

PRINCIPLES FOR REFORMING THE GLOBAL FINANCIAL ARCHITECTURE ¹

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I. The main areas for reform

The financial crisis that originated in the United States in mid 2007 has become a global financial crisis, which seems to be the largest since the Great Depression. The Bank of England in October 2008 estimated total losses of financial institutions at \$2.8 trillion, an amazingly large number. Naturally, the final losses may be more modest. Since mid-September financial markets have collapsed and the world is entering possibly into the worst recession of the post-Second World War period

The crisis has severely hit developing countries through increasing risk premia and a severe cut in bank financing, even of short-term trade credit. Developing and emerging countries with large current account deficits and a high proportion of short-term debt find it particularly difficult to get foreign funding, but a surprisingly large group of developing countries have been affected. Capital outflows from developing countries have generated a collapse of stock markets, exchange rates and quite a large loss of reserves. Reversal of the carry trade seems to have had a particularly negative effect. Commodity prices have plunged and volumes of demand for exports are being cut worldwide. Even developing countries that were seen initially as protected from a recession in the industrial world are now being badly hurt in spite of their very prudent policies.

Any global solution—both reflected in short-term measures to stabilize the current situation and long term measures to prevent future crises—must consider the impact on developing countries. Without this, economic stability cannot be restored and economic growth, as well as poverty reduction globally, is threatened.

The present financial crisis has shown again how dysfunctional the current international financial architecture is, with all its channels through which financial

contagion spreads across the world, and especially with its major financial regulatory deficit. In the 1980s, the debt crisis in Latin America, Africa and other parts of the developing world, and in the mid to late 1990s the succession of the Asian, Russian and Latin American crises had already revealed that something was deeply wrong with that architecture. Unfortunately, though there was much discussion, there was little progress on any significant reform of the international financial architecture (Griffith-Jones and Ocampo, 2003). The fact that this time, the crisis started in developed countries may now lead them into action. The call by several of them to engage in a serious reform of the current governance and have a Bretton Woods II Conference is, therefore, most welcome.

There is at present therefore an important opportunity to transform the international financial system, so as to make it more stable, and more equitable, which could provide a basis for an era of growth and greater prosperity for all countries. The governance of this system also has to be modernized, to reflect the far greater share of developing countries in global savings, foreign exchange reserves and GDP.

In what follows we will first outline the main areas for reform of the international financial system. We will then deepen our analysis in the area of global and national regulatory reform, where there is currently a particularly large challenge.

The regulatory deficit of global finance must be overcome

The magnitude of the current crisis is clearly associated with inadequate regulation and supervision of banks and financial markets. Since the Asian crisis, it became widely accepted conceptually that financial liberalization must be accompanied by stronger prudential regulation and supervision. This principle has been applied in many parts of the developing world but paradoxically was to a large extent ignored in the

United States and the United Kingdom, where further liberalization was accompanied by deregulation and weak supervision of financial intermediation (Stiglitz, 2008).

The new regulatory governance should be based on a well-functioning network of national and regional authorities and include truly international supervision of financial institutions with a global reach. Although the new global regulator should clearly have links with the IMF, it would seem better if the IMF should *not* be at the center of the regulatory system (South Centre, 2008).² There is therefore an urgent NEED for a new international institution, a global financial regulator.

The creation of a global financial regulator needs to be put urgently on the international agenda. Both respected market actors (Kaufman, 1998) and academics (Eatwell and Taylor, 2000) have long argued for such an institution; the recent major global financial crisis has made it more necessary and more politically feasible.

Existing institutions and ad-hoc groups could provide valuable building blocks for a new global financial regulator. It should certainly include the Financial Stability Forum (FSF) – created precisely to identify sources of systemic risk, fill gaps in regulations and help develop consistent regulations across all types of financial institutions (Griffith-Jones and Ocampo, 2003). It should also incorporate the Basel Banking Committee, other Basel Committees, and parts of the BIS.

² There are three reasons why the IMF should not be at the core of global financial regulation. The first is that it will have other very important functions to carry out (see below) and it must focus on doing them properly. Secondly, and perhaps most importantly, the IMF does not have so much expertise on financial regulation and supervision as the Financial Stability Forum, the BIS, and the Basel Committees, especially at a global and developed country level. Thirdly, the IMF has been—at least in the past—too closely wedded to excessive enthusiasm for de-regulation of financial markets. It should, however, be pointed out that the IMF does have two valuable characteristics, which need to be incorporated into the new global financial regulator. Firstly, the IMF has practically universal membership of countries (though the representation clearly does not reflect current economic realities). Secondly, IMF Board Members respond to Finance Ministers, who are usually elected representatives, accountable to Parliaments. Often national financial regulatory agencies do not report, or not sufficiently, to elected representatives. (I thank John Williamson for an interesting discussion, and especially for this latter point.)

This global financial regulator should, firstly, have adequate representation from developing countries (which bodies like the FSF and the Basel Banking Committee do not have); this will ensure not just greater legitimacy, but also greater efficiency, given the growing role of developing countries in the global economy (see Griffith-Jones, 2008). Secondly, it should have teeth—it must have real power to influence decisions of national regulators, especially in the major countries, including developed ones. Thirdly, it should link its work to broad macro-economic prudential concerns, with the help of the IMF and BIS. Finally, it should consider potential costs of financial instability on the real economy. For this purpose, it could include not just representation from different financial regulatory bodies across sectors and countries, which is essential, but also those concerned with growth and equity. For that reason, the United Nations, or the ILO (which represents business, trade unions and governments) should have a place in the new global financial regulator.

It is encouraging that a growing number of world leaders are willing to act on crisis avoidance through regulation, as reflected in the call for a “Bretton Woods II” G-20 summit, with a large focus on regulation. Indeed, the only silver lining of the crisis and its very negative effects on the world economy seems to be that regulatory measures to prevent future crises have become politically far easier to accept. This window of political opportunity for introducing such regulatory changes may be relatively narrow, so the task is urgent.

The current deep crisis and numerous previous ones that hit developing countries seem to demonstrate that crises are inevitable in deregulated financial systems. There is, therefore, ever-growing consensus that more complete and more effective financial regulation is required. The key question is HOW best to do it. The main aims must be to

help avoid future building-up of systemic risk, whilst allowing desirable financial innovation that supports the real economy.

There are two broad principles on which future financial regulation needs to be built (D'Arista and Griffith-Jones, 2008). The first is counter-cyclicality, in order to correct the main market failure of banking and financial markets, their boom-bust nature. It should be fairly easy to implement; in fact, the Spanish and Portuguese regulators already required banks to have dynamic provisions, which are, de facto countercyclical regulations. This has resulted in Spanish banks apparently being stronger than in other countries. This positive experience needs to be built on by other countries, either through forward-looking provisions and/or counter-cyclical capital. The key idea is that provisions and/ or capital required should increase as risks are incurred, that is when loans grow more, and fall when loans expand less. This would strengthen banks in boom times, and discourage them then from excessive lending. It would also make it easier for them to continue lending in difficult times, given the cushions they had accumulated.

The second key principle for modern, effective regulation should be comprehensiveness. There are several reasons. A particularly obvious one today is to avoid moral hazard, as an ever-increasing range of financial institutions (many of them not – or lightly – regulated) have had to be bailed out with likely massive costs to taxpayers. The only way that we can avoid this happening again is by ensuring far more complete and countercyclical regulation to avoid excessive risk taking in the boom across the financial sector. A second reason for comprehensive regulation is that economic theory tells us that for regulation to be effective, the domain of the regulator has to be the same as the market to be regulated. In the United States, banks represent less than 25 percent of total financial assets; furthermore, only a part of commercial banking activity

has been properly regulated, with off-balance-sheet activities largely excluded. A system of regulation that focused only on parts of the banking industry and regulated neither the rest of the banking system, nor much of the rest of the financial system, clearly did not work. It was the parts that were not regulated (having very little or no capital requirements in the U.S.), such as Structured Investment Vehicles, that tended to be the cause of the largest problems. Inevitably, there was regulatory arbitrage.

Another area for potential regulation surely must be derivatives, especially the ever-growing over the counter (OTC) derivatives markets. The scale and growth of total derivatives, a large part of which was totally unregulated, had been exponential.

According to the BIS, in 1997 their notional value reached \$75 trillion, by 2007 they had increased to \$600 trillion, some 11 times world output.

It is noteworthy that, in the winding down of Lehman Brothers, the derivatives trades conducted through the exchanges were not problematic to resolve, whereas the OTC derivatives deals have been wound down very slowly, posing additional risks to the financial system. Therefore, at a minimum, derivatives contracts should be made simpler, more standardized, and all go through the exchanges.

The need seems to be for comprehensive and equivalent transparency, as well as regulation of all financial activities, instruments, and actors. Both minimum liquidity and solvency requirements need to be regulated. Indeed, if banks had stronger liquidity, as in the past, their solvency problems may have been smaller in the current crisis.

The magnitude of the crisis, and the damage that it is causing, should make it far easier and more urgent to design desirable changes in financial regulation. Weaker financial institutions may be less able today to oppose such regulation. They may also realize that good regulation is actually in their own long-term interest.

The IMF should be reformed

Four essential reforms of the IMF should be part of the reform agenda.(see South Centre,2008, op cit). The first long-term reform is the creation of a meaningful and truly global reserve currency, which could be based on the IMF Special Drawing Rights (SDRs). This would overcome both the inequities but also the instability that is inherent in a global reserve system based on a national currency. Experience has indicated that this system is plagued by cycles of confidence in the US dollar and by periodic shocks due to policies of the reserve currency country that are adopted that ignore their international impact.

The second issue is the need to place the IMF at the center of global macroeconomic policy coordination. This is the only way to give developing countries a voice on the issue. The multilateral surveillance exercise launched by the Fund in 2005 was an interesting step in that direction, but it has lacked binding commitment by the parties and any accountability mechanism.

The third issue is the need for the IMF to lend during balance of payments crises rapidly and without overburdening conditionalities, particularly when the sources of the crisis are exogenous, such as a rapid reversal of capital flows and/or a sharp deterioration in the terms of trade. This means putting in place quickly a credit line for capital account crises; in this sense, the recent approval (October 2008) of a quickly-disbursing fairly large facility by the IMF seems a very positive step; the new Short-Term Liquidity Facility (SLF), which creates a quick-disbursing financing mechanism for countries with strong economic policies, yet are facing temporary liquidity issues due to the current global crisis. Managing Director Strauss-Kahn stressed that the SLF will be for countries that

have sound macroeconomic policies, but are currently facing short-term liquidity pressures. The G-24, at the 2008 IMF annual meetings, had requested the establishment of that type of facility.

In order to qualify for a loan under the SLF, countries must have sound macroeconomic policies, access to capital markets, and sustainable debt burdens. Additionally, the last annual country assessment by the IMF must have been positive. The SLF has been designed for a country with a track record of sound policies, which have been assessed by the IMF through the normal Article IV Consultation processes (as suggested for example, in Griffith-Jones and Ocampo, 2003). The IMF stated that “Given this strong emphasis on past performance, financing is made available without standard phasing, performance criteria, monitoring, and other conditionality of a Fund arrangement. However, borrowers are expected to continue their commitment to maintain a strong macroeconomic policy framework.”³ Loans will have a three-month maturity and can be renewed up to two additional times during a 12-month period. Countries will be allowed to borrow up to 500% of their quota. It is also assumed that this short-term help will establish enough stability to unlock other sources of lending, an assumption that may be somewhat optimistic.

The U.S. Federal Reserve simultaneously announced the establishment of temporary swap lines with the Central Banks of Brazil, Mexico, Korea, and Singapore (in addition currency arrangements already made with the ECB, Canada, Australia, and Japan). This

³ International Monetary Fund. “IMF Creates Short-Term Liquidity Facility for Market-Access Countries.” Press Release, October 29, 2008.

seems a very positive development and at least in the short-term, has helped give stability to emerging markets.

The IMF's SLF, in some ways, represents a return to a proposal by former President Clinton who, in 1998 suggested that the IMF lend to a list of pre-approved countries without conditionality. His proposal came in response to strong criticisms of the IMF's lending conditionality during the 1997 Asian financial crisis, which exacerbated the economic downturn for many Asian countries. The IMF adopted a version of this proposal in 1999 (when it introduced the Contingency Credit Line), but abolished it in 2003, as no developing country had actually used the facility; countries worried that signing up for the list could be interpreted as a lack of confidence in the economy's fundamentals.

In response to this, the IMF plans to streamline the approval process and keep the results of countries rejected confidential, as to not increase market instability in rejected countries. Some still worry that despite the IMF's efforts for confidentiality, it is "essentially dividing developing countries into an A-list of nations that qualify for loans without strings, and a B-list of everyone else."⁴

Stiglitz has said that he is encouraged by the IMF's new lending program, as it does not impose conditions on these unstable economies (as the 2008 IMF loans to Iceland, Hungary, and the Ukraine already have). In imposing these conditions, the IMF has "used the same vocabulary they used in past crises: that we need to restore confidence. It doesn't restore confidence; it just leads to further bankruptcies."⁵

⁴ Davis, B., M. Walker, and J. Lyons. "IMF Creates \$100 Billion Fund to Aid Crisis Fight." *Wall Street Journal*, October 30, 2008.

⁵ Landler, M. "Healthy Countries to Receive IMF Loans." *The New York Times*, October 29, 2008.

Strauss-Kahn has also noted that the Fund's current lending practices cannot be maintained without additional funds, saying that it would solicit additional contributions from countries with high levels of foreign-exchange (such as Japan and China) and oil-exporters. Both Prime Minister Gordon Brown and President Sarkozy have echoed this need for China and the Persian Gulf states to step-up their IMF contributions. An interesting question is whether such lending should be done through the IMF or through a mechanism where countries supplying the funds are appropriately represented.

There should also be a major and quick reform and more active use of compensatory financing (the IMF Compensatory Financing Facility has not been used since 2000 due to very high conditionalities) and of the Poverty Reduction and Growth Facility (PGRF) enhancement to compensate for the adverse terms of trade shocks faced by low-income countries. Recent changes to the Exogenous Shocks Facility (compensatory financing for low-income countries without a PRGF), though welcome, has been clearly insufficient, especially as regards the scale of the lending. An expansion of this facility is urgent, given the severity of the current crisis. More broadly, especially in the light of recent sharp fluctuations of terms of trade, the following broad suggestions for compensatory financing seem especially relevant (see, for more details, Griffith-Jones and Ocampo, 2008).

Scaling up

The scale of existing facilities, and of resources—including for grants and for subsidies to allow concessionality financing of loans—are too small, in proportion to the shocks. This seems perhaps the most important point. In a context of scaling up of aid and/or innovative sources of finance, higher resources should be allocated for financing shocks. This would need to be linked to fewer restrictions (e.g. higher per cent of IMF

quota for access) on the scale of facilities, so that a far larger proportion of shortfalls of exports could be financed.

Both loans and grants are valuable

In the case of low-income countries, grants are more useful for more permanent shocks, or shocks (e.g. natural disasters) with more permanent effects. However, official lending has an important role to play as potentially speedy, and may provide incentives for changes in the economy, to reduce its vulnerability. For middle income countries, loans play a particularly valuable role. Also, closer coordination between institutions providing loans (eg the IMF) and those providing grants (e.g. the European Union) seems urgent.

IMF lending for trade shocks needs far-reaching changes

There should be significant simplification of IMF facilities as they are too many (e.g. enhanced PRGF, ESF and others) and too complex. Indeed, low-income countries may not even be acquainted with—or fully understand—all the facilities available. Indeed, an option to consider may be to merge all these IMF trade compensatory financing facilities for low-income countries into one low-conditional facility at the IMF. Lower conditionality is clearly needed. There is no justification for upper credit conditionality for external shocks, for countries with reasonable policies. A possible way forward to avoid excessive conditionality in times of shock, that could be more acceptable to the IMF, would be for countries with PRGFs, PSIs or other shadow programmes, to have a baseline scenario for their programme, but embedded into them augmentations for terms of trade or other external shocks.

More broadly, the IMF should act more like a central bank, providing liquidity in an agile way, similar to how central banks have actually been providing funds in

industrial countries on a massive scale in recent months. One possibility would be for these new IMF credits to guarantee external debts of corporations and banks from developing countries, to help sustain private finance towards them.

The current IMF Articles of Agreement do not commit countries to capital account convertibility, giving them full autonomy to adopt capital account regulations. As both financial euphoria and panic are transmitted worldwide it would be sensible to make more active use of capital account regulations. Thus, the reform effort should encourage the IMF not only to tolerate but actually to encourage countries on what regulations to impose under given circumstances. Indeed, the regulatory structure that must be developed to manage financial stability in the global era should include provisions that apply to cross-border capital movements, such as generalized reserve requirements on cross-border flows, minimum stay periods and prohibitions to lend in foreign currencies to economic agents that do not have incomes in those currencies (South Centre,2008).

Coordination of global macroeconomic policy is important

The global recession now under way calls for a strong policy response. This means clear expansionary monetary and credit policies in all industrial countries as well as expansionary fiscal policies. Developing countries should also be part of the solution, and should adopt equally expansionary policies. Those countries that have accumulated large amounts of international reserves do have a larger room to maneuver to adopt these policies than they had during previous crises. For those who do not, this implies that it is essential to avoid the IMF conditionalities of the past, which forced developing countries to adopt contractionary macroeconomic policies.

A large increase in official development assistance to low income countries can play an important role, to both combat poverty and contribute to the generation of aggregate demand at the global level. Additional ODA, and highly concessional lending (eg from IDA) is particularly important to avoid contractionary policies in the poor countries suffering a deterioration of their terms of trade due to the collapse of commodity prices.

Past crises have also shown that multilateral development banks can play an essential role as lenders when private financing dries up. One particularly problematic issue during crises in developing countries is the curtailment of commercial credit available to exporters, which severely limits an essential mechanism through which countries can recover from crises. So, the launching by multilateral and/or regional development banks of a large program of commercial lending should be at the center of the crisis response efforts. Another alternative is for multilateral and regional development banks to issue guarantees for such commercial lending. No conditionalities should be attached to these credit lines or guarantees.

The reform process and the resulting global governance should be democratic

Any discussion process of international financial reform must be democratic, giving adequate voice to both industrial and developing countries. The governance system that it designs must be mainly based on *representative institutions*, not on any ad-hoc grouping of countries. A central involvement in any reform process of the United Nations, the most representative global institution, is needed. The follow-up to the Conference on Financing for Development to be held in Doha, Qatar, in late November and early December 2008 could be the best occasion to launch a participatory process

leading to a reform of the global financial architecture, with the backing and close collaboration of the United Nations and the Bretton Woods institutions. In this broader context, an expanded G-8 of leaders—such as a G-20 of leaders, including both developed and developing countries could help take the broad agenda forward for implementation. This process should include a discussion of the voice and representation of developing countries in international economic decision making and norm setting, as mandated by the Monterrey Consensus. So far the only reforms in this area were undertaken by the IMF and were extremely modest.

The system must rely more broadly on regional institutions, and some developing countries can contribute resources

In all of the areas of reform, the IMF should collaborate more closely with regional institutions, such as the Chiang Mai Initiative or the Latin American Reserve Fund. Indeed, the IMF of the future could be seen as the apex of a network of regional reserve funds –that is, a system closer in design to the European Central Bank or the Federal Reserve System than to the unique global institution that it now is. (Ocampo,) This is also the system in place in the case of multilateral development banks.

The developing countries are in an excellent position to contribute to this task, given their extremely large foreign exchange reserves. Using those reserves more actively for swap arrangements among central banks, pooling them in reserve funds or to support the development of regional bond markets are mechanisms to multiply the room to maneuver that they provide. These reserves and existing sovereign wealth funds could also be used to increase the role of regional development banks owned by developing countries, by investing in the capital of existing institutions and creating new ones

(Griffith-Jones, Ocampo, and Calice, 2008). Developing countries as a whole in mid-2008 had a level of reserves approaching \$5 trillion. Half of this volume is concentrated in developing Asia, but Latin America and Africa have also been amassing international assets at a remarkable pace. This pool of reserves surpasses developing countries' immediate liquidity needs (though the seriousness of the current crisis does make high levels of liquid reserves very desirable). This led to the increased creation and expansion of sovereign wealth funds, which have an additional level of assets of more than \$3 trillion. Practically all developing countries' reserves are invested in developed countries' assets.

A significant increase in investment in areas such as infrastructure is required to sustain growth in developing countries in the future. A very small portion of developing countries' total foreign-exchange reserves—say, 1%—could be channeled to the expansion of existing regional development banks or the creation of new ones that would invest in infrastructure and other crucial sectors.

Indeed, infrastructure investment is recognized as a key ingredient in sustaining and accelerating growth. However, there is a large financing gap. According to the World Bank, developing countries spend an average of 3-4 % of GDP on infrastructure every year, compared to an estimated 7% of GDP required to meet existing infrastructure needs for maintaining rapid growth. This translates into an annual gap of at least \$300 billion at current prices. The current crisis is very likely to reduce it significantly further for an unforeseeable period (see World Bank, 2008).

High expectations for private-sector financing of infrastructure have gone largely unmet. Private investment remains limited and concentrated by both country and sector. National governments still account for the large majority of financing. Official

development assistance and multilateral bank lending, though valuable, remain insufficient. In particular, there are large gaps in the provision of crucial regional and cross-border investments, for example in energy and roads.

Multilateral financial institutions must maintain their central function in the international development architecture, and in particular in financing infrastructure investment. But regional and sub-regional financial institutions owned by developing countries can and should play an important and valuable complementary role. These institutions give a greater voice and sense of ownership to developing countries, are more likely to rely on moral suasion rather than conditionality, and tend to benefit from smaller information asymmetries.

Moreover, regional and sub-regional development banks are particularly suited to provide regional public goods. The growing importance of trade integration and regional trade flows makes the provision of regional infrastructure urgent. The European experience offers valuable lessons in this regard.

If developing countries allocate only 1% of their foreign exchange reserves to the paid-in capital of regional and sub-regional institutions, this would amount to \$50 billion at current levels of reserves. Assuming a ratio of loans-to-capital of 2.4 times – an estimate based on the ratio of the successful and financially sound Andean Development Corporation – the expanded regional and sub-regional development banks or new ones could generate additional lending of approximately \$120 billion.

With time, they could leverage retained earnings, increasing their lending potential without additional paid-in capital. This would imply the ability to finance an important proportion of unmet needs for infrastructure financing.

Based on these initial calculations, the additional lending capacity generated would be significantly larger than total disbursements currently made by existing multilateral development banks. Obviously, more detailed calculations and analyses are required, along with discussions with governments, existing institutions, rating agencies, and other stakeholders.

By expanding or creating new regional and sub-regional financial institutions, developing countries could lay the basis for their own current and future lending capacity, which would eventually help them meet their development goals. Given their large foreign-exchange reserves, we believe the time to begin such an initiative is now. A network of regional development banks is already in place, though unevenly developed in different regions of the developing world. The multiplication and growth of these institutions is highly desirable.

II. Global and national regulatory reform

The broad regulatory challenge

The global crisis that started in the most advanced financial markets in the summer of 2007 follows many deep and costly financial crises in the developing economies during the last twenty five years. This more recent crisis, like previous ones, is the result of both:

a) inherent flaws in the way financial markets operate - such as their tendency to boom-bust behaviour – and

b) insufficient, incomplete and sometimes inappropriate regulation.

Financial crises tend to be very costly from a fiscal point of view (i.e., that of the taxpayer), from their impact on lost output and investment, and from their impact on

people, many of whom are both innocent bystanders and poor. Indeed, reversals of capital flows and banking crises have led to many costly financial crises that have reduced output and consumption in developing countries well below what they would have been if those crises had not occurred. Eichengreen (2004) estimated that income of developing countries has been 25 percent lower during the last quarter century than it would have been in the absence of such crises. The cost of the current crisis, in the terms of lost growth and poverty reduction, globally and for developing economies, unfortunately threatens to be very large.

It is therefore urgent and important to reform financial regulation, so that it makes financial crises less likely in the future. Those new systems of financial regulation should attempt to deal with the old unresolved problem of inherent pro-cyclicality of banking as well as financial markets through counter-cyclical regulation. They should also deal with such new features as the growing scale and complexity of the financial sector, the emergence of new, as yet unregulated actors and instruments, as well as the increased globalization of financial markets. To do this adequately and to avoid regulatory arbitrage, regulation has to be comprehensive.

It is these two broad principles, comprehensiveness and counter-cyclicality, that should provide the framework for financial regulatory reforms, both nationally and globally.

1. As regards comprehensiveness: for regulation to be efficient, it is essential that the domain of the regulator is the same as the domain of the market that is regulated. Furthermore, lender-of-last resort type facilities provided by national central banks are increasingly being extended to new actors and instruments during the current turmoil, as well as being internationalized. As a result, a corresponding expansion of regulation to

actors and activities that have been, or are likely to be, bailed out is essential to avoid moral hazard. The internationalization of lender-of-last resort facilities seems both inevitable and desirable, given globalized private financial players; it needs to be accompanied by a corresponding and considerable strengthening of the international dimension of financial regulation. If the latter is not done, moral hazard will significantly increase, nationally and internationally, once again as financial activity and risk-taking will grow rapidly in areas where international regulatory gaps exist but there is implicit or explicit coverage by lender-of- last resort facilities.

Comprehensive measures are required at two levels:

a) transparency for all actors and activities. This will require both registration and disclosure of relevant variables for all financial institutions. This is a pre-condition for comprehensive regulation, but one that will also benefit the counterparties of other financial market participants and investors, as well as macro-economic authorities.

b) comprehensive and equivalent regulation, to cover all entities that invest or lend on behalf of other people, and all activities which they undertake. Such regulation needs to be done in ways that protect both liquidity and solvency.

In fact, adequate liquidity and capital buffers are linked, as sufficient reserves, implying higher levels of liquidity in individual institutions and in the whole system, will alleviate the pressure on capital, in times of stress.

2. A key market failure in the financial system is the pro-cyclical behaviour of most financial actors, which leads to excessive risk-taking and financial activity in good times, followed by insufficient risk-taking and financial activity in bad times. As a consequence, a key principle and desirable feature for efficient regulation is that it is counter-cyclical, to compensate for the inherent pro-cyclical behavior of capital and

banking markets. The desirability of such an approach has been increasingly stressed by international institutions, such as the BIS (2005, 2008) and leading academics (Ocampo and Chiappe, 2003; Goodhart and Persaud, 2008). This implies varying regulatory requirements for reserves, loan to asset value ratios, capital, provisioning against losses, etc according to the phase of the economic cycle; as discussed below, regulatory variables such as capital could thus be varied according to the growth of total assets, and/or the expansion of assets in particular sectors, e.g. loans for housing. As BIS Chief Economist, William White (2007) pointed out, this would use “monetary and credit data as a basis for resisting financial excesses in general, rather than inflationary pressure in particular.”

Criteria and Principles for national and international financial regulatory reform

As discussed earlier, there are two broad principles, comprehensiveness and counter-cyclicality, that need to be adhered to, so that financial regulation is effective in helping ensure financial stability and avoid crises.

1. Regulation has to be comprehensive. One of the main causes of the current crisis is the fact that effective regulation covers a diminishing share of total capital and banking markets. As Damon Silvers, Counsel to the AFL-CIO (2008) put it, “the regulatory system is a kind of Swiss cheese, where the regulatory holes gradually get larger.”

As is often the case it has been true in this crisis that the parts of the financial system that were not regulated at all, or were regulated too lightly, have generated more problems. Because of regulatory arbitrage, growth of financial activity (and risk) moved to unregulated mechanisms (SIVs), instruments (derivatives) or institutions (hedge funds). However, though unregulated, those parts of the shadow financial system were

de- facto dependent on systemically important banks via provision of credit, guaranteed liquidity lines or other commitments.

A clear example where lack of capital requirements led to excessive growth of unregulated mechanisms was that of SIVs (structured investments vehicles). It is very interesting that Spanish regulatory authorities allowed banks to have SIVs, but required Spanish banks to have the same capital requirements as their other assets. This eliminated the incentive for such vehicles to grow.

It is positive that Basle II, unlike Basle I, requires banks to set aside capital to support liquidity commitments to those vehicles; however, those commitments have lower capital requirements for short maturities; furthermore, the Basle Committee is reportedly planning to strengthen these capital requirements to reduce regulatory arbitrage incentives (FSF, 2008, *op. cit.*). Though positive, such measures would only be partial. A more comprehensive solution would be for all vehicles and transactions to be put on banks' balance sheets; then there should be no regulatory arbitrage, as risk-weighted capital requirements would be equivalent for all balance sheet activities; furthermore, transparency could automatically become far more comprehensive for banks.

This discussion of SIVs illustrates the fact that the only solution is for comprehensive and equivalent transparency and regulation of all institutions and instruments. This would discourage or even hopefully eliminate regulatory arbitrage and help prevent the build up of excessive systemic risk, which is essential for financial stability. The massive widening of last resort facilities – both national and international – that is occurring recently further justifies the need of a corresponding increase in comprehensiveness of regulation, to avoid moral hazard.

The task of defining equivalent regulation on assets for all financial institutions and activities, both for solvency and liquidity is essential.

To be more specific, all entities that invest or lend on behalf of other people – using other people’s money and providing some type of leverage – need to have both relevant transparency requirements and need to be regulated. Within institutions, all their activities need to have equivalent regulation. Therefore, institutions like hedge funds need to be brought into the regulatory domain, as do all off-balance activities of banks.

Specific steps have already been taken towards more comprehensive regulation; for example, U.S. authorities are addressing regulatory gaps in the oversight of entities that originate and fund mortgages, which is clearly welcome. As importantly, there is increasing support for the idea of comprehensive regulation.

For example, an influential EU report (EU 2008) argues that financial regulation should be comprehensive; it especially emphasizes the need to regulate hedge funds and makes specific recommendations to limit the leverage of hedge funds to preserve stability of the EU financial system. Some of the most influential mainstream commentators (see, for example, Roubini, 2008 and Wolf, 2008) are forcefully arguing for comprehensive regulation of all relevant institutions and activities. For example, Martin Wolf writes; “If regulation is to be effective, it must cover all relevant institutions and the entire balance sheet in all significant countries. It must focus on capital, liquidity and transparency.” Furthermore, it is very encouraging that the U.S. Treasury March 2008 Blueprint for Financial Regulatory Reform (U.S. Treasury, 2008), though flawed in some aspects, put forward the idea that financial regulation should be comprehensive, including hedge funds and other private pools of capital.

A key pre-condition for comprehensive regulation is comprehensive transparency of relevant variables. Transparency has also advantages for other actors, such as investors, other market agents and macro-economic authorities.

2. Reducing asymmetries of information between markets actors and regulators is an essential pre-condition for better regulation. In many cases, regulators genuinely do not know the extent to which risks are increasing, and how these risks are distributed. The more complex and large the financial system the greater the opaqueness and the greater the difficulty to obtain information. Building on the work of Stiglitz (for example, Stiglitz and Weiss, 1981) there is a whole theoretical literature that shows market failures and incorrect incentives lead to private underprovision of information and monitoring by private actors, which gives a rationale for official sector intervention (see Kambhu, et al, 2007, for a view from the Fed).

One example is complex and totally opaque OTC derivatives, which reach massive levels. Possible solutions would be to attempt to standardize such instruments but above all to channel them through clearing house based exchanges, as Soros (2008) suggests for the \$45 trillion credit default swap contracts; currently those that hold the contracts do not know even whether those counterparties are properly protected with capital. This establishment of clearing houses or exchanges, should become obligatory for all OTC derivatives. This would have the benefit of ensuring appropriate margin and capital requirements on each transaction, as well as many other advantages, such as greater liquidity of such markets.

Another, somewhat related example for need for increased transparency is in the case of hedge funds (HFs); on this, there is growing consensus (including by the HF industry itself) that improved information on HFs and other HLIs would also be valuable

to investors, counterparties as well as regulators. As pointed out in a previous paper (Griffith-Jones et al., 2007), it seems appropriate for hedge funds to report market risk, liquidity risk and credit risk. It also seems essential that HFs report aggregate world wide and country positions, the aggregate level of leverage, and especially the level of long and short positions, and others, such as the level of trading.

It is also important to decide with what periodicity and to whom information is to be disclosed; additional important questions are whether this information should be provided by all HFs or only those systematically important.

As regards periodicity of reporting, positions can be reported in real time or with a lag. Though real time reporting would be particularly useful, it could be possibly costly, though much of this information must be already privately available. Real time reporting, if publicly available, can either enhance market stability, by encouraging contrarian positions; however, it also risks encouraging herding, if other market actors mimic the positions of large actors, e.g. hedge funds (for a good discussions, see De Brower, 2001). The problem of fixed point in time disclosure is the risk of window dressing for the particular moments. The solution may be to require also maximum and minimum positions during this period, to avoid such window dressing.

It would seem best if information would be made publicly available, e.g. on the internet. It may be sufficient if positions are reported in aggregate by class of institution, e.g. bank, securities firms, hedge funds, other HLIs, etc. The aggregate reporting would avoid revealing individual positions.

It seems important to find an institution that would be efficient at collecting and processing speedily such data, without compromising confidentiality. The institution with

the best experience in similar data gathering would be the Bank for International Settlements (BIS), which already collects detailed information on banks and other financial institutions. The reputation of the BIS would also ensure confidentiality of individual positions. A future global financial regulator could later possibly also play a role in this. As Davies and Green (2008) argue, the explosive growth of hedge funds has certainly created a strong argument for enhanced surveillance of the sector by regulators, from a financial stability perspective. To be effective, that surveillance should be as international in character as are the funds and other leveraged institutions, which ought to include large private equity funds. That should include regulators from some offshore centers in which the funds themselves are domiciled, which would have the added benefit of encouraging those regulators to accept some responsibility for the funds that they are pleased to accept into their jurisdiction.

Though we have discussed issues of transparency and disclosure in relation to the most opaque actors (hedge funds) and transactions (derivatives), similar criteria need to apply to other opaque actors and, especially to the opaque parts of the banking system.

3. Regulation has to be counter-cyclical. It would seem that the most important market failure in financial markets, through the ages, is their pro-cyclicality. Therefore, it is essential that regulation attempts to compensate and curb this (particularly during booms when excessive risk is created) by pursuing counter-cyclical regulation. It is encouraging that finally there is growing agreement among academics, institutions like the B.I.S. (which in its' 2008 Annual Report very forcefully argues for counter-cyclical regulation), and increasingly regulators and Central Banks – like the Bank of England, about the need for introducing counter-cyclical elements into regulation. It is noteworthy that the 2008 BIS Annual Report rightly argues that the trends toward globalisation,

consolidation and securitisation, increase both the probability of both excessive behaviour in the boom and costs in the bust, thus increasing the dangerous and negative side effects of financial market pro-cyclical behaviour. This adds additional urgency to introduce counter-cyclical regulation. The questions now are not so much about if, but about how and when, counter-cyclical regulation is introduced.

As regards banks, Goodhart and Persaud (2008) have presented a specific proposal: increasing Basle II capital requirements by a ratio linked to recent growth of total banks' assets. This is very important in that it provides a clear, simple and transparent rule for introducing counter-cyclical regulation into regulation of banks. Another virtue of this proposal is that it could be fairly easily implemented, in that it builds on Basle II. Finally, it has the advantage – at the heart of the concept of counter-cyclical regulation – of linking micro to macro-stability.

In this proposal, each bank would have a basic allowance of asset growth, linked to macro-economic variables, such as inflation and the long-run economic growth rate. It would measure actual growth of bank assets as a weighted average of annual growth (with higher weights for recent growth).

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 characterises booms.

Three issues arise. Should the focus just be on increase in total bank assets, or should there also be some weighting for excessive growth of bank lending in specific sectors that have grown particularly rapidly (such as recently to real estate)? Or for growth of more risky lending? Often crises have arisen due to excessive lending during

boom times to particular sectors or countries (e.g. emerging economies). However, most systemic bank failures have also been preceded by excessive growth of total bank assets.

Second, is the best way to introduce counter-cyclicalities through modifying capital adequacy requirements through time? Would not the alternative of increasing provisioning against future losses – as done in Spain and Portugal – be a good option, given that it has much merit, as argued by Ocampo and Chiappe (2003) as well as others? An advantage of using provisions is that their objective is precisely to finance **expected** losses (in this case through the business cycle) as distinguished from capital, whose objective is to cover for unexpected losses. A disadvantage of using provisions is that accountants object to provisioning of expected losses, especially for asset classes.

As global accounting rules are defined, it would be desirable that they pay far more attention to balancing the aim of what is effective for individual and systemic bank stability with their current emphasis on providing information to investors.

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 (especially linked to the weighting given to growth in recent years in the G-P formula, which would be high) 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 (on over or under shooting) of exchange rates of both developed and developing economies, with negative effects often

on the real economy (see Brunnermeir, Nagel and Peterson, 2008, for developed economies; see also, Dodd and Griffith-Jones, 2008 and 2006, for evidence on Brazil and Chile). As has become particularly clear during the current crisis, the carry trade was far broader than many realized.

Practically all currencies that paid a high yield (including most of emerging markets) were affected by the carry trade, leading to overvaluation in the good years – and as the current global crisis deepened, when the carry trade was reversed – contributing to sharp depreciations (Authors, FT, October 2008).

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.

This issue of timing is crucial for introducing greater capital regulations for other actors, just as discussed above in the case of bank regulation. Regulations need to be approved now, given greater appetite for regulation, but may need to be introduced with a lag, when financial institutions are stronger; doing so now, could weaken financial institutions further and/or accentuate the credit crunch.

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. An issue to explore is whether this should be done for all derivatives (a far greater task, but consistent with our principle of comprehensiveness) or for derivatives that regulators think can generate systemic risk (shorting of banks'

shares) or policy-makers believe can have negative macro-economic effects (carry trade leading to over or under shooting of exchange rates); the latter more manageable approach may unfortunately allow growth of derivatives that can have negative externalities, of which financial regulators and economic authorities are unaware at the time.

More broadly, counter-cyclical criteria of regulation may need to be applied to regulations of all transactions and institutions. Besides doing this at the individual institutions or transaction level, it may be necessary, as the BIS (2008) argues, to put greater focus on systemic issues, such as many institutions having similar exposures to common shocks, and risks of contagion between markets and institutions. This is technically challenging, as regulatory needs for individual institutions would need to not only reflect their own behaviour, but also reflect system – wide developments, such as increasing property prices.

Finally, as argued below, counter-cyclical financial regulation is an increasingly important complement in the modern economy, to counter-cyclical monetary policy. Currently counter-cyclicality is insufficiently used, both in financial regulation and monetary policy, though more widely accepted in fiscal policy, especially in developed economies.

4. Regulation needs to be as tightly co-ordinated internationally as possible. One of the easiest ways to do regulatory arbitrage is to move activities to other less regulated countries, especially offshore centres. This is particularly, though not only, true for OTC derivatives and hedge funds.

The international community has made important and valuable steps in this direction. However, their efforts are clearly insufficient, given the speed and depth of globalisation of private finance, and its often negative spillovers on innocent bystanders.

The discussion of a global financial regulator needs to be put urgently on the international agenda. In the meantime, efforts at increased co-ordination amongst national regulators requires top priority. It is also urgent that developing country regulators participate fully in key regulatory fora, such as the Basle Committee. Given their growing systemic importance, it is absurd and inefficient if they do not.

5. Compensation of bankers and fund managers needs to be self-regulated or regulated. As Stiglitz (2008) points out, incentive problems are at the heart of the boom-bust behaviour of financial and banking markets. A large part of bonuses are tied to short-term profits and are one-sided, positive in good times and never negative, even when big losses occur (Roubini, 2008). Such asymmetries seem even stronger in institutions such as hedge funds, where managers fees rise very sharply if profits are very high, but fall mildly with poor performance, encouraging excessive risk-taking and leverage (Kambhu et al, 2007 op. cit and Rajan, 2005).

There is increased consensus that high remuneration, and its link to short term profits, contributes to boom-bust behaviour of financial markets. Thus the FSF Report (2008, op. cit) quoted above recommends, that “Compensation arrangements often encouraged disproportionate risk-taking with insufficient regard to long-term risks.” Several senior figures in Wall Street and the City of London are arguing for a radical rethinking of compensation schemes (Lewitt, 2008). It is interesting that even the Institute of International Finance (that represents major banks) recognizes the same

distortions caused by compensation schemes as the FSF Reports, though as could be expected it is opposed to regulators reforming compensation models.

It is positive that the FSF Report recommends that regulators should work with market participants to mitigate risks due to inappropriate incentive structures. This is very encouraging, but it seems unclear that market participants will voluntarily accept such changes, due to collective action and other problems.

There is another negative effect of short-term bonuses, less often highlighted. This is that in good times, banks and other financial institutions have very high profits, but a large part of these are not capitalized, or paid to shareholders. They are paid as very high bonuses. As Wall Street analyst Lewitt (2008) put it “Too much capital is allowed to exit banks in the form of cash compensation.” Banks are bled of capital in good times making less capital available in bad times. When a crisis comes, bail-outs occur to help re-capitalize the banks, paid by the public sector and ultimately by taxpayers. It in fact could be argued that taxpayers are paying ex-post for excessive bonuses. This gives an additional rationale for regulating compensation structure. In fact, very high short-term bonuses are creating moral hazard for three reasons. First, they encourage excessive risk-taking. Second, by bleeding banks of potential capital, they make the need for costly public bail-outs more likely. Finally, if banks have losses due to excessive risk-taking, they may well, in the future, pay fewer taxes. These two latter effects are not traditionally reflected in the literature.

There could be easy solutions to this problem, including providing only a fixed basic salary on a monthly basis, and accumulating bonuses in an escrow account such as a short-term pension fund. These could be cashed only after a period equivalent to an average full cycle of economic activity has taken place, independently if the person stays

with the firm or not. The incentives would change towards making medium or long term profits, and the excessive risk-taking linked to short-term bonuses – where large payments are obtained upfront and no costs are paid when losses take place – would be significantly reduced.

There are of course some technical issues on how this could best be implemented. These could be quite easily overcome. However, the key problem will be political, to overcome the resistance of bankers and fund managers. Given the magnitude of the current crisis, its damaging effects on the real economy – especially in major developed countries – this may be the best of times to move forward. The self regulatory route (by the industry itself) could be tried, but we are sceptical it would bring meaningful results; action by regulators seems essential. In the long term, financial institutions and the financial system will actually benefit from a change in compensation schemes. It is the problems of externalities, collective action and principal agency that may inhibit market agents from reaching a better outcome from their collective perspective. Regulators therefore need to do it for them. This would benefit financial and macro-economic stability and even the stability of individual financial institutions. As argued above, there is also a case for regulating compensation to protect tax payers from possible future bail-outs, and from reduced tax payments by banks due to future losses.