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**Global Governance for Financial Stability and Development**

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**GLOBAL GOVERNANCE FOR FINANCIAL STABILITY  
AND DEVELOPMENT**  
(Final revision 2011)

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The problems of boom-bust patterns of financial markets have a long history (Kindleberger,1982). Its frequency has been high since the 1970s, as a result of both financial liberalization and inadequate prudential regulation. Indeed, the world financial crisis provided further evidence that unless properly regulated, financial markets are prone to harmful boom-bust patterns, often leading to costly crises (Soros, 2008). In contrast, when financial systems have been simpler and better regulated, as in the quarter of a century that followed the Second World War, crises were infrequent.

The devastating effects of financial crises became particularly evident in recent decades in numerous developing countries, particularly during the Latin American debt crisis of the 1980s and the East Asian and Russian crises of 1997-98. The latter gave rise to an important discussion on reform of the international financial architecture. However, after a positive start, progress on reform became very disappointing till 2007: too little was achieved at the international level, and most of the action took place at the national level in the developing world, particularly in the areas of financial regulation, reduction of debt burdens and accumulation of foreign exchange reserves.<sup>1</sup> This lack of progress in the international financial architecture was particularly problematic as the worst financial crisis since the Great Depression hit the world. Although this crisis originated in the United States and some other industrial countries, for a period it affected the developing countries extremely hard, even though they were largely innocent bystanders.

As a result both of the extreme severity of the crisis, which started in 2007 and became acute after the collapse of Lehman Brothers in September 2008, some relatively

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<sup>1</sup> There is a very large literature on this subject. For our own work, see S. Griffith-Jones and J.A. Ocampo (2003).

significant changes are starting to occur in the international financial architecture. At the time of writing, those changes seem particularly important in aspects of international official liquidity provision, especially via the IMF and in a fairly significant attempt at strengthening and improving financial regulation in developed countries, with some though still incipient international coordination. Some quite important changes have also been made in global governance, even though these are still insufficient.

This paper analyzes the central issues of global governance to guarantee a development-friendly international financial architecture. It is divided in five sections. The first analyzes the effects of capital account volatility and proposes that a development-friendly architecture should have a strong counter-cyclical focus. The second section examines crisis prevention, particularly the role of prudential and capital account regulations. Section III looks at better management of crises: IMF lending facilities, debates surrounding conditionality, and debt workouts. Section IV examines the reform of the Global Reserve System. Throughout the paper, we discuss ongoing reform efforts and point out the areas where far deeper reforms in the international financial architecture are needed.

## **I. A COUNTER-CYCLICAL FRAMEWORK FOR A DEVELOPMENT-FRIENDLY INTERNATIONAL FINANCIAL ARCHITECTURE**

The last three decades have made developing countries, particularly those more integrated into world financial markets, swing at the rhythm of highly pro-cyclical external financing. The succession of booms and sudden stops in financing has had strong effects on these countries. In this regard, the recent global crisis was not only massive, but its impact on capital flows to developing countries was even larger than that caused in previous crises that originated in the developing countries themselves. Indeed, the Institute for International Finance (2009) estimated a decline of these capital flows of almost 8 percent of emerging countries' GDP during the 2007-09 period. However, thanks to the massive interventions by major countries to contain the crisis, this shock was short in terms of its impact.. Since mid-2009, capital flows started to return to

developing countries and by 2010 many emerging economies were facing the opposite problem: a new surge of capital flows.

Financial volatility has a direct impact on the balance of payments and domestic financial markets, and, through these avenues, on domestic economic activity and other macroeconomic variables. Furthermore, in the face of strong swings of private capital markets, developing countries have tended to lose the “policy space” to adopt autonomous counter-cyclical macroeconomic policies, and faced difficult challenges creating deep financial markets. A vicious circle involving pro-cyclical financing, incomplete financial markets and institutions, and constraints to macroeconomic policy emerged. The unfortunate outcome of this dynamics is that “twin” external and domestic financial crises became far more frequent. Paradoxically, such twin crises spread even in 2009 and 2010 to some European developed countries.

This study thus argues forcefully that the major task of a development-friendly international financial architecture is to try to curb the pro-cyclical and volatile nature of financial markets and to *mitigate the pro-cyclical effects of financial markets and open “policy space” for counter-cyclical macroeconomic policies in the developing world* (Ocampo and Griffith-Jones, 2008).

Trade and terms of trade fluctuations play a major role in the determination of business cycles in developing countries. Indeed, the widespread shift towards export-led strategies in the developing world has increased the importance of the trade channel as a mechanism to transmit crises amongst countries, as the recent crisis indicates (see Griffith-Jones and Ocampo, 2009). Domestic macroeconomic policies and political factors also play a role in determining business cycles. Since the 1970s, however, business cycles in developing countries have been characterized by the leading role played by *capital* account fluctuations. This has been particularly true for economies more integrated into world financial markets, the “emerging economies.”

Boom-bust cycles reflect investor herding and associated contagion –of both optimism and pessimism. Volatility is associated with significant changes in risk evaluation, which involve the alternation of periods of “appetite for risk” (more precisely,

underestimation of risks) with periods of a “flight to quality” (risk aversion). Market-sensitive risk management practices as well as other features of financial markets (e.g. evaluation of managers against competitors) increase herding (Persaud, 2000). Furthermore, due to information asymmetries, different assets tend to be pooled together in risk categories that are viewed by market agents as being strongly correlated. This practice turns such correlations into self-fulfilling prophecies. As pointed out, this has been again dramatically shown in the 2007-09 financial turmoil of developed countries, particularly in the United States and in the banking and sovereign debt crises in Europe.

Boom-bust cycles have given a renewed relevance to endogenous unstable dynamics of financial markets analyzed by Minsky(1982), who emphasizes how financial booms generate excessive risk taking by market agents, which eventually leads economies into crises. From a different theoretical perspective, a similar explanation was suggested by White (2006), who underscores how “search for yield” characteristic of low interest rate environments generates incentives for credit creation, carry trade, and leverage that easily build up asset bubbles. As the BIS stated, back in 2005: “The main risks to the financial sector could stem from financial excesses linked to a generalized complacency towards risk, reinforced by a benign short-term outlook” (BIS, 2005, p.120). This warning sounds particularly prescient in light of later events.

In developing countries, fluctuations in capital markets have been reflected in the pro-cyclical pattern of spreads, variations in the availability of financing (absence or presence of credit rationing), and in maturities. This involves short-term volatility, such as very intense upward movement of spreads and the periods of interruption (rationing) of financing observed during the Mexican, Asian, and Russian crises. More importantly, they also involve *medium-term* cycles, as the experience of the past three decades clearly demonstrates. During this period, three full medium-term cycles have been experienced: a boom of external financing in the 1970s, followed by a major debt crisis in the 1980s; a new boom in the 1990s, followed by a sharp reduction in net flows after the Asian and Russian crises of 1997-98. Since 2002-03 a new such cycle began, which was followed by the financial turbulence associated to the global crisis, now moving to a new stage of surges.

Different types of capital flows show different volatility patterns. The higher volatility of short-term capital indicates reliance on such financing is highly risky (Rodrik and Velasco, 2000), whereas the smaller volatility of FDI vis-à-vis all forms of financial flows is considered a source of strength. However, “financial engineering” may be making different flows increasingly similar. Particularly, the use of risk management techniques by multinationals, via derivatives, may make FDI in critical moments as volatile as traditional financial flows (Dodd and Griffith-Jones, 2007).

During booms, developing countries viewed by markets as “success” stories are almost inevitably drawn into the capital account boom, inducing private-sector deficits and risky balance sheets (French-Davis, 2001). However, even countries with weak fundamentals may be drawn into the boom and all countries, again with some independence from their fundamentals, will be drawn into “sudden stops” of external financing.

Conditions are particularly difficult in developing countries during crises because rising risk premiums and reduced availability of external financing may eliminate the room for counter-cyclical monetary and fiscal policies, and may rather force them to adopt pro-cyclical policies –i.e., high interest rates and tight fiscal policies. Thus, while most industrial countries have in the past been able to smooth pro-cyclical effects of credit and asset prices through counter-cyclical macroeconomic policies, developing countries may be forced to adopt pro-cyclical macroeconomic policies that reinforce the pro-cyclical movements of financial markets. It should be pointed out that European countries like Greece and Ireland have been forced into pro-cyclical policies in 2009, thus following a similar pattern to that suffered in the past by developing countries.

There is also widespread evidence that ample private sector financing encourages pro-cyclical macroeconomic policies during booms. Thus, unstable external financing distorts incentives that both private agents and authorities face *throughout* the business cycle, inducing a pro-cyclical behavior of economic agents *and* macroeconomic policies (Kaminsky *et al.*, 2004). In the words of Stiglitz (2003), increased exposure to financial market risks replaced Keynesian automatic stabilizers with automatic *de*-stabilizers.

Contrary to the view that liberalization would allow financial markets to play a disciplining role, dependence on financial swings encouraged adoption of pro-cyclical monetary and fiscal policies.

Although pro-cyclicality is inherent in financial markets, domestic financial and capital account liberalization in the developing world have clearly and significantly accentuated its effects. A lag in developing adequate prudential regulation and supervision frameworks, in both developing and developed economies, increases the risks of financial liberalization.

The costs of such financial volatility in the developing world are high. There is now overwhelming evidence that pro-cyclical financial markets and macroeconomic policies have increased growth volatility and have not encouraged growth in the developing world (Prasad *et al.*, 2003). The efficiency gains from financial market integration are swamped by the negative effects of growth volatility.

Eichengreen (2004) estimated that over the past twenty-five years, incomes of developing countries had been 25 percent lower due to currency and banking crises. Others have estimated even higher average annual costs of crises. Indonesia experienced larger falls in output and incomes during the Asian crisis than the United States during the Great Depression.

Each medium-term financial cycle may have specific features. The most recent one was characterized by an unprecedented accumulation of international reserves and reduced debt ratios by developing countries, which may be seen as “self-protection” against the financial instability experienced during previous crises (see Griffith-Jones and Ocampo, 2010, and section IV of this paper). Such self-protection, together with rapid development of local currency bond markets strengthened the defenses of developing countries against crisis. However, in spite of the major efforts in this areas and improvements in other policies (e.g., better macroeconomic and financial regulation policies), most developing countries were very severely hit by the global financial crisis.

New channels of transmission of crisis have emerged or become more prominent. First, as previously pointed out, increased dependence of developing countries on export-led strategies has implied that both commodity-dependent and industrial exporters have made them more vulnerable to transmission of crisis via the trade channel.

Second, as the old forms of financial volatility have continued to affect the developing countries, new sources of potential pro-cyclicality of capital flows have emerged. They are related to the explosive growth of derivatives worldwide. In developing economies, derivative contracts are being used by international hedge funds and investment banks to speculate, for example, via the carry trade. Large parts of these derivative markets are not regulated (as they operate in the OTC market and offshore). The reversal of this carry trade as the crisis intensified in 2008 led to significant capital outflows and depreciation pressures on currencies in several major emerging economies. In 2010 the carry trade has contributed to facilitate very large inflows, which have contributed to excessive strengthening of their currencies and rising asset prices.

Third, uncertainties associated with the risk of a disorderly unraveling of global imbalances and especially the major effect of the current financial crises is drastically changing the prospect for developing economies. A major paradox is that measures of “self-protection” of developing countries (current account surpluses, large increases of international reserves and reduced indebtedness) are also part of global imbalances. The new sources of strength of developing countries, when viewed on a country-by-country basis, turn out to be one of the elements of vulnerability for developing countries as a whole.

## **II. CRISIS PREVENTION**

Though crises have complex causes, experience indicates that liberalization of financial markets, especially if not accompanied by appropriate regulation, is the major cause of costly and damaging crises. This does not imply that financial crises are inevitable, but that they may be prevented or ameliorated, by appropriate public policy and, especially, by regulation.



A short look at history indicates the validity of this statement. After the Great Depression, the financial sector –particularly, but not only in the US– was re-regulated carefully, most notably in the US by the Glass-Steagall Act of 1933. During the next forty years, the financial sector throughout the world was closely regulated, capital accounts were fairly closed, and there were practically no financial crises. Since the 1970s, and especially during the 1980s and 1990s, there was massive de-regulation, both at national and international level. Since the 1980s, there have been very frequent and very deep financial crises, both in the developing and developed world. These crises have been extremely costly in terms of growth and development.

The only silver lining that appears during these costly crises is that they provide a political opportunity to carry out desirable regulatory reforms. The depth of the current crisis in the developed economies, and particularly in the United States, may represent in this sense an opportunity. It has led to massive bail-outs and costly public recapitalizations of many financial institutions in those countries, which are very costly to taxpayers and, therefore, caused a great deal of anger. The crisis threatened to lead to an unacceptably serious and possibly long recession globally or at least a major slowdown of growth, especially in the developed countries. As a consequence, there emerged significant political appetite for more and better regulation. Furthermore, it is increasingly clear that effective regulation is not just in the interests of the real economy, it is also in the interest of the stability of the financial system itself, as well as of individual financial institutions. Moreover, for a country to have a competitive financial system, it needs to be well regulated. Indeed, steps are beginning to be taken to improve regulation, and this issue has been central to the G-20 agenda at the global level and to important actions especially in the US (the Dodd-Frank Bill) as well as in Europe; also important is the approval of Basle III for banking regulation (see below).

The key question in policy circles became therefore not whether to regulate, but how best to do it. In thinking about the future shape of the financial system and its regulation, it is important to be clear about its purpose. The financial sector should be seen as a means to an end: it should serve the real economy, and thus the needs of households and enterprises to consume and invest. On the positive side, governments

should encourage the financial sector to create financial innovations and instruments that support growth and development in a sustainable way. But they should also use regulation to avoid systemic risk being generated, thus preventing future crises, which can be so disruptive to the real economy.

The principles on which financial regulation needs to be built are based, to an important extent, on the causes of this and previous crises. This relates to the inherent flaws in the way that banking and capital markets operate. In particular, the main manifestation of market failure in those markets is, as we already indicated in section I, their boom-bust pattern. A first task of regulation is therefore to help overcome these pro-cyclical patterns of behavior, therefore a first principle of regulation needs to be that of counter-cyclicality.

The second major cause of crises is –as briefly mentioned above– rapid liberalization within and across countries, which has been accompanied by insufficient, incomplete, and inappropriate financial regulation. Indeed, the excesses of financial liberalization and the major mistakes of regulation, as well as its incompleteness, imply a massive policy failure.

To overcome the failures –both of markets and of policy– that have been major factors contributing to the current crisis, two key principles of regulation need therefore to be followed: one is that of introducing counter-cyclicality at the heart of regulation, the second is the need for regulation to be comprehensive, so that the domain of regulation coincides with the domain of the market.

Capital account liberalization and the strong pro-cyclical pattern of capital flows to developing countries are also major sources of crises in these countries, as indicated in the first section of this paper. This implies that prudential regulation should be complemented with capital account regulations. Indeed, the limits between the two are sometimes difficult to discern, as they can sometimes be used as alternative ways to manage the two basic underlying problems: pro-cyclical flows and currency mismatches in portfolios.

In what follows, we start by looking at the two basic principles of prudential regulation: comprehensiveness and counter-cyclical. We then look at currency mismatches and capital account regulation. We finally take a short look at the issue of remuneration of bankers, which has also shown to induce pro-cyclical.

Although we underscore in this paper the two basic principles of prudential regulation, there are other, well-established ones: consumer protection, restricting monopoly power (a major issue looking forward, as private finance is experiencing rapid concentration), and encouraging portfolio diversification. Suffice is it to say that even these well established principles were not followed before the global crisis. The first of these functions should be considerably enhanced to avoid the supply of toxic mortgages and highly risky investment vehicles offered to unsophisticated agents during the recent boom in many countries. In this sense the creation in the US of the autonomous financial consumer protection agency, as part of the Dodd Frank legislation was an important step in the right direction.

#### **A. Comprehensive prudential regulation**

Financial systems—both nationally and internationally—have undergone very large changes. Regulation had clearly not kept up.

In the United States and other developed countries like the UK, there had been a massive shift of savings from banks to capital markets. As pointed out in d’Arista and Griffith-Jones (2010), in 2007, only 25 percent of the US financial systems’ assets belonged to commercial banks.

However, commercial banks were the only part of the financial system that were regulated for capital requirements, and even that regulation was partial, as off-balance sheet instruments, such as Structured Investment Vehicles, were practically unregulated. Investment banks were very lightly regulated. Other financial actors, like hedge funds, were not regulated at all. Germany pioneered the discussion of regulating hedge funds before the global crisis; this discussion became more intense, for example, in the European Parliament and European Commission after the crisis started. After long

debates, and intensive lobbying by hedge funds and equity funds, European legislation has been approved on alternative investment vehicles. Moreover, the powerful rating agencies were also unregulated. For some of the financial instruments, such as Over-the-Counter (OTC) derivatives that grew to astronomical levels in the last decade, there was no transparency and even less regulation. Again here both in the US and in Europe important efforts have been made to increase transparency, and even improve regulation of derivatives, though unfortunately important exceptions remain (for more details, see below). Off-shore centers, furthermore, are subject to no or extremely light regulation.

As a result of these regulatory shortages, a massive “shadow financial system” was allowed to emerge, which had no or very little transparency or regulation. Indeed, regulatory arbitrage –moving transactions from more to less regulated financial activities and centers– often drove, or at least strongly encouraged, the growth of financial activity and of risk taking. Indeed, many of the problems that caused the financial crisis arose mainly in institutions (e.g. mortgage lenders) or instruments (e.g. credit default swaps) that were not regulated. This is similar to many previous developing country financial crises, where, too, the most liberalized and unregulated parts of the financial system were major causes of crises.

In capital markets, there was practically no formal regulation. Private actors, such as insurance companies, pretended that they were able to sell systemic risk insurance, like credit default swaps (CDS). Some of those major insurance companies, like AIG in the US, had to be rescued and effectively nationalized, as they essentially became bankrupt during the crisis. This was because they did not have sufficient capital and reserves to fulfill credit swap insurance contracts that had a massive amount of systemic risk. Indeed, no entity –except the government– was capable of fulfilling credibly such a contract once the crisis spread. Thus, the government not only became the lender of last resort, but also the insurer of last resort, because it had not previously exercised regulation to limit the risk that afterwards it had to assume (see Mehrling, 2010).

To summarize, regulation has to be comprehensive so that the domain of the regulator coincides with the domain of the market; if not, regulatory arbitrage will be

inevitable. Another reason – illustrated by recent events, when bail-outs and rescues have been massive – is that there is a need to have comprehensive regulation to avoid moral hazard.

A pre-condition for effective comprehensive regulation is comprehensive transparency. Thus, Over-the-Counter derivatives should all be brought on the exchanges (even if this implies certain micro-economic costs). Off-balance sheets instruments, like Structured Investment Vehicles, should be brought into balance sheets, and on-site inspection of banks and other financial institutions should be expanded.

The new US legislation (the Dodd Frank Bill), which obliges all standardized derivatives to pass through clearing-houses is a positive step to improve transparency and reduce counterparty risk ; ideally it should be applied to all derivative transactions. It is therefore unfortunate that the US legislation has maintained a series of exceptions, especially for derivatives used by non-financial companies. A positive aspect of the US legislation, however, is that it imposes margin requirements on all the derivatives that go through clearing houses, which diminishes their risks, though again there are exceptions for those that do not go through clearing houses. We can expect European regulation to follow these US reforms on transparency in the derivatives markets, but it is to be feared that they will also allow important exceptions.

As pointed out, in the case of alternative investment funds, especially for hedge funds, it is the European Union that has taken initiatives to improve transparency by requiring their registration, as well as proposing some precautionary regulatory measures; these proposals, though watered down, have now been approved in spite of opposition from financial players and the reservations of some countries. As regards alternative investment funds, the US legislation not only took initiatives to improve their transparency, but also opened the possibility that the newly created Systemic Risk Council can declare these funds as systemically important, when they are large financial players, and thus impose limits on their leverage or other risk mitigating measures.

The creation of this Council, as well as its equivalent at European level –the European Systemic Risk Board—, whose objective is macro-prudential regulation, are

institutional innovations that are potentially very positive. It is also very positive that a rather ambitious architecture has been created at European level of three sector pan-European regulators for key financial sectors (one for banks, another for insurance and pensions, and a third one for capital markets).

These steps imply that it has been recognized that financial intermediaries that are systemically important should be subject to particularly rigorous supervision, and even to stricter regulatory norms than other institutions. This issue has received particular attention in the United States. In 2010, President Obama announced limits on the size of banks. Since 1994, there are limits on the ratio of total deposits (10%) that can be held by one bank; the new rule would also apply to other liabilities.

Another important measure announced by President Obama proposed to ban the use of bank resources in their own trading (so-called “proprietary trading”). In fact, the US legislation approved has introduced the so called “Volcker rule”, which forbids the use of the banks’ own resources and that of its depositors for its own capital market business. However, this rule was diluted in the debates in Congress, and the resulting legislation, when banks were allowed to maintain property of alternative investment funds (hedge funds and equity funds) up to 3% of their Tier 1 capital.

Comprehensive regulation should relate both to liquidity and solvency. As regards solvency, equivalent regulation of different actors, instruments and activities should especially refer to leverage, as excessive leverage has been such a major source of systemic risk. It is therefore positive that Basel III, as discussed below, has introduced limits on leverage. However, as the longevity of funding is an important variable, it may be desirable to restrict leverage more (and thus require more capital) for assets funded by short-term liabilities. This will not just protect the solvency of financial institutions, but also encourage them to seek more long-term funding.

Persaud (2010) has forcefully argued that tying leverage requirements to maturity of funding (“mark-to-funding”) will also encourage diversity of behavior amongst different actors, thus discouraging herding across different categories of financial actors. Persaud proposes, in this regard, that, whatever they are called, those financial

institutions that have short-term funding –say less than 12-24 months– should follow bank capital adequacy requirements. Those with long term funding could have a different long term “solvency” regime, that would take into account their long-term obligations and long-term valuation of their assets. It is however key that the concept of maintaining equivalent regulation of leverage, for all actors, instruments, and activities, is implemented, in order to avoid regulatory arbitrage.

Separate and sufficient minimum liquidity requirements should be an essential part of regulation, an aspect that was neglected in Basel I and Basel II, but which has been introduced into Basel III, as the global crisis showed the need for such regulations.

We will now discuss in some detail the proposal approved in principle in September 2010 as Basel III (Basel Committee, 2010). The proposal agreed in principle by the 27 countries in September 2010 has a number of positive elements. Firstly, it raises Tier 1 capital requirement, the core form of loss absorbing capital) from 2% to 4.5% of risk-weighted assets, as well as defining far more strictly the assets that make up this capital, to strengthen the solvency of financial institutions. The proposal also increases the capital for banks’ operations in the financial markets (the so called trading book) and requires an additional capital conservation buffer of 2.5%. This implies banks should have 7% of common equity. It also implies introducing additional buffers of counter-cyclical capital, in a range of 0 to 2.5% of common equity, which would be implemented nationally, along lines we discuss below. Finally, the liquidity requirements are made explicit, which, as pointed out , were practically non- existent in Basel II; it also introduces a maximum leverage ratio, calculated on total assets and not on risk-weighted assets, whose aim is to restrict the total of assets in relation to capital.

Nevertheless, Basel III has several serious problems (for a more detailed analysis see for example Griffith-Jones, Silvers and Thiemann, 2010). First of all, many observers consider that the increases of capital requirements are not enough, especially for banks with very risky assets. A second important critique relates to the excessively long time period in which they will they be implemented, culminating in 2022. The main reason is that there have been strong pressures by the banks, both to avoid even higher capital

increases and for delaying the reforms. This was combined, in the latter case, with the fear by regulators that an early increase in capital requirements would discourage even more the ability and willingness of banks to lend, which is considered key for the recovery.

A more radical critique is that maintaining risk-weighted assets capital requirements may be inadequate, and that it would be better to give a larger role to leverage. Furthermore it seems likely that the leverage indicator has been put at an excessively high level, as it can reach 33. Another set of questions relate to the design of the liquidity buffers, which may end up by discriminating against loans to SMEs, which play a key role in job creation. Further research is required here. There is also an important concern whether stricter regulation of banks will not cause financial activity to move even more to the less or unregulated entities.

It should be emphasized, finally, that the possible discrimination in the regulations against developing countries, by ignoring the benefits of diversification of lending to borrowers with lower correlation of risks, has not been corrected in the new proposals. Therefore, it would be highly desirable if Basel III would incorporate a factor that takes account of the benefits of diversification towards that type of assets, as has already been done for loans to small and medium enterprises in Basel II (as proposed for example in Griffith-Jones, Segoviano and Spratt, 2002). In fact, the recent crisis, and above all the following evolution, in which developing countries have in general had higher growth rates than developed ones, confirms the need to introduce the benefits of diversification in Basel III.

## **B. Counter-cyclical prudential regulation**

As pointed out, the most important manifestation of market failure in financial markets through the ages is pro-cyclicality. In fact, risk is mainly generated in the booms, even though it becomes apparent in the bust. Therefore, the time for regulators to act –to prevent excessive risk taking– is precisely in the boom. Indeed, one of their key functions is “to take away the punch-bowl when the party is at its best.” As a consequence,



prudential financial regulation has to have at its heart the principle of counter-cyclicality which implies “leaning against the wind.”

This needs to happen through simple rules which cannot be easily changed by regulators so they will not become “captured” by the general over-enthusiasm that characterizes booms that have so often lead to undesirable relaxation of regulatory standards.

In fact, under Basle II, bank regulation did exactly the opposite. Particularly in the advanced approach, Basle II calculated required capital based on the banks own models; this perversely incorporates the inherent pro-cyclicality of bank lending into bank regulation, thus accentuating boom-bust patterns. This interacted with the use of mark to market pricing, which links asset booms with excessive leverage.

It is very encouraging that the G-20 leaders, the Basle Committee, and in several major reports on financial regulation (such as the Stiglitz, Turner and de Larosiere Reports), there is very clear emphasis on the need to introduce counter-cyclicality as a key principle of regulation. Even more encouraging is that Basel III, as mentioned above, has introduced a counter-cyclical capital buffer, though details are still being worked out.

*Indeed, one element that must be central to reform of prudential regulation is therefore counter-cyclical regulation of leverage, or its counterpart, the capital backing of financial institutions, in a broad sense, including provisions. This is equally, if not more, true of regulation in developing countries*

Counter-cyclical regulation implies that the traditional microeconomic focus of prudential regulation and supervision be complemented by a macro-prudential perspective, particularly by introducing explicit counter-cyclical features in prudential regulation and supervision that would compensate for the pro-cyclicality of financial markets. The simplest recommendations are to increase capital and/or provisions for loan losses during booms, and to avoid mark-to-market asset pricing from feeding into leverage, such as counter-cyclical limits on loan-to-value ratios and/or rules to adjust the values of collateral for cyclical asset price variations.

Counter-cyclical bank regulation can be easily introduced, either through banks' provisions or through their capital. Introducing counter-cyclical bank provisions has already been done for some time in Spain and Portugal, showing that this is a feasible option. The Spanish system requires higher provisions when credit grows more than the historical average, linking provisioning to the credit and business cycles (Ocampo, 2003). Under this system, provisions build up during an upswing and can be accumulated in a fund (along with special back-up for non-performing assets or borrowers under stress). The fund can be drawn down in a slump to cover loan losses. This counters the financial cycle as it both discourages (though does not eliminate) excessive lending in booms and strengthens the banks for bad times.

Introducing counter-cyclical provisions in Spain has been facilitated by the fact that the design of accounting rules is under the authority of the Central Bank of Spain. This helps overcome the issue that accountants in other countries do not readily accept the concept of “latent” or expected losses, on which the Spanish system is based. They prefer instead to focus on actual losses, which is more relevant for short-term investors. However, accounting principles should be designed in ways that balance the short-term needs of investors with those of individual and systemic bank stability. Currently work is being done at international level to achieve better designs.

More directly counter-cyclical rules regarding changes in the credit exposure of financial institutions would also be desirable. Particularly, financial institutions could be asked to increase general or sector-specific provisions when there is an excessive growth of credit relative to a benchmark, a bias in lending toward sectors subject to strong cyclical swings and to the growth in foreign currency loans to sectors producing non-traded goods (see below). Indeed, all maturity and currency mismatches on balance sheets as well as in expected income and payment flows should be subject to provisions.

An alternative approach for counter-cyclical bank regulation through provisions is via capital. Here, Goodhart and Persaud (2008) have presented a very specific proposal: increasing Basle II capital requirements by a ratio linked to recent growth of total banks' assets. This provides a clear and simple rule for introducing counter-cyclicity into

regulation of banks. Another virtue of this proposal is that it could be fairly easily implemented, in that it builds on Basle II.

If such a rule is introduced, it is important that it is simple and done in ways that regulators cannot loosen them easily, to avoid them becoming “captured” by the general over-enthusiasm that characterizes booms.

Two issues arise. Should the focus just be on increase in total bank assets, or –as suggested above— should there also be some weighting for excessive growth of bank lending in specific sectors that have grown particularly rapidly (such as recently loans to real estate)? Often crises have arisen due to excessive lending during boom times to particular sectors or group of countries. However, most systemic bank failures have also been preceded by excessive growth of total bank assets.

Finally, there is the crucial issue of timing. It seems key to approve such changes soon, while the appetite for regulatory reform remains high. However, their introduction should be done with a lag, so as to avoid increased capital requirements putting pressure on currently weak banks and accentuating the credit crunch. Indeed, leverage had to be reduced, but this needs to be done gradually.

Some of the least regulated parts of the financial system may have some of the strongest pro-cyclical impacts, including on emerging economies. One such example is the role that hedge funds and derivatives play in carry trade. There is increasing empirical evidence that such carry trade has very pro-cyclical effects (over or under-shooting) on the exchange rates of both developed and developing economies, with negative effects often on the real economy.

For regulation to be comprehensive, as argued above, there should be minimum capital requirements for all derivatives dealers and minimum collateral requirements for all derivatives transactions, so as to reduce leverage and lower systemic risk. Collateral requirements for financial transactions function much like capital requirements for banks. An issue to explore is whether regulation of derivatives’ collateral and capital requirements should also have counter-cyclical elements. This would seem desirable. It

would imply that when derivatives positions, either long or short, were growing excessively (for example, well beyond historical averages), collateral and capital requirements could be increased.

In addition, prudential regulation needs to ensure adequate levels of liquidity for financial intermediaries so that they can handle the mismatch between the average maturities of assets and liabilities, which is inherent in the financial system's essential function of transforming maturities, and which generates risks. The best system could be one in which liquidity requirements are estimated on the basis of the residual maturity of financial institutions' liabilities, thus generating a direct incentive for the financial system to maintain an appropriate liability structure.

Evaluating the vulnerability of domestic financial system and developing regulatory and supervisory frameworks have become essential elements of financial sector assessments undertaken by the IMF and the World Bank. It is essential that the macroeconomic and, particularly the counter-cyclical dimensions of prudential regulation and supervision, be equally and routinely incorporated in such assessments and advice.

### **C. Currency mismatches and capital account regulations**

In developing countries these counter-cyclical measures should be supplemented by more specific regulations aimed at controlling currency mismatches (including those associated with derivative operations). The strict prohibition of currency mismatches in the portfolios of financial intermediaries is probably the best rule. Authorities should also closely monitor the currency risk of non-financial firms operating in non-tradable sectors, which may eventually become credit risks for banks. Regulations can be used to establish more stringent provisions and/or risk weighting (and therefore higher capital requirements) for these operations, or a strict prohibition on lending in foreign currencies to non-financial firms and households without revenues in those currencies.

In a complementary way, and as long as there is no international lender of last resort, international rules should continue to provide room for the use of capital account regulation by developing countries. Capital account regulations can play in fact a dual

role. They can be used as a complementary tool of macroeconomic policy. But they can also help to improve debt profiles, and in this way reduce the risks associated with liability structures that are biased towards short-term capital flows.

Viewed as a liability policy, which is also relevant for prudential supervision, capital-account regulations recognize the fact that the market rewards sound external debt profiles (Rodrik and Velasco, 2000). This reflects the fact that, during times of uncertainty, the market responds to *gross* rather than merely net financing requirements, which means that the rollover of short-term liabilities is not financially neutral. Under these circumstances, a maturity profile that leans towards longer-term obligations will reduce domestic liquidity risks. The emphasis on liability structures rather than national balance sheets recognizes the fact that, together with liquid assets (particularly international reserves), the liability structures play the crucial role when countries face liquidity constraints.

In practice, capital market regulations *segment* domestic and international markets. Traditional “quantity” controls of the type used in China and India (but being gradually dismantled in these countries, as in others before) distinguish between residents and non-residents, and between corporate and non-corporate agents among the former. Prohibitions or ceilings may be imposed on foreign borrowing by domestic residents, and/or on foreign investors taking positions in domestic securities. There may be limitations on various forms of lending and borrowing in foreign currency by banks.

Another option is to introduce price-based regulations that effectively tax inflows or outflows. Taxing inflows was the choice pioneered by Chile in 1991 and Colombia in 1993 (where it was then applied more aggressively, and was applied again in 2006), using the mechanism of unremunerated reserve requirements (URRs) on capital inflows. Argentina and Thailand have also used this approach in recent years, and taxing financial (including external) transactions has been common in Brazil. Taxing outflows was introduced by Malaysia in February 1999 as a substitute for the quantitative regulations it had introduced in 1998. The basic advantage of price-based over traditional regulations is their non-discretionary character.

A large literature on these experiences leads to four main conclusions (Ocampo, 2008; see also Ariyoshi *et al.*, 2000). First, controls on both inflows and outflows can work, but the authorities must be able to administer regulation while closing loopholes and (especially) avoiding corruption. *Permanent* regulatory regimes that can be tightened or loosened in response to external market conditions are probably the best option in this regard. Second, exchange controls and quantitative restrictions may be the best means to reduce the domestic sensitivity to global financial cycles, as reflected in China's and India's avoidance of the Asian crisis in the late 1990s. URRs and similar measures may only have temporary effects on capital inflows (especially if they are not ratcheted up during a surge) but do seem to influence interest rate spreads. Third, URRs and other reserve requirements help hold down short-term debt, which is highly volatile and thus a significant source of vulnerability. Fourth, and perhaps foremost, controls are a complement for sound macroeconomic policies, not a substitute for them.

Capital controls obviously have costs. During surges, they increase the cost of financing, but that should not be seen as a drawback, because this is precisely what they are supposed to do. Longer term costs are more important. In this regard, they can discourage operations by foreign institutional investors who may act as market makers for domestic bond and stock markets. Ways of avoiding this trade-offs between the short-term effectiveness of capital controls and their possibly unfavorable long-term repercussions on financial development are not simple.

Despite their advantages, capital account regulations were not widely used during the boom in the early to mid 2000s. The trend continued to be towards capital account liberalization, reflected in particular in the gradual liberalization in China and India. The moves to introduce URRs by Argentina, Colombia and Thailand led then to rejection by financial markets; their lead was not followed. Some countries introduced other regulations, particularly on purchase of domestic currency government bonds by international institutional investors. Other liability policies in developing countries played an important role in recent years, particularly prudential instruments aimed at mitigating currency mismatches and active liability management by public sectors. Since capital

flows again surged in 2010, a number of developing countries have introduced measures to discourage capital inflows through regulations on their capital account.

#### **D. Regulating compensation of bankers**

Another complementary way to discourage counter-cyclicalities is to regulate compensation of bankers and other market actors.

As Stiglitz (2010) points out, incentives are at the heart of the boom-bust behavior of financial and banking markets. A large part of bonuses were tied to short-term profits; these are positive in good times and never negative, even when big losses occur. This encourages bankers and fund managers to take a lot of risk in boom times which results in high bonuses for them. However, they will not lose money if heavy losses are incurred later due to their excessive risk-taking.

In good times, profits are not used to increase the capital of the financial institutions and a large proportion are paid out as bonuses. When a crisis comes, bail-outs occur usually to help re-capitalize the banks, ultimately paid by the tax-payers. It can be argued that taxpayers are paying ex-post for excessive bonuses.

A political point can be made in that high bonuses and high remunerations contribute to great wealth concentration. As a consequence, financial actors gain political influence, for example by financing political campaigns. The increased wealth and influence of the financial industry also may increase the risk that their regulators become captured.

There could be a simple solution to this problem. Bonuses could be accumulated into an escrow account; they could be cashed only after a period equal to an average full cycle of economic activity, if the activity it is compensating remains profitable. Such a change would reduce existing incentives towards short-termism.

Individual firms or the financial industry could introduce such changes, as stability is in their own long term interest. However, collective action problems make this highly unlikely. As a consequence, outside regulation of compensation schemes may be

the best way forward, even from the perspective of the stability of individual financial institutions, but particularly beneficial for systemic financial and macro-economic stability. Since the crisis, steps have been taken to regulate bonuses, but these have been relatively timid and have not been properly coordinated internationally.

### **III. BETTER CRISIS MANAGEMENT**

#### **A. The provision of counter-cyclical official liquidity by IMF lending**

As was pointed out in the first section of this paper, a critical role of international financial institutions is to mitigate the effects of financial markets and to open policy space for counter-cyclical macroeconomic policies. A key mechanism for this purpose is the provision of loans by the IMF to deal with external shocks.

##### 1. For capital-account led crises: the long road to an appropriate facility

At the country level, central banks have acted for many decades as lenders of last resort to prevent financial crises and their deepening when they occur. Equivalent international mechanisms are still at a fairly embryonic stage, with the current IMF arrangements operating, until recently, more under the principle of the “emergency financier,” since there was no automaticity in the availability of financing during crises. Enhanced provision of emergency financing at the international level in response to external shocks is essential to lowering unnecessary burdens of adjustment and to avoid the spread of crises. Appropriate facilities should include both a liquidity provision to cover large capital flow reversals and to compensate for volatility in the real capacity to import, either due to fluctuations in export or import prices. As we will see below, there seems to be more progress recently on the former than the latter.

In recent decades, capital-account liberalization and large capital-account volatility greatly increased the need for official liquidity to deal with large reversals in capital flows, especially during crises. There is increasing consensus that many of the recent crises in emerging markets have been triggered by the self-fulfilling liquidity runs. Indeed, capital outflows could be provoked by many factors not related to a country’s policies, as is illustrated by the current global crisis.



The enhanced provision of emergency financing in the face of capital-account crises is thus important not only to manage crises when they occur, but also to prevent such crises and avert contagion (Cordella and Yeyati, 2005; Griffith-Jones and Ocampo, 2003). To address this obvious need, the IMF has made efforts to improve its lending policies during capital-account crises. In 1997, the Supplemental Reserve Facility (SRF) was established (this facility was, however, eliminated in March 2009 as part of a broader set of reforms discussed below).

The evidence that even countries with good macroeconomic fundamentals might be subject to sudden stops of external financing also gave broad support to the idea that a precautionary financial arrangement, closer to the lender-of-last-resort functions of central banks, had to be added to existing IMF facilities. In 1999, the IMF introduced the Contingent Credit Line (CCL). The facility was never used and was discontinued in November 2003. Among the factors that may have contributed to the fact that countries failed to use it, observers have emphasized “entry” and “exit” problems (Buirra, 2005). Contrary to what was desired, the potential use of the CCL was seen as an announcement of vulnerability that could harm confidence.

Since the expiration of the CCL, the IMF explored other ways to achieve its objectives. As it recognized, the instant liquidity provided by a well-designed contingency line “would place a ceiling on rollover costs –thus avoiding debt crises triggered by unsustainable refinancing rates, much in the same way as central banks operate in their role as lenders of last resort” (IMF 2005b). The Medium-Term Strategy of the IMF (IMF 2005a) thus included a provision for a continued dialogue on a mechanism of contingency financing. A first proposal on a “Reserve Augmentation Line” (RAL) was put forward in 2006. This line would have reached 300 percent of quota. It required prequalification, made at the country’s request, which would have allowed the country to use resources automatically when needed. Some developing countries expressed that the RAL would have to be improved. The IMF never approved it.

At the 2008 IMF-World Bank meetings, the G-24 called on the IMF to create a new liquidity instrument with the aim of mitigating vulnerability of developing countries

to the global financial crisis. In response, the IMF established the short-term liquidity facility (SLF) in October 2008. The SLF provided rapid access to loans for countries that have sound macroeconomic policies but yet were still facing liquidity issues due to the global economic climate. These loans were to be disbursed without the traditional IMF ex-post conditionality attached, though Managing Director Strauss-Kahn stressed that borrowers would be expected to maintain a sound macroeconomic policy framework. Loans via the SLF had a three-month maturity; borrowing limits were up to 500 percent of a country's quota. The only concrete stipulation was that the borrower's previous Article IV Consultation had been positive. The IMF's actions were welcomed as a first step toward a more desirable facility.

Yet, as the global crisis deepened and spread through emerging markets and into developing economies, no country called upon the SLF. An IMF program free of conditionality has been on the reform agenda of economists and policy makers since the structural adjustment programs failed in Latin America in the 1980s and again in East Asia in the 1990s (see, for example, Griffith-Jones and Ocampo, 2008). Why, then, was the SLF not tapped?

As John Williamson (2009) points out, the SLF was “useful, but it at best can help a limited number of countries.” Because of the preconditions imposed, eligibility was more restricted than was hoped by the G-24 and other proponents. Many, such as UNDP's Administrator Kemal Dervis (2008), also expressed concern that programs such as the SLF effectively create two groups of countries: those deemed by the IMF and wealthy countries as having solid macroeconomic foundations and those who do not. In calling for expanding access to the SLF, he stated that such an “all or nothing categorization will create serious political tensions... [and] will also make it politically difficult for these governments [who are left out] to engage in such negotiations if other countries have immediate access to assistance from the IMF or Central Bank swaps.” These fears were correctly set out. For instance, when speaking of Argentina's lack of a recent Article IV Consultation, Managing Director Strauss-Kahn stated: “I'm afraid that the country you've just mentioned ... will not be eligible for this facility.”

It is probable that the handful of countries eligible for the SLF were those who were least in need of loans from the IMF. Instead, they were able to raise the requisite capital through private or bilateral sources. The same day that the IMF announced the creation of the SLF, the US Federal Reserve finalized reciprocal currency arrangements with Mexico, The Republic of Korea, Singapore, and Brazil –four countries which would have most likely qualified for IMF loans under the SLF. These swap lines had limits of up to \$30 billion and expired in October 2009.

Mexico publicly stated that it had no plans of ever using the SLF, though it welcomed its establishment as a “potentially useful tool for countries with strong policy records.” When the SLF was replaced by the Flexible Credit Line (FCL), Mexico became the first country to use the new facility with a precautionary arrangement of \$47 billion, which it did on the eve of the G-20 meetings in London. Two days later, Banco de México announced that it would activate its \$30 billion swap line with the Fed. Mexico supplemented its dollars from the Fed with a precautionary line of credit from the IMF.

In recognition of SLF inadequacies, in March 2009, the IMF Executive Board voted to replace it with the FCL. At the same time, the IMF announced a range of other measures, such as modernizing conditionality, enhancing stand-by arrangements, and doubling access limits for non-concessional loans. Like the SLF, the FCL is based on ex-ante qualifications of sound economic policies and contains no ex-post conditionality. The FCL directly addressed the noted shortfalls of the SLF: It is a renewable credit line (either at six or twelve-month periods), has no borrowing limit, allows borrowers to draw at any time or use it as a precautionary instrument, and has a longer repayment period of three to five years. The IMF stressed that the pre-set qualification criteria are at the core of the FCL. When used as a precautionary tool, the FCL is intended to bolster confidence and prevent crisis situations. Though there seems to be greater flexibility, the FCL is still for “countries with very strong fundamentals and track records of policy implementation”.

Many policy makers, especially those in large emerging markets, welcomed the FCL as a marked improvement over the SLF: Brazil’s finance minister, Guido Mantega,

said “This way, the IMF can react quicker.” South Africa’s finance minister, Trevor Manuel, said: “At a time when the global economy is experiencing the deepest and most widespread crisis in recent history, this facility, together with increased lending access limits and simplified terms for borrowing, will enable the IMF to better respond to the various needs of all member countries”.

Positive reception, however, was not universal. Both South Korea and Singapore announced they were not interested in pursuing an IMF loan, even with the modified facility. Although welcoming modifications made by the IMF, Brazilian President Lula made it quite clear that “Brazil needs no money from the IMF”. These statements point to the Fund’s more serious, and much more difficult to tackle, problem: stigma. Still feeling the effects of the IMF response to the Latin American and Asian financial crises, these countries were refusing to turn to the IMF. Eswar Prasad, formerly at the IMF, noted this “The main emerging markets are going to remain wary of relying on the IMF for emergency financial support until they are convinced that the leopard has really changed its spots.” Mexico’s April 2009, announcement of its intention to seek a \$47 billion loan from the FCL to help it weather the effects of the financial crisis was seen as helping address the stigma. In doing so, Finance Minister Agustin Carstens reiterated that Mexico had no need or intention to actually draw on the credit line, but was looking to it for precautionary measures –exactly as the IMF had intended, and as those advocating such a contingent preventive credit line had suggested for a long time. Two weeks later, Poland followed with a \$20.5 billion request for a precautionary credit line, as did Colombia with a \$10.4 billion request. The terms of the FCL were improved in August 2010, by increasing the scale of the resources and extending the period for which it can be used, but these have been the only three countries using it so far.

It should be added that in March 2009, although some existing facility were eliminated (particularly the SRF and, as we will see, the Compensatory Financing Facility, CFF), credits under the Stand-by facility were doubled and countries were allowed to use it for preventive purposes (termed ‘high-access precautionary arrangements’). In August 2010, an additional step was taken, with the creation of the new Precautionary Credit Line (PCL) for countries which the IMF deems have good policies, but that do not meet

the criteria of the FCL. All these facilities have been more broadly used. The other significant reform introduced in March 2009 was the elimination of the relationship between IMF disbursements and structural conditionality.

## 2. Compensatory financing for low-income countries

The international community has a clear incentive to protect emerging markets and low-income countries from the adverse effects of external shocks. As evidenced by the current crisis, external shocks add to global instability by eliminating export markets and increasing the need for foreign aid. For individual countries, unnecessary reductions of imports in the face of temporary shocks is highly undesirable, from the perspective of sacrificing growth and poverty reduction, that could be avoided if financing is provided. It was, therefore, disappointing that, when announcing the FCL, the Compensatory Financing Facility (CFF) for middle income countries was cancelled, instead of correcting its basic deficiency: excessive conditionality.

Created in 1963, and modified many times since, the CFF addressed members' balance of payments problems arising from temporary export shortfalls and significant increases in cereal imports, beyond the member's control. Adjustments to the CFF in 2000 simplified access limits, but, more notably, increased the level of conditionality associated with borrowing, to make it as stringent as an upper credit tranche loan. A Fund review of the facility in 2004 revealed that, despite external shocks to many economies as a result of the September 11 2001 terrorist attacks on the United States and a drastic reduction in cereal production in southern Africa, no country had borrowed from the CFF since these modifications had been made. Such a fact stands in stark contrast to the forty-two loans that had been made in the 1990s under this facility. As will be discussed in more detail below, by definition, exogenous shocks are not the fault of the country in question and therefore loans to those countries should not carry any conditionality.

Arguing that the facility had not been used since 2000, that the question of temporality is often difficult to assess, the Executive Board eliminated the CFF as a lending option in March 2009.

The IMF's main instrument for addressing the needs of low-income countries was for a long time the Poverty Reduction and Growth Facility (PRGF). Since the creation of the PRGF in 1999, augmented PRGF arrangements first became the vehicle the Fund has used to provide financing for low-income countries that are suffering from exogenous shocks. This mechanism had the main advantage that financing was concessional. Yet, this mechanism had a number of problems. First, it was restricted to only some low income countries, those with PRGF programs. Consequently, it was linked to a high conditionality Fund arrangement, inappropriate as terms of trade shocks are caused by external circumstances. Secondly, as the Fund itself recognized (IMF, 2005a), PRGF average augmentation was very small compared to the impact of the shock. 2008 saw a marked increase in the number of countries requesting augmentations to their existing PRGF arrangements; most of these countries sought this additional financing in an effort to mitigate the adverse effects of the global increase in food and energy prices (see Table 1) though as the global crisis hit, it was also used to compensate for its effects, though the scale was small.

<b>Date</b>	<b>Country</b>	<b>PRGF type</b>	<b>Amount (millions SDR)</b>	<b>Reason</b>
Jul-04	Bangladesh	Augmentation	53.3	Associated with first approval of under newly created Trade Integration Mechanism
Dec-04	Kenya	Augmentation	50	Rising oil prices and drought
Dec-04	Azerbaijan	Reduction	12.9	Cancellation of one review
Nov-05	Niger	Augmentation	19.7	Severe drought and terms of trade deterioration
Sep-06	Burkina Faso	Augmentation	6	Decline in terms of trade
Dec-06	Moldova	Augmentation	30.8	Sharp increase in natural gas import prices and disruptions in wine exports to traditional markets
Apr-07	Kenya	Reduction	75	Improved external position
Jan-08	Burkina Faso	Augmentation	9	Expected decline in cotton exports and rise in oil imports.
May-08	Kyrgyz Republic	Augmentation	8.9	Mitigate effects of rising food and energy prices.
Jun-08	Central African Republic	Augmentation	8.355	Mitigate effects of rising food and energy prices.
Jul-08	Madagascar	Augmentation	18.33	Rising food and oil prices, as well as the impact of cyclones.
Jul-08	Grenada	Augmentation	1.46	Mitigate effects of rising food and energy prices.
Sep-08	Togo	Augmentation	18.35	Rising food and oil prices as well as severe flooding
Dec-08	Sierra Leone	Augmentation	10.4	Strengthen the foreign reserve position to cope with the external shocks from world food and fuel price increases and the unfolding global financial crisis
Dec-08	Benin	Augmentation	23.22	Mitigate effects of rising food and energy prices.
Feb-09	The Gambia	Augmentation	6.215	International reserves declining and the current account deficit widening as a result primarily of reduced income from tourism and remittances.

The IMF's Exogenous Shocks Facility (ESF) was established within the PRGF Trust in November 2005 to provide financing and policy support to low-income countries facing exogenous shocks. The ESF was for countries eligible for the PRGF, but did not have a program in place. For the first three years of its existence, the ESF had no borrowers. In postulating why this was the case, Griffith-Jones and Ocampo (2008) cite the major shortfalls of the ESF as: (i) the slow pace of disbursement, which did not allow countries to react to crises in a timely manner; (ii) the small scale of liquidity provided, as countries were only allowed to borrow 25 percent of the quota annually and 50 percent for the facility as a whole, which, in most cases, was not enough to counteract an unanticipated shock; the small scale of the compensatory financing for trade shocks was also a major problem of the Enhancements of the PRGF; and (iii) the tying of the loan to the Poverty Support Instrument (PSI), which has a conditionality of its own, in addition to that imposed by the ESF. Countries without a PSI needed an approved poverty reduction strategy. Given the shock was exogenous, by definition, all this conditionality was inappropriate.

The Executive Board of the IMF sought to improve upon the facility. A group of international NGOs,<sup>2</sup> pressed the IMF to adjust the ESF to better respond to the needs of low-income countries, particularly in the face of food and energy price increases that occurred in the summer of 2008. Their main concern was the fact that if shocks are exogenous, conditionality is inappropriate. This coincided with the views expressed by Griffith-Jones and Ocampo (2008).

The IMF Executive Board approved fairly significant adjustments to the ESF in September 2008. The modification to the ESF had two main parts: a rapid-access component and a high-access component. First, it allowed countries to access the ESF loans fairly quickly, up to 25 percent of its quota for each exogenous shock (IMF 2008). This loan could stand alone, or be part of a larger package. The second component increased the borrowing limit to 75 percent of quota for each arrangement. One or two year programs were established, and finances disbursed upon review. In addition, the

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<sup>2</sup> The full list of NGOs signing the document is: Action Aid International, African Network on Debt and Development, Bank Information Center (US), Bretton Woods Project (U.K.), European Network on Debt and Development, New Rules of Global Finance Coalition, US, and Oxfam International.

IMF dropped the requirement to have an approved Poverty Reduction Strategy and streamlined conditionality under the rapid-access component, (IMF 2008). However, the high access component still had inappropriately high conditionality. Perhaps most importantly, the limit of 75 percent of quota was very limited, especially in a context of very large declines of commodity prices, as during the crisis. Since these changes took effect, several countries drew on the facility; the fact that the global crisis had hit low income countries hard via the trade, (especially commodity price) channel was naturally an important factor

In April 2009, the IMF doubled access to all its low income facilities, including the ESF. It also increased the global capacity of IMF loans to these countries to \$17 billion. Though this was very positive, it may have been still insufficient, given the scale of the shocks facing low income countries in a world that is increasingly volatile due both to frequent financial crises and growing natural disasters linked to climate change. More broadly, the question arises why limits are so much lower for low income than middle income countries.

In March and especially December 2009, the IMF modified quite significantly the lending facilities through which it lends to low income countries, which is now done through three facilities: (i) The Extended Credit Facility (ECF), which replaced the Poverty Reduction and Growth facility (PRGF). (ii) A stand-by line, which can either be used for larger external shocks (that used to be addressed by special facilities, like the ESF for low income countries) or other balance of payments needs linked to domestic policy problems. From our perspective, this particular change is inappropriate, as balance of payments needs arising from external shocks should be clearly distinguished from those caused by domestic policy mistakes; the former should, above all, have lower, or ideally no conditionality. And (iii) a Rapid Credit Facility (RCF), which provides limited support during for balance of payments needs either due to natural disasters or a trade shock, with relatively low conditionality. This is a useful quick disbursing facility, but its scale is too small. A positive change was that the IMF granted all low income countries an exceptional cancellation of all owed interest payments on concessional loans until the end of 2011, as well as lower interest rates on future loans.



The history of the last 15 years shows that the IMF has played a positive role as a last resort lender, but it needs to be more active in awarding larger emergency financing subject to lower levels of conditionality. It needs to continue to improve its design of mechanisms with sufficient resources, preferably that are automatic and speedy, so as to deal with shocks that developing countries face, both those coming from the capital account, that affects mainly middle income countries, and the trade shocks that low income countries face.

### 3. Conditionality

As important as the lending facilities of IMF is the conditionality attached to them. Conditionality in IMF-supported programs had been introduced in the 1950s and incorporated as a requirement into the Articles of Agreement in 1969. Until the 1980s, conditionality mainly focused on monetary, fiscal, and exchange-rate policies. However, in the late 1980s, and especially in the 1990s, in addition to traditional quantitative targets for macroeconomic variables, IMF financing was increasingly conditional on structural changes, involving changes in policy processes, legislation, and institutional reforms. This resulted in a significant increase in the average number of structural conditions in Fund-supported programs. These climbed from 2-3 per year per program in the mid-1980s to 12 or more per year per program by the second half of the 1990s, and to as high as 117 in the case of Indonesia after its financial crisis in 1997 (International Monetary Fund, 2003b). This change was also reflected in increasing numbers of performance criteria, structural benchmarks and prior actions.

The increase in the number of structural conditions raised concerns that IMF was exceeding its mandate and expertise. It has also been argued that the number and detail of structural policy conditions attached to IMF loans were too extensive to be fully effective (United Nations, 2001). In this regard, it has been observed that the rate of member countries' compliance with Fund-supported programs fell from over 50 percent in the late 1970s and early 1980s to about 16 percent in the 1990s, if compliance is defined as that which permitted the full disbursement of the loan (Buirra, 2003).

There were also concerns that excessive conditionality might have undermined the national ownership of programs, thereby impeding their implementation. Indeed, following closely the arguments related to external assistance in general, it has become clear that lack of real domestic ownership is the most important obstacle to effective program implementation, and that conditionality is not a substitute for government commitment. In this regard, it has also been argued that “ownership” can be promoted only by an effective plural discussion of the virtues of alternative types of “structural reforms” (Griffith-Jones and Ocampo, 2003).

Against the backdrop of continuing debate over the use and effectiveness of structural conditions, in early 2008, the Independent Evaluation Office published an evaluation of the use of structural conditionality in IMF-supported programs. It focused on two distinct issues: the effectiveness of structural conditionality at bringing about lasting economic change and the impact of the 2000 Streamlining Initiative to achieve greater focus in the use of conditionality in Fund arrangements.

The report found that a significant number of structural conditions are very detailed, not obviously critical, and are often felt to be intrusive and to undermine domestic ownership of programs. Most programs failed to explain how so many conditions at such a level of detail are needed to bring about the desired long-lasting reforms. The report also found that compliance with structural conditionality, at about 50 percent, is low compared to about 85 percent for macroeconomic conditionality. In these circumstances, it is difficult to see how structural conditionality contributes to ensuring adequate safeguards for the use of Fund resources or how it provides assurances to borrowing countries regarding the conditions under which Fund resources would be available to them –the roles envisaged for conditionality in the Fund’s Articles of Agreement.

The evaluation found that the average number of structural conditions in IMF-supported programs had not declined since the launching of the streamlining initiative in 2000. However, progress has been made in that the composition of structural conditionality has changed, showing a significant shift toward core areas of IMF

expertise, with marked declines in the share of conditions in trade and privatization and increases in tax policy, public expenditure management and financial sector issues. Yet, about one-third of structural conditions continue to fall in non-core areas. Improving the design of structural conditionality in IMF-supported programs remains a key challenge for the Fund.

Recommendations from the IMF Evaluation Office included reaffirming the need to reduce the volume of structural conditionality. As a practical first step, a notional cap could be set, possibly at four or five conditions per year –half the current average for performance criteria and prior actions. We also believe that any conditionality should be restricted to core IMF issues.

It is important to clarify the link between structural features and macroeconomic policies. Structural macroeconomic balances can be produced, and in fact have been produced in the past, in economies with high degrees of public sector intervention. Also, considerable academic debate still goes on as to whether more liberalized economies are superior in terms of their resilience, their efficiency and their ability to grow. We have growing evidence that vulnerability may, in fact, increase with liberalization, particularly vulnerability to capital account shocks. Without adequate correction for market failures, efficiency is not guaranteed, and liberalized economies do not necessarily grow faster. A well-known paper by Rodríguez and Rodrik (2001) made this point clear: macroeconomic stability is essential for growth but more liberalized economies (particularly in relation to trade) do not necessarily grow faster.

This implies that “ownership” requires meeting several additional conditions: effective alternative reform packages should be available to countries; such alternatives should be provided by the Bretton Woods institutions with the same technical rigor as traditional reform programs; these institutions should be ready to provide such support when asked to do so; but for this, the composition of IMF (and World Bank) staff should be representative of the heterogeneous views that exist on structural and macroeconomic adjustment. In a complementary way, these institutions should be ready to call organizations or economists who think differently to support the design of alternative

programs. This clearly means that IMF conditionality should be restricted to macroeconomic policies, and that a *strong negative presumption* should be established against *any* form of structural conditionality that goes beyond factors that directly hinge on macroeconomic balances.

It must be said finally on this issue that one positive recent change in conditionality is that implementation of structural policies in IMF programs will be monitored in the context of program reviews rather than through the use of structural performance criteria. According to IMF, this means that countries will no longer need formal waivers if they fail to meet a structural reform by a particular date. Though positive, however, it is not clear why structural reforms need to continue to be part of IMF programs

#### 4. Increasing Fund resources

As the realities of the current crisis began to settle in, an increasing number of countries turned to the IMF in the face of balance of payments problems. This sparked a concern that the current lending capacity of the Fund would prove to be inadequate given the expected magnitude of the crisis. Developing countries and many other observers have, for some time, emphasized the limitation of Fund resources. Indeed, the size of the Fund has shrunk relative to the world economy over the past thirty years, particularly in relation to trade and cross-border capital flows (IMF, 2009a).

At the start of 2009, the IMF contended that it had the funds to meet the foreseeable demands, but that it would also be “prudent...to add contingent facilities that would double the resources available”. Various proposals to significantly increase Fund resources were endorsed by the G-20 in spring 2009, and included a new allocation of special-drawing rights (SDR) equivalent to \$250 billion, which was a very significant amount; loans from countries that currently have a surplus of reserves; increasing IMF members’ quotas; and sales of IMF gold resources. Section IV focuses on the first of these issues, so we will concentrate here on the others.

The most important commitment in terms of boosting the financing for IMF credit lines was the mix of \$250 billion in immediate bilateral financing and an additional \$250 billion through a revamped New Arrangements to Borrow (NAB).

Increasing members' quotas has been the traditional means of replenishing the Fund. The G20 agreed to accelerate the next quota review to January 2011. While this is a marked improvement over its previously scheduled date, it is short of the April 2010 date requested by the Committee on IMF Governance Reform headed by Trevor Manuel (IMF, 2009a). Given important demands on Fund resources a major increase in quotas may be needed.

The use of arrangements to borrow as the way to provide the resources for IMF finance emergency financing has the basic disadvantage that it is not truly multilateral and gives a disproportionate influence to those countries providing funds. It also generates uncertainty as to the funds available to the IMF for its operations. Quota increases are better in this regard, but have the major problem that only about 30% are available for new lending (Polak, 2005, ch. 7). For these reasons, as argued below, an SDR-based IMF is the best option.

We will discuss below (in Section IV) in greater depth, a major reform of the global monetary system that would have at its center an SDR-based IMF. We will argue there that this way of financing the Fund is clearly superior to both arrangements to borrow, in their different modalities, and even to quota increases.

## **B. Creation of an International Debt Workout Mechanism**

As it is widely accepted, and even beyond the traditional trade-off between financing and adjustment in the face of balance of payments crises, the global financial architecture cannot rely exclusively on emergency lending (or "bailouts", as they are generally called) for two major reasons, which can be seen as the two sides of the same coin. The first is that it may result in unsustainable levels of foreign indebtedness. The second is that it may generate moral hazard for creditors. For these reasons, an

international financial architecture must have complementary mechanisms to finance emergencies and debt workouts to manage debt crises.

The dividing line between when to use one or the other has been traditionally set as that between “liquidity” and “solvency”, but as we know this line is not easy to draw, as in many cases the lack of liquidity financing may lead into insolvency (we could add that this is true at the level of firms as well as nations). The Bretton Woods arrangements had another dividing line: only *current account* deficits should be financed, whereas capital account deficits should be managed with capital controls. Some authors have suggested going back indeed to this dividing line (Akyüz, 2005), but it may be too late for that purpose. In a world with large pro-cyclical capital flows, it is inevitable that there should be some financing of capital account, not only current account deficits. Capital controls can also play a central role in this regard, as discussed above.

In the discussions that were launched by the Asian crisis, most of the abundant reports and academic contributions demanded that the system should *both* provide more liquidity financing during capital account crises and a framework for the resolution of debt crises. Indeed, this is the way national systems are designed: they include both “lender of last resort” financing (and some bailouts of non-financial firms through government interventions of different sorts) and bankruptcy procedures. National bankruptcy frameworks are not only intended to give the debtor a “fresh start” and treat debtors and creditors fairly, but also promote efficiency by creating incentives for creditors to undertake due diligence in lending—ensuring that they lend to people who can pay back what is borrowed. The basic reason for rescuing firms is that bankruptcy generates a significant loss of capital, not only because capital equipment and even real estate owned by firms are sold at very low prices, but also because the “intangible capital” of the firm (its reputation, administrative traditions and networks of clients) is entirely destroyed. The reasons for rescuing countries are even more powerful but the instruments must be different.

Before the Second World War, the normal way to manage sovereign debt defaults at the international level was through inter-governmental arbitration. Creditors were

organized in committees which tried to negotiate directly with the country in default. When they failed, they sought assistance from their own governments. (It must be added that, in some cases, and up to the early twentieth century, they went so far as to intervene militarily in the debtor country.) Government facilitation was still the mechanism used in the early post-war period to settle the debts which had gone into default in the 1930s. After the War, the only regular mechanism that was put in place on a regular basis was the Paris Club, born in the mid-1950s to manage official debts. Official ad-hoc initiatives also include the Heavily Indebted Poor Countries (HIPC) Initiative launched in 1996 and the succeeding Multilateral Debt Relief Initiative (MDRI) of 2005. In the case of private debts, the Brady Plan was a late but important part of the process of overcoming the Latin American debt crisis, and interventions by industrial countries' governments and central banks were common to twist the arms of private creditors to maintain short-term financing lines and rollover credits during the Asian crisis.

The remaining mechanisms were ad-hoc in nature. They include, the "London clubs" to renegotiate bank debts, which is really not a formal set up but a generic name to a mechanism that has a touch of the way renegotiations were done prior to the war. Collective action clauses (CACs) in some issues have been used for some time in some markets (e.g., London) to facilitate eventual renegotiations and became broadly accepted in recent years in others (New York) but they have not been fully tested yet. Bond swaps that amount to important rescheduling of debt service have been used in some cases even without CACs. And, of course, a few cases of unilateral default have led to (conflictive) settlements that have had a significant "haircut". Russia in 1998 and Argentina in 2001 are the most important examples in that regard.

All these mechanisms have serious deficiencies. The most important is that they generally come too late, when over-indebtedness has had devastating effects on countries: a collapse of economic activity, a long period of lost income and jobs, increased poverty and, in many cases, worsening income inequality. This is also true of the Paris Club, which has historically relied on sequential rescheduling of debts, and it is certainly true of the Brady Plan and HIPC. Haircuts are absent or insufficient to guarantee a fresh start, and thus lead to renegotiations later on. Insufficient debt reduction under the Brady Plan

may explain in part why several Latin American countries faced a difficult adjustment in the face of the Asian crisis. And it is certainly true of HIPC, which had to be complemented with the MDRI. In a sense, a common strategy has been simply to use renegotiations to postpone, not solve the problem.

This has been particularly bad in the case of consensual, market-based private rescheduling. Although they are useful rollover operations to manage “bumps” in the debt servicing schedule, they have not contributed to solving problems of over-indebtedness. Since swaps are voluntary, the terms on the new bonds had to be attractive enough to induce creditors to participate. So, as Spiegel (2010) has shown, even in cases when investors experienced losses over a short time period, returns to investors were quite good over a longer time horizon. The underlying problems could therefore resurface later, as the case of Ecuador show. It is, again, only in the cases of unilateral defaults that creditor losses are significant.

An additional problem is that the existing system –or, rather, non-system—treats creditors and debtors in dissimilar ways, thus leading to horizontal inequities. Even Paris Club creditors have complained that private lenders do not follow the guidelines of their renegotiations (in which, of course, private creditors have no voice). Leaving private renegotiations to take the lead may be particularly unfair to debtors with weak bargaining power, whereas large countries (Argentina and Russia, again) may be able at the end to get a better deal.

The Asian crisis led to several initiatives in this area, but no final solution was adopted (see a full review in Herman, Ocampo and Spiegel, 2010). The renewed capital account boom experienced by developing countries since 2002 till the crisis no doubt served to postpone the problem, which resurfaced again, in the European context, during the current world financial crisis. The most important initiative was undoubtedly the Sovereign Debt Restructuring Mechanism (SDRM) proposed by the IMF in 2001 with encouragement of the US Treasury Secretary. However, it was killed in 2003 by a coalition made of the US Treasury itself and several emerging market governments, which feared that they were giving a signal to the market that they would contemplate



defaulting at some time in the future. The private sector also opposed it, among other reasons because it saw the IMF as unlikely to be a “neutral mediator”, as it was also a creditor. However, its main reason for opposing it seems to have been that it felt introducing the SDRM would weaken its bargaining position in eventual debt renegotiations.

Of other initiatives, the most important, as already noticed, was the tendency to generalize CACs. This initiative, which had been proposed after the Mexican “Tequila” crisis of 1994, was finally speeded up by the private sector, largely to help kill the SDRM discussions. The initial fear that this would result in higher risk premium for those countries choosing to include this provision in their bond issues did not materialize. Meanwhile, a group of banks together with some major emerging countries promoted a code of conduct for market-based renegotiations, formally called the Principles for Stable Capital Flows and Fair Debt Restructuring, which was adopted in 2004 and is promoted by the Institute of International Finance. There were also several other initiatives coming from the academic world and non-governmental organizations. NGOs have also opposed IMF participation in the debt resolution process, not only because their rejection to traditional conditionality but also because the Fund’s governance structure is today dominated by creditor countries.

As part of the current debates on redesigning the world financial architecture, it is urgent that this debate come to conclusion, by designing a well structured sovereign debt workouts mechanism. The Monterrey Consensus as well as the Doha follow-up encourage a global decision in this area. As Herman, Ocampo and Spiegel (2010, ch. 17) have argued, this mechanism should be a *single system for relief*, which should embody mechanisms for debtors to talk with their creditors with the goal of reaching a *timely and comprehensive debt restructuring* that gives the debtor country a *fresh start*. This latter principle should be understood in the context of human development, thus aiming at debt conditions in which the burdens of adjustment do not severely affect the disadvantaged in society. Although the poorest countries may require special treatment to support their recovery after crises, this task should be left to the *aid* regime —i.e., to official development assistance. A complementary but major task of multilateral development

cooperation is to support countries that have undergone debt restructuring to have a smooth and hopefully speedy return to markets. Multilateral development banks can play a crucial role in this regard, through co-financing or the issue of guarantees to new debt issues by countries.

Any process of this type has to start with the declaration of moratoria by the debtor country, which unleashes the renegotiations. As in national bankruptcy regimes, the first step in any renegotiation would be characterized by the attempt by the defaulting country to reach a voluntary agreement with creditors. The process should also serve as a framework to coordinate the positions of creditors within and across different classes of lenders (including government creditors that operate today through the Paris Club). It should aim at a fair deal with the debtors but also an equitable treatment of creditors, including minority lenders.

The structure of the renegotiation process could follow two alternative approaches. The first would be an International Debt Court, created as an independent body, which would be in charge of the whole process. It would work first as an “honest broker”, encouraging but not involving itself in the debtor/creditor negotiations. But it will also be in charge of the arbitration, either at the request of the parties or on its own, if the voluntary renegotiations are unsuccessful or are delayed beyond an agreed period. The Court would ensure that agreed international principles of a fresh start, equitable sharing of haircuts and priority of claims against the debtor government are followed. As in national “debtor in possession financing”, it would also have the authority to ask creditors to provide new financing to the country undergoing debt restructuring. These new debts, as well as all financing provided when the country is in default (e.g., IMF “lending into arrears”, loans by multilateral development banks and official bilateral loans, but possibly also some private credits) would have seniority over defaulted debts.

The second alternative would be to empower a global financial institution to take over the responsibilities of “honest broker” and eventual arbitrator. This can be a UN body, but also the IMF. However, as the SDRM discussions revealed, the Fund is unlikely to be seen as a neutral mediator. However, in this case, the mechanism could

function through a system of independent panels of experts, similar to those used under the dispute settlement mechanism of the World Trade Organization. The panel would take the responsibility for mediating the negotiation between the debtor and its creditors and ultimately determine the solution, following agreed international policy guidelines.

There can also be a mix between these two approaches. For example, the Fund or the independent panel could first seek to facilitate voluntary debtor/creditor negotiations for a limited time period, after which it would refer the case to the International Debt Court. It is, of course, essential, that national courts recognize the legitimacy of international rulings in this area, under either framework. An international treaty is therefore essential, and should be negotiated in the United Nations, even if this organization is not in charge of its functioning. Such a treaty should provide clear guidance as to what constitutes a “fresh start” and what is required to reach internationally agreed human development goals. Incorporating such considerations of fairness are essential to boost the credibility of any designed framework with debtors. Debtors will also benefit from the definition of clear rules of the game and the sustainability of the debt situation once the process is over in individual cases.

It must be emphasized that the workout mechanism designed should deal primarily with sovereign debts, but there are two other individual cases that should be taken into account. They are private sector debts that are “nationalized” during crises as part of bailouts, particularly of financial sectors, and cases where private sector debts cannot be serviced because they would generate balance of payments problems. In the first case, the external liabilities should be treated in principle as corporate debts that should be renegotiated as such, as part of the cleaning of the balance sheet of the institution involved, and can therefore involve larger amounts of haircuts. In any case, it should be subject at least to the reductions of the overall public sector debt. This procedure would help reduce the pressure exercised by foreign creditors to take over private sector debts during crises, which has been a practice in many developing countries in the past and have added substantial amounts of private sector debt to the sovereign’s obligations. In the case of balance of payments crises, an agreement should

be reached as to how foreign creditors can convert the amounts paid in local currency into foreign exchange.

#### **IV. REFORMING THE GLOBAL RESERVE SYSTEM**

##### **A. The problems of the system**

Discussions on the global reserve system go back to the debates that surrounded the creation of the International Monetary Fund as part of the preparation for a post-Second World War order. A central concern of these proposals was the need to design mechanisms to avert the repetition of the collapse of the multilateral trade and payments mechanisms and competitive exchange depreciations among major currencies during the 1930s. Keynes recommended the creation of a global reserve currency that would be at the center of a multilateral clearing mechanism. The main virtue of this proposal, in his view, is that it corrected the essential asymmetry of all international payments mechanism that had existed up to then, associated with the fact that the burden of adjustment falls on deficit countries, whereas surplus countries lack a similar pressure to adjust.

The system designed in Bretton Woods was based on the dual use of gold and dollar at the center of the system and did not correct this fundamental problem. Furthermore, it added another one, which came to be called the “Triffin dilemma” after the pioneering work of the Belgian economist Robert Triffin (1961). The essential problem, as he pointed out, is that the use of a *national* currency as *international* monetary instrument creates a paradoxical situation: the build up international reserves in the rest of the world is only possible if the reserve currency issuing country (the United States) runs a balance of payments deficit, but this deficit erodes the confidence in the use of that currency (the US dollar) as a reserve currency. This generates an inherent instability of the system.

The perspective of developing countries was largely absent in the major reform undertaken in the 1960s, the launching of the Special Drawing Rights (SDRs), which gave birth to the first world fiduciary reserve currency. The fact that the US had an

“exorbitant privilege” under the system, to use de Gaulle’s terminology, was at the center of the call by European countries to participate in the benefits from world reserve creation –i.e., world seignorage). But the fact that the system also had an imbedded inequity, as it involved a resource transfer from developing countries to the reserve currency issuing country –i.e., a form of “reverse aid”—was not a central issue in the debate. As SDRs were allocated in proportion to IMF quotas, their share in reserve creation was also small. The developing countries were rather viewed by industrial countries as somewhat unreliable partners in global monetary reform, as they were perceived to want more aid, not more reserves and were thus seen as likely to spend whatever reserve allocation they got (see Solomon, 1977).

Two interesting proposals were made at the time, however, which had strong development dimensions. The first was the proposals by a group of experts convened by UNCTAD to generate a “development link” in global currency allocation, through the possibility of allowing the IMF to invest in bonds issued by multilateral development banks, basically the World Bank at the time (UNCTAD, 1965). We will return to this issue below. The second was the possibility of creating a commodity-based reserve currency (a proposal that also goes back to Keynes), which had the very interesting feature that it tended to stabilize commodity prices at the same time. This had potentially very positive effects on developing countries and would also provide an automatic stabilizer for the world economy (see Hart *et al*, 1964).

With the demise of the gold-exchange standard in the early 1970s, the world moved effectively into a “fiduciary dollar standard” (it is also, but only secondarily, a system in which alternative fiduciary currencies compete with each other for their role as reserve currencies). The system has had since then two major trends: (i) growing US current account deficits, which eroded the net investor position of the US and transformed it into a net debtor position; and (ii) increasingly sharp cycles in the US current account deficit and the real exchange rate of the US dollar (Ocampo, 2007/8 and 2010; Ocampo, Kregel and Griffith-Jones, 2007, ch. IV). The latter can be seen as the particular manifestation of the Triffin dilemma under the fiduciary dollar standard.

The first of these phenomena has generated an abundant literature on the implications of an eventual run of the dollar on the global system. This expectation has not materialized so far and, rather, the US dollar has actually appreciated during the current crisis as the result of the perception that US government securities are the “safest” assets in the world and perhaps the lack of a large alternative supply of “safe” assets. Nobody can rule out, however, an eventual run on the dollar, particularly in the face of ballooning Fed balance sheets and US federal government debts. The second problem, the instability of the dollar implies that the US dollar does not have the major feature that a good reserve asset should have: the stability of its value. This is what was emphasized by the Chinese central bank governor in March 2009 (Zhou, 2009).

The development dimensions have become even more prominent in recent decades as the result of the fact that developing countries have accumulated massive foreign exchange reserves. What this implies is that the resource transfers towards the reserve issuing countries have been significantly increased, thus making the inequitable features of the current global reserve system even more prominent. At the same time, however, such accumulation may have contributed to global imbalances, and in this sense to potential global instability –an effect that can be called the “inequity-instability link” (Ocampo, 2007/08 and 2010).

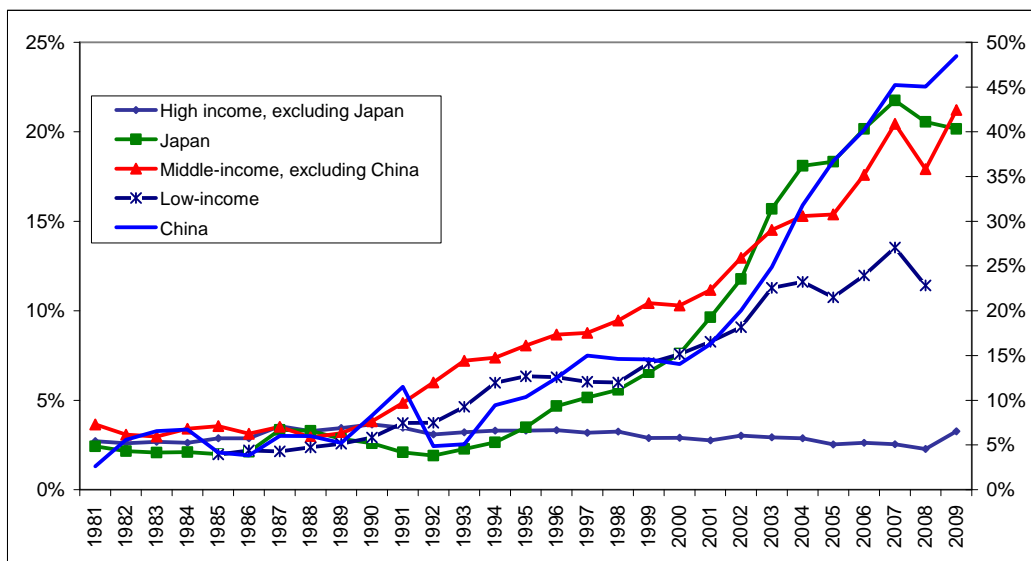
The financial asymmetries that characterize the world economy imply that developing countries not only face strong shocks through the business cycle but also, as a result of pro-cyclical capital flows, reduced room of maneuver to adopt counter-cyclical macroeconomic policies. Strong shocks and pro-cyclical macroeconomic policies have left an inheritance of a multitude of financial, balance of payments and, frequently, a mix of both.

Within the limited maneuvering room that these countries have, they have thus responded by trying to create their own “policy space” for counter-cyclical macroeconomic policies. Such policies are aimed either at correcting the direct source of the disturbance, capital account volatility (through capital account regulations) or its macroeconomic effects. Although there have been movements in several policy

directions, the most common one in recent decades has been the accumulation of foreign exchange reserves.

The large accumulation of international reserves by developing countries is indeed a clear response to the very costly crises they faced in the 1980s and in late 1990s. Up to the 1980s, international reserves in the hands of developing countries were not very different from those of the industrial countries –around 3 percent of GDP. The Latin American debt crisis of the 1980s led both middle and low income countries to sharply increase the demand for reserves, which started to diverge from that of the industrial world since the early 1990s (Japan was the only exception among industrial countries). The Asian and Russian crises accelerated this trend. The most aggressive country in this regard was, of course, China, which by 2007 had accumulated non-gold reserves equivalent to 46.7 percent of its GDP. But middle income countries, excluding China, also held in 2007 foreign exchange reserves equivalent to 20.6 percent, and low income countries 16.2 percent of GDP. In contrast, industrial countries excluding Japan only held reserves equivalent to 2.6 percent of GDP, a similar level to that of the 1970s and 1980s (see Figure 1).

Figure 1  
International Reserves by Level of Development (% of GDP)



Source: World Bank, *World Development Indicators*, based on information from IMF.

The fact that Asian crisis was an even more important turning point than the Latin American debt crisis indicates another crucial issue: the clear perception in developing countries that the world lacked adequate institutions and mechanisms to manage crises that originate in the capital account, a point that has been analyzed in previous sections of this paper, as well as the excessive conditionality traditionally attached to emergency IMF financing. The demand for reserves may be seen, therefore, as massive “self-insurance” or “self-protection” against crises. As Carvalho (2010) has suggested, this can be expressed as “precautionary” demand for international reserves. More precisely, the demand for self-protection through massive foreign exchange reserve accumulation can be seen as having three different motives.

The first is protection against capital flow reversals. Since such reversal has been an embedded feature of global finance since the 1970s (they were also up to the Great Depression), there is a strong argument in favor of either adopting policies to reduce capital inflows or intervening heavily through sterilized intervention in foreign exchange markets that transform such temporary capital flows into international reserves. Since experience has indicated that letting temporary capital flows generate an exchange rate appreciation that leads to a current account deficit is a risky strategy, avoiding such appreciation and current account deterioration is an essential part of the rationale of this policy strategy. This implies that both sides of the national balance sheet grow, thus reducing the risks of capital reversals that characterize a balance sheet with a biased growth of external liabilities. Furthermore, to the extent that the major problem developing countries face is a *medium*-term cycle in the availability and costs of external financing, reserves should be proportional to *total* capital inflows and not only to short-term flows.

A similar logic applies to primary commodity exporting countries facing terms of trade shocks. Saving some of the exceptional export revenues associated with booming terms of trade, as well as associated fiscal revenues (particularly in energy and mineral-exporting countries) has long been accepted as a rule in the demand for foreign exchange reserves. More generally, to the extent that international trade is pro-cyclical (a fact that has been made sharply evident by both the trade boom of the mid 2000s and the collapse



of international trade during the acute part of the crisis starting in the last quarter of 2008), export booms always have a transitory component. It makes sense, therefore, to respond to cyclical swings in export revenues by accumulating the excess supply of foreign exchange during booms. The decision to avoid overspending the trade boom and, rather, accumulate what are perceived to be temporary export revenues as foreign exchange reserves, may be seen as a second motive behind self-protection.

A third motive is that countries reject the only available form of “collective insurance” against balance of payments crises for two reasons. They find that it is insufficient relative to the magnitude of capital account shocks that developing countries face, a fact that relates in turn to the scale of financing available. They also regard that the conditionality associated with such lending had been unacceptable due to intrusive conditionality (of both macroeconomic and structural character), forcing countries to adopt strongly pro-cyclical macroeconomic policies during crises.

There might also be “mercantilist” motives behind foreign exchange reserve accumulation. The “second Bretton Woods” literature (Dooley *et al*, 2003 and 2009) has argued, for example, that the “mercantilist” decision of the Asian countries to avoid exchange rate appreciation to sustain their export-led growth models explain their large current account surpluses and, therefore, their willingness to continue financing US deficits. The idea that stable and weak exchange rates and strong current account balances tend to accelerate economic growth in developing countries has, of course, a respectable tradition in the development literature (see a survey of that literature in Frenkel and Rapetti, 2010). However, one of the basic reasons why a strong current account is seen as one of the factors that has positive effects on growth is that it reduces the dependence on the volatility associated with capital flows. If this is the major reason, it would imply that the motivation is really self-protection rather than “mercantilism”.

The pattern of reserve accumulation during the 1990s differs across countries and regions, reflecting different mixes of current and capital account imbalances as explanations of reserve accumulation (see also Akyüz, 2010). A first group of developing countries includes countries with current account deficits for which the only source of

reserve accumulation was net capital flows. This is the largest group, and incorporates whole regions (Central and Eastern Europe, South Asia, and sub-Saharan Africa), including major developing countries such as India, Turkey and, in the last part of the boom, Brazil, but also a large number of smaller countries. The second group includes countries that mixed current account and capital account surpluses, such as China and mineral exporters of Latin America and Africa. The third are basically energy exporters with strong current account surplus that are net exporters of capital. A basic reason for the surpluses of these countries as well as by mineral exporters has been the decision to save a larger part of the terms of trade boom than in the past. In any case, the basic reason for reserve accumulation in most of the developing world has been capital flows. Indeed, with the exception of years where reserve accumulation was associated to balance of payments adjustment programs (1999-2000), the major peaks in reserve accumulation in the developing world over the past two decades (1992-93, 1995, and 2003-07) have been booming capital flows.<sup>3</sup>

This behavior raises, of course, some interesting policy questions. First, it is a costly strategy, as it involves a national loss equivalent to the difference between the financial cost of the liabilities vs. the yield of foreign exchange reserves. It makes, therefore, sense to try to reduce capital inflows in the first place (Rodrik, 2006; Ocampo, 2007/08). Second, if many developing countries pursue this strategy at the same time, they generate “fallacy of composition” effects that feed into global imbalances. If a large group of developing countries follows this route, they generate a current account surplus and an additional demand for safe assets that is contractionary in its effects on the world economy unless it is matched by current account deficits and the supply of those assets by industrial countries. The United States has been supplying both those deficits and assets (US Treasury bonds) in recent years, but this is not necessarily a stable situation.

Self-protection is not only a costly form of insurance for individual countries but also a source of instability to the global economy. However, the problem cannot be

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<sup>3</sup> For developing countries, excluding China and the Middle East, the correlation of variation of reserves with net capital flows (both as a proportion of GDP) is 0.715 for the period 1982-2007, whereas that between the current account and reserve accumulation is actually negative and not statistically significant (-0.165).

solved simply by asking developing countries to appreciate their currencies to correct their balance of payments surpluses. It must solve first the source of the demand for self-protection, which are strong pro-cyclical capital and trade flows and the lack of adequate supply of collective insurance against balance of payments crises.

## **B. Reforming the system**

Although past discussions indicate that there are several possible ways to reform the system, the easiest is to complete the reforms of the 1960s, when SDRs were created. Obviously, the role of SDRs has changed since then (Clark and Polak, 2004). The issues of adequate provision of international liquidity, which was at the center of early post-war debates and in the 1960s are not important now. Indeed, except from extraordinary conjunctures (such as the world financial collapse of September and October 2008), the fiduciary dollar standard actually provide enough (and possibly even excessive) liquidity. However, other problems continue to be or are even more important today, particularly those associated with the composition of world reserves, the access to liquidity by developing countries and associated equity issues.

Allocations of SDRs have been made on three occasions: 1970-72 and 1979-81 and in 2009. The first two amounted to only SDR 21.4 billion, equivalent to about \$32 billion or 0.5% of world reserves when the recent global financial crisis struck. There was also a one-time allocation that was agreed in 1997, which would have doubled SDR allocations and would have compensated those countries which had become IMF members after the two original allocations had been made (over a quarter of current members joined the Fund after 1981 and so have received no allocations of SDRs). However, the amendment of the IMF Articles of Agreement of which it was part –the fourth in the history of the Fund— only became effective upon approval by US Congress in 2009. The G-20 pushed, in turn, in 2009 for a new general allocation equivalent to \$250 billion, less than \$100 billion of which went directly to emerging and developing economies.

Previously the cessation of SDR allocations over almost three decades had negative effects for developing countries and the world economy, as it actually coincided with their growing demand for foreign exchange reserves.

Several proposals to renew SDR allocations on a more systematic basis have been made in recent years, following two different models. The first is issuing SDRs in a counter-cyclical way, concentrating them essentially in periods of world financial stress and possibly destroying them partly once financial conditions normalize (United Nations, 1999; Camdessus, 2000; Ocampo, 2002; Akyüz, 2005). The second model proposes regular allocations of SDRs similar to the additional world demand for reserves. According to the average demand for reserves in 1990-2002, this should be at least \$110-150 billion, but possibly much more, as that figure jumped to \$777 billion in 2003-07. This is also the magnitude of SDRs that must be issued in the long term under a counter-cyclical rule.

As argued above, SDRs are the best mechanism to finance the IMF. An SDR-based Fund would have two essential counter-cyclical instruments. The first are counter-cyclical *allocations* of SDRs, which represent in the traditional terminology of the Fund “unconditional” liquidity. The second is counter-cyclical *lending* financed by SDRs. There are two ways of doing it. As suggested by Polak (2005, chs. 7-8), IMF lending during crises could simply create SDRs, in a similar way as lending by central banks create domestic money. When loans are paid back, such issues would be automatically destroyed. The alternative, recommended by Ocampo (2002 and 2010) would treat SDRs that are not used by industrial countries or developing countries that have adequate reserves as deposits in (or lending to) the IMF, which can be used by the institution to lend to countries in need. Whereas the limits on lending under the first option would be the overall level of quotas (which would now have a more notional value, as national resources are not actually transferred to the Fund), in the second it would be the total allocation of SDRs. Any of these alternatives would improve collective insurance. For this to work, however, it is of course essential that IMF credit lines, their conditionality and the stigma associated with borrowing from this institution be fully overcome, as we discussed in previous sections of this paper.

Although an SDR-based global reserve system would go a long way to solve the Triffin dilemma, it would not correct the increasing inequity issues associated with the demand for reserves. The basic problem here is that current IMF quota allocations, which are also the basis for SDR issues and individual lending limits, not only do not reflect the realities of the world economy today but, most importantly, do not respond to the huge disparity in the demand for reserves by developing vs. industrial economies, which are at the center of both the inequities of the current reserve system and the inequity-instability links highlighted above.

This problem can be corrected only with either one or a mix of three types of reforms (since they are not mutually exclusive), which complement the system of allocation of SDRs and SDR-financed lending outlined above. The first would be the allocation of SDRs according to the demand for reserves rather than quotas, which imply that a large proportion of them would go to developing countries. The second is to create a “development link” in SDR allocations. One way to do it would be to use the allocation of SDRs to industrial countries to finance development assistance or the provision of global public goods (Stiglitz 2006, ch. 9; French-Davis, 2007). Another way is that recommended by the Group of Experts convened by UNCTAD in the debates of the 1960s: allowing the IMF to buy bonds from multilateral development banks (UNCTAD, 1965). The third is encouraging the creation of *regional* reserve arrangements among developing countries—such as the Latin American Reserve Fund and the Chiang Mai Agreement—that provide a complementary form of collective insurance. To create incentives to the formation of such arrangements, the allocations of SDRs could be made proportional not only to IMF quotas but also to reserves that developing countries have placed in common reserve funds (United Nations, 1999; Ocampo, 2002).

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