point), predictable assistance through new SDR allocations and the use of the OD facility would avoid or mitigate

several of the flaws of standard aid assistance, such as donor fragmentation, political influence, and volatility.

6. Finally, the moral hazard problem could issue strong perplexities linked to the creation of the overdraft facility: the possibility to unconditionally access to additional liquidity could create perverse incentives for the government of deficit countries. To attenuate this problem, the IMF must be free to adjust the overdraft facility to each situation, asking adequate conditionality; moreover the link between the IMF overdraft and the World Bank's assistance as proposed in the paper appears not only necessary, but also functional to reduce moral hazard worries.

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