TOWARDS A NEW GLOBAL RESERVE SYSTEM

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I. Introduction

The economic crisis has resulted in renewed attention to the creation of a new global reserve system. Some of the reasons should be obvious. The dollar-based reserve system has been fraying for years.[1] At least since the beginning of the decade, the dollar no longer seemed a good store of value; its value was volatile and seemed to be subject to secular decline. (Part of the secular decline may itself be associated with the fact that the dollar was no longer seen as a good store of value; countries holding vast amounts of dollars in reserves were disposing of those reserves, or at least curtailing their accumulation.) But the crisis further undermined confidence in the US economy and its management. The way the country responded to the crisis—the enormous increase in debt and the ballooning of the Federal Reserve's balance sheet, from $800 billion to over $2 trillion— provided further worries to those holding large reserves, typified by statements of the People's Republic of China's Premier Wen Jiabao. There were concerns about inflation (though those anxieties could be addressed by shifting holdings to TIPS [inflation indexed bonds]) and declining exchange rates. The Fed has attempted to assure the markets that it would not allow inflation to increase by deftly draining liquidity from the system as the economy recovered, but, because it takes six to eighteen months for monetary policy to have its full effects, this implies that the Fed must *anticipate* the inflation before it actually appears. Those that had watched the Fed's forecasting record over recent years, however, may not be so confident: for instance, it repeatedly said that the problems of the subprime mortgages were well-contained.

While the fraying of the dollar reserve system had already begun a movement towards diversification, the growing lack of confidence in the dollar accelerated the process. Yet, the problems in other potential reserve currencies—most notably the euro—raised questions about the alternatives.

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[1] A point noted in Chapter 9 of J. E. Stiglitz , *Making Globalization Work,* New York: W. W. Norton, 2006.

Globalization itself had raised questions about the dollar-based reserve system: it seemed peculiar that a twenty-first century global economy should be so dependent on the currency of a single country. But so long as United States (US) was the single superpower and its economy was dominant, few wanted to challenge US' seeming resistance to the creation of a global reserve system. But with the crisis, this suddenly changed.

This was especially so as the UN Commission of Experts on Reforms of the International Monetary and Financial System[2] highlighted the ways in which the dollar reserve system contributed to global financial instability and a weak global economy. While many of its arguments were already well known—Triffin[3] had noted that the reserve currency country got increasingly in debt as others' held more of its IOU's as part of their reserves, and Keynes had noted that the build-up of reserves by surplus countries led to weaknesses in global aggregate demand[4]—the crisis gave them increased salience. Moreover, the magnitude of the build-up of reserves in the years before the crisis was enormous. Many saw the resulting "savings glut" as playing a central role in the crisis (contributing to the low interest rates, which in turn contributed to the bubble).[5] It clearly contributed to global imbalances, and even if a "disorderly unwinding" of global imbalances was not the cause of this crisis, it could cause the next.

Those in developing countries and emerging markets are especially sensitive to the inequities of the current system. The US is able to borrow at low interest rates from these countries—a form of foreign aid from the poor to the rich that exceeds the amount of the assistance given to the poor by the rich.[6] These concerns—a global reserve system that seems inequitable and unstable and that contributes to a weak global economy—have culminated in a demand for the creation of a new global reserve system. The United Nations Conference on the World Financial and Economic Crisis and its Impact on Development in June 2009

[2] United Nations, *Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System, . 21* September 2009, available at http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf
[3] Robert Triffin, *Gold and the Dollar Crisis: The Future of Convertibility,* Yale University Press, 1960.
[4] John Maynard Keynes, *Treatise on Money,* Harcourt, Brace, and Company, 1930.
[5] But low interest rates may fuel a legitimate boom rather than a bubble if the financial sector is functioning correctly, and it was ultimately the Federal Reserve that chose to keep interest rates low. See J.E. Stiglitz, *Freefall: America, Free Markets, and the Sinking of the World Economy,* New York: W.W. Norton, 2010.
[6] See Dani Rodrik, "The Social Cost of Foreign Exchange Reserves," *International Economic Journal,* vol. 20, no. 3 (September 2006), pp. 253–266,and J.E. Stiglitz, *Making Globalization Work,* 2006

called for the beginning of discussions; several countries—the People's Republic of China (PRC)[7] , France, Russia—have been vocal about the desirability of a new system. While the US has not enthusiastically endorsed such a discussion, it will be impossible for the US to suppress the discussions with holders of large reserves clearly seeing such a system as in their interest.

Later, in this paper, we will argue why a global reserve system is actually in the interests of the US. But the main point is that the dollar reserve system is already in the process of falling apart. The choice facing the international community is whether to create, systematically, a new global reserve system, or to "muddle through," moving from the dollar-based system to a two- or three-currency reserve system, which could be even more unstable and volatile. (As holders of reserves come to believe that, say, the dollar is on the decline, they will move to shift out of dollars into euros, accelerating the decline of the dollar—until some political or economic event shifts views in the other direction.)

One further factor has provided impetus to the discussions: the newly issued reserves could provide a convenient way of helping finance expenditures for climate change adaptation and mitigation for developing countries. The developed countries made a commitment to provide such support in the Rio Convention in 1992, and it is generally thought that about $100 to $200 billion a year are required. Yet, especially after the crisis, as national debts have soared in most of the developed countries, finding the money appears increasingly difficult. Stiglitz and George Soros have long advocated the use of newly created reserves to help fund "global public goods," including expenditures related to climate change and development.[8] Now, this idea seems to have been endorsed by the IMF.[9]

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[7] Zhou Xiaochuan, Governor of the People's Bank of China, gave a widely acclaimed speech on the subject, "Reform the International Monetary System," March 23, 2009, available at http://www.pbc.gov.cn/english/detail.asp?col=6500&id=178.

[8] George Soros, *George Soros on Globalization,* PublicAffairs, 2002.

[9] *IMF Survey,* "IMF Proposes ' Green Fund' for Climate Change Financing", 30 January 2010, http://www.imf.org/external/pubs/ft/survey/so/2010/NEW013010A.htm

II. The Demand for Reserves

It is now widely accepted that the demand for reserves has contributed to weaknesses in global aggregate demand. One response is the creation of a new global reserve system; another is to reform the global financial and economic system in ways that reduce the demand for the accumulation of reserves. This section addresses the second approach, the next the first approach.

There are at least three factors contributing to the high level of demand for reserves: (a) the high level of global macroeconomic volatility and the inadequacy of alternative mechanisms for risk mitigation; (b) the export-led model of growth, which has been touted as the most successful model for development; and (c) the high level of natural resource volatility, especially that of oil.

We will explain why several of these factors have changed in the past fifteen years in ways which have led to increased demand for reserves. While some reforms may slightly mitigate the demand for reserves, we are not sanguine about any of the reforms currently under discussion having a significant enough impact to mitigate the need for a major reform of the global reserve system. Indeed, some recent events may have exacerbated some of the factors contributing to a high level of demand for reserves

(a) the high level of global macroeconomic volatility and the inadequacy of alternative mechanisms for risk mitigation

Since the era of liberalization and deregulation began some three decades ago and since the world moved to a system of floating exchange rates (and managed floats), the world has been afflicted by repeated economic and financial crises. The recession of 2008 is only the most recent and the most severe—a crisis from which the world has yet to fully emerge. But those countries that had large reserves (such as the PRC) with which to finance a strong Keynesian stimulus have fared far better than those without adequate reserves. Had Russia not had adequate reserves, it would have faced a far more severe crisis—perhaps even worse than the ruble crisis of 1998. The speculative attack on Greece—in some ways reminiscent of the Hong Kong double play—is a forceful reminder of the risks of inadequate reserves.

But even apart from these calamities, an ample supply of reserves upon which countries can draw enables them to stabilize exchange rates. (At the time that the world moved to a system of flexible exchange rates, there was a presumption that markets would work to produce stable exchange rates and that there would be low-cost means of managing the risk of exchange rate volatility. Volatile short-run capital flows have contributed to a high level of exchange rate volatility, and managing the risks, beyond certain short-term movements, has proven expensive.)

A more stable exchange rate reduces a major risk facing businesses (extending years after investments are made), with positive benefits to investment.[10]

As we noted earlier, markets have done an inadequate job in shifting risk from developing countries to developed countries, e.g. the risk of interest rate and exchange rate fluctuations associated with sovereign bonds. Standard economic theory suggests that, with efficient capital markets, risk-averse developing countries would have borrowed in their own currency.[11] There is no good explanation of these capital market imperfections.[12]

Given these inadequacies in modern financial markets (who ironically have prided themselves in their achievements in risk management), countries have set aside trillions of dollars in reserves *at great cost.* The cost of reserves is largely the opportunity costs: funds effectively lent to the US government (now at close to a zero interest rate) could have been invested at home at much higher returns. That governments are willing to forego those high returns provides testimony for the high social benefits of reserves.[13]

The importance of providing alternative mechanisms for risk mitigation has now been widely recognized.[14] The IMF too has recognized this problem and put itself forward as part of the solution. If countries had some kind of automatic drawing right, then they would not need to build up their own (costly) reserves.

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[10] J. Darby, A.H. Hallett, J. Ireland, and L. Piscitelli (1999), "The impact of exchange rate uncertainty on the level of investment," *The Economic Journal 109(454),* C55– C67.
[11] Capital markets are not efficient because developing-country borrowers do not internalize the risks they create by borrowing in foreign currencies. Anton Korinek, "Excessive Dollar Borrowing in Emerging Markets: Balance Sheet Effects and Macroeconomic Externalities", June 2009, University of Maryland mimeo.
[12] One argument sometimes provided is that there is a moral hazard associated with inflation. This does not provide an adequate explanation, since inflation-indexed bonds and/or bonds linked to the exchange rate of similarly situated countries could have been issued.
[13] The cost calculus is somewhat more complicated in at least three ways: (a) many of the high return investments involve domestic resources, and converting foreign exchange earnings would lead to an appreciation of the exchange rate, with the adverse consequences noted in the text; (b) postponing investment may allow investments in technologies that are more appropriate to the country's evolving economic structure, and hence the "cost of delay" may be less than it otherwise would seem; and (c) there are long-term benefits of additional "learning" consequent from the extension of the low exchange rate, again reducing the cost of "delay." Critics of a slow adjustment often focus on the threat to inflation, but most of the East Asian countries have been able to contain these inflationary pressures.
[14] See, e.g. Stiglitz, *Making Globalization Work,* and Martin Wolf, *Fixing Global Finance,* Johns Hopkins University Press, 2008.

The proposal, while well intentioned, is not likely to adequately address the problem. Countries have to be confident that they can have access to the funds when they need them, without onerous conditions being imposed. While previously they could be confident that onerous conditions *would* be imposed, more recent IMF programs have been far better. But there are still some recent programs that have raised concerns. More fundamentally, while there have been notable reforms of governance at the IMF, the pace of change has been slow and the reforms have not been sufficiently deep to provide assurance that the current changes are *permanent* and not happenstance of having a head of the organization who believes in Keynesian economics. Indeed, most analyses suggest that proposed changes in voting rights, even when they are fully implemented, are too small to make much of a difference on most issues.

In the absence of reforms that engender *long-term* confidence, countries will want funds that they can rely on—funds that are directly under their own control. There is likely to be little shifting away from reliance on reserves.

Regional reserve arrangements, such as the Chiang Mai initiative, *may,* in these circumstances, be an important "half-way" house, especially if they can be designed in a way that gives confidence that the funds can be drawn upon when needed.[15] Since downturns within a region are more likely to be correlated than downturns across the globe, there is an argument for providing insurance at a global level. But this advantage seems to be more than offset by the greater difficulty of getting global agreements, at least of the kind that would work in this instance.

The large spillovers across countries within a region—and the greater sense of solidarity—make it more likely that money will be forthcoming when needed.

If effective regional reserve funds can be established, then the aggregate size of the funds can be smaller—and therefore the deflationary impact of annual increases in the size of the funds will be diminished. It would be even better if the countries in a region can create a regional reserve currency (an "ASIABANCOR"), with emissions of this reserve currency partially offsetting accumulations of hard currencies.

Given that reserves will likely be the major form of "insurance" for some time to come, the overall performance of the global economy would be enhanced if other factors contributing to the demand for insurance were diminished, i.e. if the international community took actions that reduced the scope for global volatility and for the transmission of global volatility into national economies.

[15] E.g. provisions requiring IMF programs in order to draw upon the facility are counterproductive.

Two sets of policies would contribute: better coordination of global economic policy (including those directed at redressing global imbalances) and better financial sector regulation.

Unfortunately, for all the talk of global macroeconomic coordination, there has been little progress. This crisis provides ample evidence. Each country determined the size of its stimulus largely on the basis of national considerations; for instance, Ireland could openly talk about being a free rider on a global economic recovery. While recognizing that policies which maximized *global multipliers* gave the most bang for the buck, each country instead focused on maximizing national multipliers—even to the extent of engaging in protectionist stimulus programs, exemplified by the "buy America" provisions in the US stimulus.[16]

The crisis has brought home the role of financial and capital market deregulation and liberalization in causing the crisis and its rapid spread around the world.[17] If countries respond to the crisis by re-regulating, the global economy may become more stable, and the demand for reserves may accordingly decrease. One more factor may have contributed to the magnitude of volatility faced by countries: trade agreements (WTO as well as bilateral) have reduced the scope for countries to respond to the volatility of international prices. This is exemplified by the movement from quotas to tariffs and the strong opposition of the US to Colombia's use of variable-rate tariffs to provide stability to its economy. [18]

(b) The export-led model of growth: Is there an alternative?

Governments around the world have been encouraged to promote exports as a way of promoting growth. The countries of East Asia have been well served by that model.

The promotion of exports does not necessarily lead to a trade surplus—and in fact did not do so to a large extent until the last decade. In a "three-commodity model," one can encourage exports and imports, shifting production and consumption away from import substitutes and non-traded goods. One can still have "trade balance" in

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[16] There is some evidence of coordination of monetary policies. Still, the U.S., for instance, may have welcomed the exchange rate effect of its extraordinarily low interest rate policies, even if they had adverse effects on Europe.

[17] Preferential treatment of capital gains may have also encouraged speculative activity. Tax policy can discourage such speculation and thus help to stabilize the economy, simultaneously reducing the need for reserves and thereby increasing global aggregate demand.

[18] See P. Dasgupta and J. E. Stiglitz, "Tariffs Versus Quotas As Revenue Raising Devices Under Uncertainty," *American Economic Review,* 67(5), December 1977, pp. 975-981.

an export-led growth model, and many countries did so, especially as the increased exports were offset by increased imports of capital goods.

One of the reasons for the change may, in fact, be the combination of neoclassical orthodoxy and WTO Uruguay Round strictures that made industrial policy more difficult and seemingly less attractive. To encourage exports, then, countries had to rely more on exchange rate policy. But exchange rate policy simultaneously encourages exports and discourages imports—giving rise to trade surpluses.

The Uruguay Round agreement may have contributed to the problem in another way. The "Grand Bargain" was supposed to entail a significant reduction in agricultural subsidies, but the advanced industrial countries reneged on this part of the agreement.[19] US subsidies after the Uruguay Round were actually increased substantially, and even when the WTO ruled that the U.S. cotton subsidies were WTO illegal, there was no change in policy. While in other areas, countries can impose countervailing duties, they are more constrained in doing so in agriculture.[20] The only way developing countries can offset the adverse distributional effect on their poorest citizens is to keep a low exchange rate. To put it another way, were they to allow their currency to appreciate, their poorest citizens would be hurt as a result of competition with US and Europe's highly subsidized farmers. Though they could respond by similarly subsidizing their farmers, to do so would take away funds badly needed for development. Thus, a low exchange rate serves both distributional and developmental objectives. But it also results in large build-ups of reserves.

There are alternative high-growth strategies, and the PRC may in fact be switching to such a strategy through government investments in education and technology. It is a switch that is possibly also being encouraged by global trade policy: TRIPS has made it increasingly expensive to rely on foreign technology.

Export-led growth is important in the initial stages of development as a way of promoting technology during a period in which the growth of demand may lag the growth of supply. But part of development strategy is the improvement in institutional arrangements that can facilitate the growth of domestic demand (e.g. public health and education, and improved financial institutions providing access to credit and insurance, which reduce the need for savings). The PRC, however, faces an additional challenge: changing the distribution of income, increasing the share of household income in national income. Such changes are always difficult and are not typically accomplished quickly.

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[19] See A. Charlton and J. E. Stiglitz, *Fair Trade for All,* Oxford University Press, 2005.

[20] The Uruguay Round created a category of subsidies that were non-actionable (the Green Box) that were *supposedly* non-distortionary. A closer look at these subsidies makes clear that most of them are distortionary, especially in a world of imperfect capital markets.

(c) The high level of natural resource volatility, especially that of oil.

High growth in Asia combined with limited supplies of natural resources have, naturally, contributed to increasing prices of exhaustible natural resources like oil. The prices of these commodities have also been highly variable. Sellers of these resources are aware of this variability and have been repeatedly advised on how to manage their economies in the presence of this high volatility, through the creation of stabilization funds—a form of precautionary savings that simultaneously helps avoid exchange rate appreciation (the Dutch disease problem). These accumulations of reserves were particularly important in the Middle East in the years before the current crisis.

Equilibrium Reserve Levels

The first decade of the twenty-first century saw a remarkable build up of reserves. Previous subsections have outlined possible explanations. One may perhaps think of this build up of reserves as a movement from one equilibrium (defined, for instance, as a desired ratio of reserves to GDP or trade) to another. We have explained the factors that one might have expected to lead to an increase in the demand for reserves. The problem is that some of the factors leading to increased demand for reserves are ongoing, increasing the demand still further. For instance, the crisis and the way it was managed globally have shown the value of having a high level of reserves, encouraging those countries that did not previously have large reserves to accumulate them.

There are several factors that may, however, tame this demand.

As reserves *grow globally*—especially reserves held in the currency of one country—perceptions of a risk of a loss of value also increase; in a sense, the expected costs of holding reserves increase at the same time diminishing returns to the benefits of holding reserves (at the margin) sets in. It is clear that today the PRC is far more worried about its holdings of reserves than when those reserves were much smaller.

But there is a partial response: to hold reserves not in the currency of the US (Tbills) and other hard currency areas but in non-financial assets or in less risky financial assets. Several countries, for instance, sell inflation-indexed bonds, which protect against the risks of inflation that one might think will increase as the indebtedness of the country increases. But such markets are far less liquid than Tbill markets, so that they may be less effective in risk-mitigation. Non-financial assets are, of course, more illiquid and still riskier. Yet, as government reserves increase, especially when the increase in reserves is due to the country pursuing an export-led growth strategy, governments are able to bear the additional risk, especially since such risks are accompanied by markedly higher returns when the funds are invested well. The major problem, however, is political: in spite of an official belief in free and open capital markets—and a demand that developing

countries open up their capital markets to investors from advanced industrial countries—developed countries are likely to resist opening up their markets to sovereign wealth funds, or possibly even to firms in which governments have a large share. Curtailing investment opportunities reduces the returns to holding reserves, and again, in balancing out the costs and benefits of reserve accumulations, will result in governments limiting the size of reserves.

Wealth Management

The large reserve holdings—combined with the volatility of global financial markets and enhanced understanding of the principles of risk management—have changed perspectives on reserve management. It used to be a canon that reserves would be held in dollars. But the dollar is no longer a good store of value: its value has been volatile and in secular decline. Countries have learned about the principle of diversification. Thus many (most) countries put a large fraction of their reserves in euros and other currencies.

The problem is that as countries take an increasingly active role in managing their reserves, the global financial system may become increasingly volatile; and a two- or three-currency reserve system may be more volatile than a single currency system. If countries holding large amounts of reserves come to believe that the dollar will be decreasing in value relative to the euro (because, say, of political and economic events in the US or Europe), they may dump dollars and buy euros; because they are sufficiently big players in the global financial markets, their purchases and sales collectively may move the market—reinforcing the decline in the dollar. The largest holders of dollar reserves may, of course, act more cautiously, aware of the impact of the decline in the dollar's value on their remaining holdings. Moreover, those countries whose major motivation for holding reserves (at the margin) is exchange rate management (for promoting export-led growth) may even be forced in these circumstances to increase their holdings of dollars, to avoid movements of the exchange rate. But to balance the increasing risk of a loss in value, they may move holdings to higher yielding assets. Given the fluidity of capital markets, such processes may contribute to global financial instability, as bubbles are fed in both the reserve currency and in the countries holding reserves.

III. Towards a New Global Reserve System

The UN Commission laid out a variety of alternative forms that a new global reserve system might take and a variety of ways by which the transition from the current system to the new one might be accomplished. We will not repeat their fairly comprehensive discussion here. What we will do is lay out the basic trade-offs and argue for my preferred approach.

The alternatives differ in their degree of "ambition." The least ambitious is a simple extension of the current system of special drawing rights (SDRs), within the IMF which are issued only episodically. Under the new system, they would be issued regularly and in larger amounts. The most ambitious is one which (a) allows the amounts to be issued to vary with the state of the global economy, so that the issuance of the global reserve could be an active instrument of global macroeconomic stabilization policies; (b) allows the funds to be used for the pursuit of global public goods, like development and climate change; and (c) builds in incentives for countries not to maintain high levels of surpluses, recognizing that persistent surpluses generate macroeconomic externalities on the global economy by contributing to an insufficiency of global aggregate demand.

We strongly believe that it would be desirable to move towards the more ambitious frameworks, which simultaneously address all of the problems posed by the dollar reserve system (and discussed earlier in the paper) as well as other key problems in globalization. Keynes—not surprisingly, given his focus on underemployment equilibria—argued for a system that taxed surplus countries. This could be implemented by reducing allocation of new reserves to countries with persistent reserves. These amounts could then be reallocated, e.g. for climate change or development.

Regional reserve arrangements

The UN Commission report commends the regional arrangements (such as the Chiang Mai initiative), encourages their expansion, and sees this as a possible way forward in the creation of a new global reserve system. This can be done in two ways: either through open regional systems, in which countries not in the region eventually are allowed to join into the regional arrangements; or by joining together the various regional arrangements into a global system.

As we noted earlier, regional arrangements have some distinct advantages in addition to the fact that negotiating such arrangements may be easier than reaching a global accord: the countries not only have greater understanding of each others' economies[21], but because of the close interlinkages and interdependencies, they have a greater interest in seeing a quick recovery.[22]

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[21] In the East Asia crisis, there was a widespread belief that the IMF and most of the G-7 did not understand—and many did not like—the "Asian economic model."

At the time of the East Asia crisis, there were proposals for the creation of an Asian Monetary Fund. The United States strongly opposed this initiative, which might have enabled the region to recover much more quickly, with a much shallower downturn. Seemingly, the US thought that such an institution would undermine the effectiveness of the IMF and American financial hegemony in the region.[23] The US Treasury was willing to put its political interests above the well being of those in the region. (Whether without its opposition such an institution could have been created at the time is open to debate.)

The Chiang Mai initiative and subsequent expansions represent attempts by the region to enhance regional cooperation in responding to a crisis. But as the UN Commission pointed out, IMF requirements embedded in the arrangement, seemingly to mollify opposition, also undermined the effectiveness of the arrangements, reflected in the limited use in this crisis. While changes in the IMF in recent months may have made these restrictions less burdensome, countries in the region should have enough confidence in their own judgments about the appropriateness of the economic policies of their neighbors not to require the concordance of the IMF *in any form*—after all, the IMF encouraged the policies that led to the crisis and its rapid spread; its models have been shown to be flawed. To be sure, it makes sense for those within the region to consult with others on their views and to be sensitive to any global externalities. But those in the region are likely to have a far better understanding of the economies in the region and to be far more sensitive to regional externalities.

Regional cooperation can take many forms—just as global cooperation can. Just as we have argued for the virtues of a more ambitious global arrangement, so too we would argue for a more ambitious regional arrangement. A modest arrangement would entail a vastly expanded swap arrangement along the lines of current initiatives. But we would encourage the consideration of deeper arrangements, the creation of a regional *reserve* currency, with emissions of reserves being used to promote stability and growth. Regions like Asia or South America are too diverse to satisfy the conditions for an optimal currency area; but the conditions for ensuring the success of a reserve currency are much less stringent. Such a reserve currency need not fully replace the use of other currencies in reserves.

A Portfolio Approach

There was a suspicion that many celebrated the crisis as confirming its deficiencies and the superiority of the American economic model.

[22] Just as the U.S. was the prime mover in the Mexico bailout of 1994-1995.

[23] See J. E. Stiglitz, *Globalization and its Discontents,* New York: WW Norton, 2002; and E. Sakikabara, "The East Asian Crisis - Two Years Later", in B. Pleskovic and N. Stern (eds), *Annual World Bank Conference on Development Economics 2000,* Washington, DC: The World Bank, 2001.

Regional reserve arrangements do not allow risk diversification to the same extent that a global reserve arrangement would. Yet the likelihood of quickly moving towards a new reserve arrangement, especially one of the ambitious forms, is bleak. That is why we would encourage a portfolio approach—moving forward on several forms simultaneously: more ambitious regional arrangements concurrently with less ambitious arrangements at the international level, such as using SDR expansions for financing climate change.

IV. Concluding Comments

The world's financial system has been marked by a high level of instability in recent decades. The view of free market fundamentalists that a movement to free and fully flexible exchange rates accompanied by financial and capital market liberalization would automatically be accompanied by the development of good markets for managing risk and a new era true stability and high growth (as the episodic adjustments of exchange rates under the old regime came to an end) has been proven wrong. There have been far more financial crises—more than 120 in the last three decades; growth in most countries—other than those that did not buy fully into these doctrines—has actually been slower; and inequality has increased.[24] The international community has not managed these crises in ways that have instilled confidence, at least within developing countries.

Most of the crises occurred in developing countries, with the IMF and the G-7 bailing out Western banks that had made bad lending decisions—but with the burden of the bailout falling on the citizens of the developing countries. The effects of the crises were contained. So too, as the bubbles within the advanced industrial countries broke, government came to the rescue, with the infamous Greenspan-Bernanke put. The inference made by many was that the system—free market economics—worked wonders. But it was the wrong inference. What enabled the system to work, at least as well as it did, was that government was constantly coming to the rescue.[25]

This crisis has brought out into the open the deficiencies in current economic arrangements and the economic philosophies that underpin them. But these economic arrangements have served certain interests well; not surprisingly, reforms have been slow, especially in the United States. Changing global economic arrangements is even more difficult.

The consequence is, as we have argued, heightened demands for reserves, which will contribute to a weak global economy for years to come. The magnitude of these increases might be diminished with reforms in the ways that the international financial institutions work and in the "global financial and economic architecture"— rethinking the principles of financial and capital market liberalization, both as they affect movements of capital and finance across borders and as they affect financial markets within a country; with improvements in private financial markets so that they actually do a better job in managing risks, especially those facing developing countries; with reforms in the ways in which sovereign debt is restructured; and with reforms in the global trading system which allow countries to manage their risks better and promote their development more effectively. Even with such

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[24] There may, of course, be many other factors contributing to these macroeconomic changes.

[25] See J. E. Stiglitz, *Freefall, op. cit.* and George Soros, *The New paradigm for financial markets: The credit crisis of 2008 and what it means,* PublicAffairs, 2008

reforms, there are likely to be substantial increases in reserve holdings in coming years—a form of precautionary savings that will weaken global aggregate demand. But without such reforms, the increases will be even larger, and the global economy even weaker, partially as a result of the current economic crisis and the way that it has been managed.

We have argued in this paper that a new global reserve system is absolutely essential, if we are to restore the global economy to sustained prosperity and stability. But achieving this, too, will not be easy. In the interim, the countries of Asia have an opportunity to strengthen existing regional arrangements. Doing so would not only contribute to the strength of the Asian economies, but possibly also be a critical building block in the creation of a new global reserve system.