INTRODUCTION
TIME FOR A VISIBLE HAND: LESSSONS FROM THE 2008 WORLD FINANCIAL CRISIS

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The world financial meltdown of 2008 has shattered into pieces the sophisticated but conceptually hollow premise on which the framework of self-regulating markets had been built. The dominance of this conceptual apparatus in recent decades has left, as its legacy, the worst global financial crisis since the Great Crash of 1929, the worst recession since the Second World War and a collapse of international trade. As a result, the world is also experiencing a mounting social crisis, reflected in particular in escalating unemployment and underemployment, and significant reductions in the value of pension funds. The developing world, which had been experiencing in recent years one of its best growth records in history, has also been dragged into the crisis.

Financial crises are not new, and the growing financial market liberalization since the 1970s has led to a good number of them. The United States itself has experienced three of them: the banking crisis generated by excessive lending to Latin America (usually not recognized as a U.S. banking crisis, as it was Latin America that at the end paid a heavy price—a "lost decade" of development), the savings and loan crisis of the late 1980s, and the current financial crisis. It has also recorded major stock market crashes, such as Black Monday in October 1987 and the collapse of Information and Communication Technologies (ICT) stocks in the early 2000s. Many industrial countries have also undergone financial crises in recent decades—Japan being the most noteworthy case—and, of course, the developing world has experienced an unfortunate record number of them. However, the depth of the current crisis and its worldwide systemic implications are unique, and present major policy and conceptual challenges.

This book aims at looking at these challenges, with a particular emphasis on policy implication. It is the outcome of a seminar organized in July 2008 by the Initiative

for Policy Dialogue of Columbia University and the Brooks Poverty Center of the University of Manchester, and part of a research project supported by the Ford Foundation. At the time of the Manchester seminar, the crisis was well underway, but the financial meltdown that followed the collapse of Lehman Brothers in mid-September 2008 had not taken place, nor had the government and central bank activism in industrial countries that subsequently followed. At that point, some, including many in the U.S. Administration, thought that the world had "turned a corner." But we were convinced even then that matters were likely to get worse, and that we should begin thinking more deeply about the causes of the crisis, what should be done in response, and what to do to prevent a recurrence. The papers prepared for the initial conference have been significantly updated to reflect the events and policy decisions between the time of the conference and mid-Spring 2009.

The book is divided into four parts. The first one looks at the causes, magnitude, and broad policy implications of the U.S. financial crisis. It underscores both the distinctive aspects of the current crisis, as well as the "universal constants" behind all crises that have also been reflected in the current one. It also explores whether the current attempt at re-regulating finance (the third in the U.S. since the late 19th century) will be more capable of providing durable financial stability. A final chapter in this section explores the macroeconomic response to the crisis as well as the management of foreclosures and the financial rescue packages.

The second section focuses on regulatory reforms, both national and international. After taking a look at the broad principles that should underlie a new and more effective system of financial regulation, different authors look in detail at the mechanisms of

massive expansion of central bank liquidity, the broad principles for an effective financial regulation, specific key aspects of regulation relating to rating agencies and credit default swaps, and appropriate institutional frameworks.

The third section focuses on developing economies, in a sense, the innocent victims of the current turmoil. It first looks at the management of capital flows in Asia and afterwards at the lessons that can be drawn from the experience of a highly successful country, India. It then explores recent changes in the global financial system and their effects on developing countries, through both the capacity to maintain competitive exchange rates and the accumulation of international reserves as a preventive device.

The final section explores broader issues of international monetary reform, with particular emphasis and specific proposals on the reform of the global reserve system. Two parallel papers propose an entirely new system that would overcome the problems of the current dollar-based system by creating a global reserve currency. It is an old idea—Keynes proposed a global reserve system some seventy five years ago—but as the March 2009 Report of the UN General Assembly Commission on Reforms of the International Monetary and Financial System has underscored, it is an idea whose time has come.

Our book thus attempts to draw on our analysis of the current crisis to make a fairly comprehensive and ambitious set of policy proposals in the fields of national and global regulation, national macroeconomic management, and reform of the world monetary system. At the time of sending the book to the press, debates on national and global policy responses were quite active, including on the initiatives launched by the

Group of Twenty (G-20) during their spring 2009 London meeting. Some interesting initiatives have been put forth, such as the renewed issuance of Special Drawing Rights (SDRs), and steps towards better international regulation, with emphasis on both more comprehensive regulation and the adoption of the principle of counter-cyclicality. However, many concerns remained as to the adequacy of the fiscal stimulus throughout the world and the unsettled position of banks in industrial countries, but particularly in the United States. We hope this book will contribute to the ongoing dialogue on a better design of policies that will replace the ones that have failed in the past.

The U.S. Financial Crisis and Its Implications

As highlighted by Stiglitz in Chapter 2, the global financial crisis is distinctive in its origins, its magnitude, and its consequences. It examines the failures that led to the crisis and, in particular, the important role played by information and incentives problems. On the basis of this diagnosis, the author provides recommendations on how to reform financial regulation to prevent future crises.

The crisis provides a wonderful case study in the economics of information. Stiglitz illustrates how the models—those used explicitly by or implicit in the mind of both regulators and market participants—ignored the imperfections and asymmetries of information. Since incentives mattered, distorted incentives at both the individual and organizational level led to distorted behavior. These distorted incentives included executive compensation systems in banks, conflict of interest in rating agencies, problems caused by the repeal of Glass-Steagall, moral hazard, the use of complexity to

reduce competition and increase profit margins, as well as moral hazard problems created by securitization. While financial markets had changed markedly since the Great Depression, some of the underlying problems giving rise to crises remain the same—most notably excessive leverage.

On the basis of this diagnosis of what went wrong, Stiglitz suggests some regulatory reforms that will reduce the frequency and depth of such occurrences in the future. Regulatory reform is, however, not just a matter for the long-term. This crisis is a crisis in confidence, and it is hard to restore confidence in the financial system if the incentives and constraints—which led to such disastrous outcomes—are not changed. The author lays out the principles of a good regulatory system. It should improve incentives for market actors and regulators, have better and more transparent accounting frameworks, and provide for adequate, counter-cyclical capital requirements. Stiglitz also calls for institutional innovations, such as a financial products safety commission—to ensure the safety, efficacy, and appropriate use of new financial products—and a financial markets stability commission, to oversee the overall stability of financial markets—ideas that have since come to become widely accepted.

The chapter by Caprio argues that many of the features of the crisis are disturbingly familiar: they reflect "universal constants" of financial market behavior, particularly incentive systems that are conducive to excessive risk-taking and lax oversight by markets and supervisors alike. In the author's view, one of the major mistakes that authorities made was putting their faith in a static set of rules, ignoring the dynamics of the regulatory game—that is, the fact that any static set of rules will end up inducing innovations designed to evade the same rules.

According to Caprio, the goal of regulation should be a financial system that takes prudent risks in supplying a large volume of useful financial services efficiently, to the broadest part of society, and with the least corruption. A dynamic system has to have as many participants as possible, with the incentives to uncover new forms of risk-taking that would then compel supervisors to act. Supervisors' main job should be to require far greater information disclosure to the public and verify that it is not false or misleading. More comprehensive disclosure allows society to monitor supervisors and hold them accountable.

A critical ingredient in regulation is how firms compensate risk takers. The supervisory agency could give lower scores to firms that award more generous current compensation and high scores to those with a greater percentage deferred far out into the future. Regulation can also improve incentives by exposing to the legal system those who take excessive risk managing other people's money. Money managers should be asked to exercise the highest degree of fiduciary responsibility in line with their published objectives, and could face lawsuits for improper conduct, subject to the interpretation of the courts. The same legal liability that money managers face should be extended to those who rate firms, so raters should be compelled to publish more information about their ratings, and courts need to hold the principals of these firms liable for their pronouncements.

The chapter by Kregel notes that the United States financial system is currently undergoing its third episode of major financial turmoil and response in the form of financial re-regulation. The first was the creation of the national bank system in the 1860s, the second was the New Deal legislation of the 1930s, and the third is that

currently under way. The first two episodes produced similar responses and similar financial structures, and laid the basis for subsequent crises. Given the similarity of the present crisis with the two previous experiences, there is, therefore, the risk that the solutions introduced will in fact lay the groundwork for the next crisis.

Kregel emphasizes the fact that financial innovations have not only led to the co-mingling of commercial and investment banking, but also to a series of new institutions (hedge and private equity funds) that have taken on both traditional investment as well as commercial banking functions, but without the regulation of either. Some of the major implications of this are that there is no longer any precise relation between financial institutions and functions, and that regulated banks no longer are the primary source of system liquidity, and thus are no longer the major transmission mechanism of monetary policy. This implies that any attempt to re-regulate the U.S. financial system must start from a decision to either re-impose this identity between institutions and functions, or to shift to a system based on functional regulation.

One way to see this is that the United States is facing its third try at deciding between a segmented or a unified banking system. Many European countries have had the latter for many years without the same experience of financial crisis. What have they done that is different? Germany provides a good example. Germany rejected separation of commercial and investment banks after their 1930s banking crisis and maintained universal banking. Regulators operate a system in which the bank's balance sheet is effectively split into short-term commercial banking activities requiring short-term maturity matching, and capital market activities requiring long-term maturity matching. This is the equivalent of extending commercial bank regulation to investment banks, yet

recognizing that the regulations must differ. Interesting lessons can be applied to U.S. regulation, recognizing, however, that these requirements have not sufficed to protect all German banks in the current crisis.

Entering into a more detailed analysis of policy responses, Stiglitz lays out in Chapter 5 four of the key aspects: monetary and fiscal policy, reducing the mortgage foreclosures, and financial sector restructuring. Keynes long ago recognized that monetary policy is typically ineffective in a downturn. He likened it to "pushing on a string." Interest rate reductions prevented a meltdown of the financial markets but were unable to reignite the economy. The burden must therefore shift to fiscal policy.

Given that the deficit soared over the past seven years, it is especially important, in the author's view, that fiscal policy aim at as big a "bang for the buck" as possible. Increasing unemployment benefits rank high in this criterion; tax cuts rank low, other than for low income individuals. Noting that the U.S. has one of the worst unemployment insurance systems among industrialized countries, strengthening it should be an important component of any American stimulus, not just because it is the right thing to do but because money received by the unemployed would be spent immediately and so would help the economy. A second criterion is that the money should create an asset, to offset the increased debt associated with the stimulus package. A third criterion is that any spending should be consistent with the country's long-term vision. Federal government support of R&D to reduce its dependence on oil is an example of what should be included. Assisting the states and localities to make up for the shortfall in revenues and helping them address the striking inadequacies in infrastructure is another

example. These investments, as well as those in education, would stimulate the economy in the short-run and promote growth in the long- run, far more than tax rebates would.

A major challenge is how to save the homes of the hundreds of thousands of those who otherwise would lose their homes, and not bail out the lenders. A novel proposal is a “homeowners’ chapter 11”—a speedy restructuring of liabilities of poorer homeowners, modeled on the kind of relief for corporations who cannot meet their debt obligations.

Stiglitz argues that the downturn will be longer and deeper because of the failure of the Bush Administration to design a quick and effective response. In his view, the Obama Administration finally came up with a stimulus package that might work—but it was too little, and had also design problems. It came up with a mortgage restructuring program—but it too was too little, and not designed to address one of the key problems—that of mortgages that were underwater. But its real failure was its incapacity to come up with an effective program to restart lending. It focused on the past, dealing with the “legacy” assets, rather than looking forward. It may work, but as this book goes to press, it looks increasingly unlikely that this gamble will pay off—and the costs to the taxpayer will be high.

Regulatory Reform

The second part of the book focuses on a detailed analysis of regulatory reform. In the first chapter of this section, Turner examines the principles underlying central bank liquidity actions taken during the financial crisis. The toolkit of central banks has expanded dramatically. The author then poses some fundamental questions. Which

measures should remain permanently in place? How could some of the dangers in this expansion of the role of central banks in markets be addressed?

A bigger toolkit seems always better, provided those using its potentially dangerous tools are fully cognizant of the attendant risks. Only central banks can provide the assurances of liquidity often needed in a financial crisis. In the extreme conditions prevailing in autumn 2008, it was natural that fighting the crisis received priority. Before this crisis, nobody expected the scale of operations central banks would be drawn into—and many of these operations will at some point have to be unwound. A lot of these measures, however, will probably be permanent. Turner suggests three areas where the changes decided on during this crisis are likely to endure: increased term financing, wider deposit arrangements at the central bank, and better cross border provision of liquidity.

One danger, according to the author, is that highly visible central bank operations can distract attention from fundamental credit problems. Public confidence in banks holding large volumes of bad assets can be restored only by some form of government guarantee or by the government taking such assets off banks' balance sheets. It took the virtual seizure of credit markets in September 2008 to convince most governments of the need for an overall strategy to address this issue.

The international dimension of central bank policies has become essential because the largest banks are active in many jurisdictions. Recent central bank swap arrangements to address foreign currency funding difficulties were a very concrete manifestation of international central bank cooperation and, according to Turner, should endure.

D'Arista and Griffith-Jones emphasize, in their chapter, the seeming contradiction that the more liberalized the financial system is, the greater the need for more effective regulation, to avoid massive and costly crises. The chapter develops the two basic principles on which such future financial regulation should be based.

The first principle is counter-cyclicality. It aims at correcting the main manifestation of market failures in banking and financial markets: their boom-bust nature. The key idea is that (forward-looking) provisions and/or capital required should increase as risks are incurred, that is when loans grow more, and fall when loans expand less. The application of this principle in Spain and Portugal shows that it is possible to design simple rules to make it effective.

The second principle is comprehensiveness. For regulation to be efficient, the domain of the regulator should be the same as that of the market that is regulated. In the United States, commercial banks represented before the crisis less than 25 percent of total financial assets; furthermore, only a part of commercial banking activity was properly regulated, with off-balance sheet activities largely excluded. A system of regulation that focused only on parts of the banking industry and that regulated neither the rest of the banking system nor much of the rest of the financial system clearly did not work. The application of the principle of comprehensiveness thus requires that minimum liquidity and solvency requirements be established in an equivalent way for all financial activities, instruments, and actors.

Finally, D'Arista and Griffith-Jones agree with other authors in this volume that flawed incentives played a critical role in the crisis, and they propose modifying incentives for bankers and fund managers so these are compatible with more long-term

horizons for risk-taking. This would break the current link to short-term profits, which encourages excessive short-term risk-taking and boom-bust behavior of financial markets. An easy solution would provide that any bonus would be accumulated in an escrow account. This could be cashed only after a period equivalent to an average full cycle of economic activity has taken place.

Persaud provides in his chapter complementary analysis on the design of banking regulation and supervision in the light of the credit crisis. In the author's view, two fundamental flaws in financial regulation led to the biggest crisis of modern times. The first was to put market evaluations of risk at the heart of financial regulation, through external ratings and risk measures derived from market prices. The essential problem is that market prices may improperly evaluate risk in the presence of market failures. The second flaw was to assume that common standards, such as value-accounting and risk measures, are good and that diversity is bad, thus underestimating the advantages different players have to assume different risks.

Persaud proposes a model of banking regulation based on three pillars. The first will replace the notion of "risk sensitivity" with the concept of risk capacity, based on mark-to-funding. Independently of legal distinctions, regulation would focus on a capacity of different agents to absorb risks, on one hand, and on systemic risks, on the other. Those institutions with short-term funding, which have little capacity to hold market and liquidity risk, would be subject to capital adequacy regime, based on short-term measures of value and risk, mark-to-market accounting, and high standards of transparency. This would be pro-cyclical, but it would be addressed explicitly by a counter-cyclical second pillar. Those institutions with long-term funding liquidity (like a

traditional pension fund or endowment fund) would be exempt from the capital adequacy regime, but would adhere to a new "solvency regime" that allows institutions to use long-term measures of valuation and risk in determining and reporting their solvency. The quid pro quo of not being required to follow mark-to-market price and value systems is greater disclosure.

The second pillar of regulation would entail putting the credit cycle back at the heart of the capital adequacy regime rather than as an afterthought. Capital adequacy requirements should rise and fall with the overall growth in bank assets, with clear rules formulated perhaps in conjunction with the monetary authorities. Like several other authors in this volume, he believes that this reform is essential.

The third pillar would be about maximizing transparency where it will benefit investor protection, with the constraint of not reducing heterogeneity in the behavior of all market participants. Indeed, the whole regulatory framework should seek to support the natural diversity in the financial system and should draw on the systemically beneficial role of risk absorbers—those that have a capacity to diversify risks across time.

Credit Rating Agencies (CRAs) have been regarded as one of the villains of the current financial crisis. Certainly they failed to predict the general downturn in U.S. housing prices, but so did almost everyone else. Their high ratings allowed pension funds and others to provide money to the mortgage markets, though triple A rated securities consisting of pieces of subprime mortgages. Not surprisingly, there have been calls for better regulated rating agencies.

The chapter by Goodhart examines how, if at all, should credit rating agencies be regulated. The author argues that most proposed regulation of CRAs is either useless or

likely to be counterproductive. The CRAs were dragged into the broader regulatory framework (e.g., Basel II) against their wishes and, perhaps, as the U.S. Securities and Exchange Commission has suggested, they should now be removed from this role. Since CRAs are essentially forecasters, the author proposes a small, independent (but publicly funded) Credit Rating Agency Assessment Centre (CRAAC), paid by the industry, to provide a public evaluation of all the CRA forecasts.

More specifically, Goodhart suggests that all CRAs should be required to provide confidential details of their ratings in a numerically quantified format to the proposed CRAAC. This Centre would maintain ex post accountability of CRAs by comparing forecasts with outcomes and publish reports on comparative accuracy. CRA forecasts should have two numerical dimensions: central tendency, and a measure of uncertainty (forecast confidence), the latter perhaps being supported with a modest pre-commitment penalty. Conflicts of interest are an important concern. This can be handled by appropriate adjustment of the payment mechanism and by requiring all products to be rated by two or more CRAs.

One of the ways in which this crisis is different from all previous crises is the role played by new instruments, illustrated so forcefully by the bail-out of the American Insurance Group (AIG). AIG had provided credit default swaps (CDS) to many other financial institutions, and if AIG failed, there was a worry of a bankruptcy cascade, as those to whom it had provided "insurance" might also fail.

Based on the importance of CDS, Mehrling argues in his chapter that the current crisis is best seen as the first test of the new system of structured finance. That test has revealed the crucial role played by credit insurance of various kinds, including CDS, for

supporting both valuation and liquidity of even the top tranches of structured finance products. The various government interventions of the last year amount, in his view, to the public sector going into the credit insurance business in response to crisis—by either writing credit insurance or taking over insurance contracts written by others. The author calls this the “Paulson-Bernanke CDS put”. In his view, a basic lesson of the crisis is that the government must be in the credit insurance business in normal times as well.

The problem with this form of intervention is that it is both too broad and too narrow, and both too temporary and too permanent. It is too broad insofar as it provides a floor under the value of portfolios containing a very wide range of securities, and too narrow insofar as it is focused on portfolios held by particular market participants rather than on the markets themselves. It is too temporary insofar as it envisions no continuing support for markets, and too permanent in that it envisions long-term government exposure to the referenced assets.

The underlying problem according to Mehrling is that the Fed is operating on the securities themselves, rather than on the relevant swap—no doubt as a result of the fear of supporting swaps that do not arise from any real funding operation. The author argues that there needs to be a recognition that swaps are here to stay, and need their own discount facility. The key element of such a facility would be recognizing that the risk in the triple A tranches of credit and their derivatives is not diversifiable: it is systemic risk. It follows that government involvement in credit insurance should focus here. It may be desirable to have a standing facility, with a rather wide bid-ask spread, thus making sure that insurance does not get too cheap, so facilitating an unsustainable credit expansion, but also that is does not get too expensive, so sparking a spiral in the other direction. The

model, obviously, is the standing facility through which modern central banks provide liquidity to the money market.

The final chapter, in this section, by Williams, attempts to analyze the national and international financial governance system, their strengths and weaknesses. In the chapter, a number of issues are explored and a number of recommendations made. The author does not call for a total revamp of the financial governance structure, but rather for a number of improvements, among them some dealing with the issue of legitimacy. It is also important that, since some of these issues had been identified prior to the current difficulties, to ensure that systems and regulated entities accelerate their responses to the recommendations already available.

In particular, Williams emphasizes that serious institutional gaps have emerged, with no international financial institution having a clear mandate to require remedial regulatory measures when risks arise, especially from large countries like the United States. She argues for creating a multi-purpose regulatory oversight body. This could be based on the Financial Stability Forum (FSF), but it would require global representation and clear authority. A key issue to determine would be defining a body that could develop how FSF recommendations would be implemented, with the Bank of International Settlements (BIS) being a good candidate once its membership is broadened. In contrast, she argues that, although the IMF may be well positioned to evaluate the feedback effects between financial system behavior, it is not clear that it is best positioned to set regulatory criteria. At a national level, Williams emphasizes the need for adequate regulatory mandates and information to provide policy-makers with

enough tools to ensure financial stability, given increased inter-connection and internationalization of financial markets.

The Crisis and the Developing World

Focusing in the next part on the crisis and developing countries, the first chapter, by Akyüz, deals with the management of capital flows and financial vulnerability in Asia. There is a growing consensus that vulnerability of emerging markets to financial contagion and shocks depends in large part on how capital inflows are managed, since options are limited during sudden stops and reversals. Vulnerabilities associated with surges in capital flows lie in four areas: (i) currency and maturity mismatches in private balance sheets, especially of financial institutions; (ii) credit, asset and investment bubbles; (iii) unsustainable currency appreciations and external deficits; and (iv) reliance on help and policy advice from the International Monetary Fund (IMF) rather than self-insurance against sudden stops and reversals of capital flows. Crisis prevention should thus aim at preventing fragility in private balance sheets and external payments, checking financial and investment bubbles, and building adequate self-insurance against reversal of capital inflows.

After a brief interruption, capital flows to emerging markets recovered strongly since the earlier 2000s, with Asia being among the main recipients. Asian policy makers did not generally opt for tighter restrictions over capital inflows. In fact, Asian capital accounts are invariably more open today than they were during the 1997 crisis. Rather than applying tighter counter-cyclical restrictions over capital inflows, most countries in

the region chose to relax restrictions over resident outflows and to absorb excess supply of foreign exchange by intervention and reserve accumulation. In this way, most of them successfully avoided unsustainable currency appreciations and accumulated substantial amounts of international reserves.

However, the Asian emerging-market economies are now much more closely integrated into the international financial system than they were in the run-up to the 1997 crisis. Foreign presence in Asian markets has increased, as well as portfolio investment abroad by residents. This has resulted in greater fragility of the domestic financial system by contributing to asset, credit and investment bubbles, and increased the susceptibility of the Asian economies to shocks and contagion from the current global financial turmoil. The combination of asset deflation with sharp drops in exports and consequent retrenchment in investment can no doubt wreak havoc in the real economy. This explains why the slump in industrial production in Asia during the present crisis has been more significant and more rapid than in 1997-98.

Therefore, in Akyüz' view, Asia may have learned some of the wrong lessons from the last crisis. It improved domestic regulation and transparency, strengthened external payments and accumulated large reserves. But its greater integration into the global financial system has meant that Asia has been exposed to greater risk, with little direct gain from access to more capital. More importantly, Asia allowed itself to be more integrated into the global financial system, without putting into place counter-cyclical regulatory mechanisms that would have provided protection against the vicissitudes of global financial markets. In a sense, policies pursued over the past decade made Asia's financial markets less vulnerable to the problems that afflicted the region a decade ago,

but perhaps more vulnerable to the kind of shock that confronted the global economy in 2008.

Given his experience as Governor of the Reserve Bank of India, Reddy provides in his chapter a practitioner's perspective. The author highlights several broad issues which need to be kept in view while considering changes in the regulatory structures of developing economies. During a crisis, whatever has to be done must be done promptly, comprehensively, and effectively to bring stability. But in rewriting regulatory structures, some broader issues need to be considered. Most developing economies recognize the continuing need for reforms in their financial sectors. However, the crisis of 2008 raises doubts as to the efficacy of known and existing models of financial sectors in the advanced economies, particularly the Anglo Saxon one. Thus, in the future, reforms in the financial sector may have to be cognizant of the evolving understanding of the subject, and hence gradualism commends itself.

In light of the recent experience with what may be termed as "excessive financialization of economies," the author poses several questions: should there be a review of the sequencing and pacing of reforms in the financial sector relative to the fiscal and the real sectors in developing economies? In view of the observed volatility in capital flows and of commodity prices, how should the policies relating to financial sector in the developing economies provide cushions against such shocks? Reddy argues that the case for harmonized counter-cyclical policies (monetary, fiscal, and regulatory) in developing economies is stronger than for others, due to higher weight that needs to be accorded to stability. Specifically, he argues for measures such as those taken by the Reserve Bank of India to limit asset bubbles, via requiring banks to increase risk weights,

make additional provisions, and impose quantitative limits on lending. This protected banks against a serious downturn in asset prices.

India also has developed institutional innovation by, for example, establishing within the Central Bank, a very effective Board for Financial Supervision. Besides senior Central Bank officials, it has a number of eminent individuals, including from civil society and the corporate sector.

Reddy also claims that financial inclusion should be at the center of any financial policy. This means ensuring access to all the relevant financial services to all sections of the population, but this should not be equated with aggressive lending or simple provision of micro-credit with profit-motive driving the process. In fact, experience with the 2008 crisis shows that those banks with significant retail base tended to be more resilient.

The remaining two chapters of this section represent also a bridge to some of the issues dealt with in the last part of the book. Frenkel and Rapetti argue in their chapter that the emerging market economies found in the 2000s a new way to participate in the global financial markets. In their view, one of the most important aspects was the stronger emphasis on the relationship between foreign saving, reserve accumulation, and the effect of competitive real exchange rates (RER) on economic growth. The authors find major theoretical explanations and empirical support for the RER-growth link.

The current global financial and economic crisis has brought back the discussion about the international financial architecture. The emerging debate has so far focused on the degree of regulation of global financial markets and potential reforms of multilateral financial institutions. These initiatives share the spirit of the proposals of the late 1990s and early 2000s, which were developed as a result of the crises in emerging markets

economies. The proposals called for building institutions capable of preventing, managing, and compensating for the instability of the system. This agenda is still valid today. However, it should be broadened to take into account the lessons from the period 2002-08.

One important lesson underlines the key role of markets for developing countries' exports. The experience of financial globalization tells us that capital inflows and external savings are by no means substitutes for growth-cum-exports. Therefore, together with institutional reforms aimed at stabilizing the workings of the global financial system, developing countries should also call for a deeper reform, intended to consolidate the positive features of the 2002-08 configuration. For instance, they should pursue an international agreement on real exchange rates and exchange rate regimes that would lead to high growth rates.

One objection to the proposal of targeting competitive RER, current account surplus, and foreign exchange reserves accumulation is that it implies a fallacy of composition. Certainly, this kind of strategy cannot be followed by all countries at the same time. However, Frenkel and Rapetti simply interpret empirical evidence as suggesting that developed countries can best contribute to poor countries' development by providing markets for their (infant) products, instead of providing savings. A situation like this would certainly call for international coordination, in order to reach an agreement on real exchange rate levels among developing and developed countries, and avoid fallacy of composition effects.

The chapter by Carvalho explores, in turn, the accumulation of international reserves as a defensive strategy, as well as the reasons and limitations of their "self-

insurance" function. Conceptually, countries demand reserves of foreign currencies for a similar set of reasons to those which explain why individuals demand liquidity. However, while individuals hold liquid assets primarily to effect transactions, countries do it mostly for precautionary reasons. Again, as in the case of individuals, the stronger the demand for money, the harder it is to obtain liquidity in public sources and money markets.

The experience of emerging countries with balance of payments crises in the 1990s taught them that liquidity can be impossible to obtain during a crisis. The most important source, loans from the IMF, comes with a heavy price tag in the form of policy conditionalities. Therefore, in the 2000s, many emerging countries accumulated reserves as a precaution against new balance of payments crises. However, countries that accumulate reserves out of capital inflows are in a much more fragile position than those which obtain current account surpluses. In fact, countries suffering current account deficits become more and more vulnerable to changes in market sentiment and capital flow reversals. Besides, even when reserve accumulation is successful at making a country more secure, it may be deleterious to the international economy since money holding is fundamentally deflationary.

In conclusion, the chapter notes that international liquidity provision remains as important now as it was in the recent past. Carvalho argues that the best alternative would clearly be an international monetary system where a new international currency could be created according to global liquidity needs, as well as for emergency liquidity facilities to protect countries from adverse temporary external shocks. Both were features of the original Keynes plan at Bretton Woods. At a national level, Carvalho

argues that, if the world monetary system is not appropriately reformed, the main alternative to reserve accumulation is capital controls.

Reforms of the global financial system

The final section of the book includes two parallel contributions on the reform of the international monetary system, particularly the global reserve system.

In the first of these chapters, Ocampo argues that the current global reserve system exhibits three fundamental flaws. First, it shows the deflationary bias typical of any system in which all the burden of adjustment falls on deficit countries (the anti-Keynesian bias). Second, it is inherently unstable due to two distinct features: the use of a national currency as the major reserve asset (the Triffin dilemma) and the high demand for "self-protection" that developing countries face (the inequity-instability link). The latter is related, in turn, to the mix of highly pro-cyclical capital flows and the absence of adequate supply of "collective insurance" to manage balance of payments crises, which generate a high demand for foreign exchange reserves by developing countries. This implies, third, that the system is inequitable (the inequity bias), and that such inequities have grown as developing countries have accumulated large quantities of foreign exchange reserves.

In his view, the major deficiencies in the current system can only be solved through an overhaul of the global reserve system. The most viable is completing the transition that was launched in the 1960s with the creation of the Special Drawing Rights (SDRs). This implies putting a truly global fiduciary currency at the center of the system,

thus completing a trend towards fiduciary currencies that has been at the center of national and international monetary systems.

Given the pro-cyclicality of finance towards developing countries, and the high demand for foreign exchange reserves that it generates, this has to be accompanied by reforms aimed at guaranteeing that SDR allocations are used to at least partly correct these problems, through either one or a mix of a series of alternatives. One would be tying the counter-cyclical issues of SDRs with IMF financing during crises, thus improving the provision of collective insurance. This means that SDRs that are not used by countries should be kept as deposits in (or lent to) the IMF, so that they can be used by the institution to lend to countries in need. More ambitious alternatives would include an asymmetric issuance of SDRs, which would imply that all or a larger proportion of allocations be given to countries that have the highest demand for reserves—that is, developing countries—or designing other development links in SDR allocations—for instance, allowing the IMF to buy bonds from multilateral development banks. A final alternative is to encourage the creation of regional reserve arrangements among developing countries that provide complementary forms of collective insurance.

In the parallel chapter, Greenwald and Stiglitz argue that an ideal system of international payments should be characterized by stability and balance: stability in exchange rates and the absence of sudden crises, and balance in the sense that individual national economies should suffer neither from deflationary effects of chronic external deficits nor the distorting consequences of chronic external surpluses. Both requirements are essential to the efficient international movement of goods and resources. Yet neither requirement appears to have been met by the current dollar-based reserve currency

system. Recurrent crises in Asia, Latin America, and Eastern Europe, and chronic and growing U.S. payments deficits (with their associated deflationary impact) are longstanding characteristics of the current system.

Looking at the global reserve system from the perspective of a global general equilibrium, they argue that the increase in the demand for reserves—understandable from the perspective of self-insurance, as discussed in the chapters by Carvalho and Ocampo—leads to a deficiency in global aggregate demand. However, if some countries run surpluses, others must run trade deficits. What has offset this in recent years is the U.S. spending beyond its means; in a sense the U.S. became the consumer of last resort—but also the deficit of last resort. This system is fundamentally unsustainable.

The authors debunk the twin deficit theory of U.S. trade deficits—that fiscal deficits are associated with trade deficits—by showing that the U.S. ran trade deficits both when it had fiscal surpluses and when it had fiscal deficits. They then argue that, if anything, trade deficits may *cause* fiscal deficits; the deficiency in aggregate demand caused by imports in excess of exports "forces" governments concerned about maintaining full employment to run fiscal deficits. In this sense, the demand for reserves by developing countries generates an insufficiency of world aggregate demand that must be filled by a U.S. trade deficit.

The authors argue that, without reform, these problems will continue to plague the global economy. The current move towards a two (or three) currency reserve system could be even more unstable than the dollar reserve system, which they suggest is already fraying. However, a simple set of institutional reforms which bear a striking similarity to those which Keynes cited in connection with the failure of the pre-Bretton- Woods

system would go a long way toward alleviating these difficulties. They show how such a system could be designed not only to reduce incentives for countries to accumulate reserves but also to provide finance for needed global public goods. The global system would be stable, more likely to remain near full employment, and more equitable.