

RIS DISCUSSION PAPERS

Towards a Multipolar World of International Finance

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and
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RIS-DP # 46/2003



**Research and Information System
for the Non-Aligned and
Other Developing Countries**

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**RESEARCH AND INFORMATION SYSTEM FOR THE
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Contents

I. Introduction	1
II. The Current Unipolar International Financial Structure is Unjust and Unstable	2
III. Asian Economic Needs can not be Met under the Present System	3
<i>a. The Great Economic Slowdown in East Asia</i>	3
<i>b. Promoting Regional Public Investment Activity: Regional Keynesianism</i>	5
<i>c. Mobilizing Regional Savings for Regional Investments</i>	7
<i>d. Risks on Exchange Rate Regimes</i>	8
<i>e. Case for Capital Controls and Regional Financial Security Mechanisms</i>	9
<i>f. Inadequacies of the Monetary Co-operation in Asia</i>	11
IV. An Outline of Preferred Program of Monetary Co-operation in Asia	12
<i>a. Exchange Rate Regime</i>	12
<i>b. A Researve Bank of Asia</i>	14
V. Concluding Remarks	18
Reference	21
Annexure I: Economic Costs of the programs	22
Annexure II: Bibliography	26

Towards a Multipolar World of International Finance

Ramgopal Agarwala *

(in collaboration with Gauri Modwel)

I. Introduction

The basis for the current system of international finance was laid at Bretton Woods Conference in 1944 which is often described as one of the most successful conferences of the twentieth century and a landmark in world economic history. Among the key objectives of International Monetary Fund that emerged from the conference were: to provide “the machinery for consultation and collaboration on international monetary problems”, “to promote exchange stability”, and to provide resources “to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity” (quotes from Articles of Agreement of the IMF).

Over time, however, the system has changed dramatically. The current system is not based on true international consultations and collaboration. It is now led by the US. Most of the international trade is denominated in US dollar, most of the international reserves are held in US dollar, and the US can pay for its external deficits by printing dollars which it does not expect to have to redeem in the foreseeable future. The US dollar is now the vehicle currency in inter-bank and forward exchange markets and the main currency of denomination for most cross-border capital flows. The US-led private financial institutions intermediate a major part of international savings and investments and the US-led international financial institutions now play a decisive role in determining the macro economic policies of many developing countries. Thus even more than in political and military spheres, the world has become unipolar in financial matters.

In the wake of financial crisis in Latin America, East Asia and Russia in the 1990s, there have been intensive discussions on reform of the international financial architecture. It is widely recognized that the instability in exchange rates is now extremely high and is detrimental to trade and investment. The hot money flows have led to extremely high instability in balance of payments of many countries and over time have been associated with major economic upheavals. Contrary to the provisions in the Articles of Agreement (noted above), the IMF programs have somehow too often become associated in the recent past with “measures destructive of national prosperity”.¹

There are many proposals at individual and group levels for reform of the international financial system.² Illustrative of the line of reasoning in these proposals is the

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¹ For a review of the statistical association of IMF programs with poor economic performance see W. Easterly (2001), for analytical weaknesses of IMF programs see Stiglitz (2002) and for political agenda behind some recent IMF programs see Paul Blustein (2001) A statistical analysis of 30 countries with intensive IMF programs by the author comes out with the conclusion that in only 10% of these cases were the countries able to achieve per capita income growth of more than 1% per year and inflation rate of less than 10% per year. See Annexure 1.

² See Annexure II for a partial list of these proposals.

report of the Emerging Markets Eminent Persons Group (EMEPG). The Group makes thirty-three recommendations in eight key areas. These recommendations relate to speed and sequencing of capital account liberalization, choice of appropriate exchange rate regime, regulation of highly leveraged institutions, setting up of international financial codes and standards, private sector participation in crisis prevention and resolution, reducing social costs of financial instability, reform of international financial institutions (IFIs) and regional monetary and financial co-operation.

The authors of these and similar proposals are generally frustrated to see that even though there is a lot of fanfare about these reports, nothing much happens on the ground. The reports are quietly shelved after having provided an opportunity to give vent to the grievances against the current system

It is the contention of this paper that as in discussions of domestic policy reforms, these reform proposals have to be seen in the political economy context of the benefits accruing to the leader under the current unipolar international financial system. The paper argues that under the present system the leader gets tremendous benefits in terms of financial gain and ideological hegemony and it can not be expected to surrender these gains voluntarily through a meaningful reform of the international financial architecture. Just like any other system, reforms from within are not a feasible option as these assume that the principal beneficiary of the existing system will voluntarily give up the benefits that accrue to it. The present situation is against the basic American principles of equality and pluralism and also against the long-term interests of the American people. However, the lure of short-term gains is too powerful to be overcome by persuasion. The only viable alternative to the countries adversely affected by the unipolar financial world is to reduce their dependence on the current international system and develop their own regional financial architecture. Europe has made a good beginning in that direction. Asia should now follow suit.

II. The Current Unipolar International Financial Structure is Unjust and Unstable

In the unipolar world of finance, the US had a soft budget constraint in terms of external deficit. The US thus ran huge deficits in current account balance for nearly a decade. And it was able to combine these deficits with an appreciation in real exchange rates because of huge capital inflows which were in part due to the illusion of high profitability of investments in the US created to a significant extent by the boom in stock markets and by the creative accounting practiced by corporate America. The salient features of the international resource position of the US as it emerged by 2000 are presented below (Table1):

- Over the period 1993-2000, the US net debt position worsened by \$2 trillion. At the end of 2000, the US was the largest debtor nation in the world.
- The current account deficits have been rising during the 1990s and were \$ 445 billion in 2000, more than the entire income of 1 billion people in India.
- Unique in the world, external liabilities of monetary authorities and General government in the US in the form of bonds, currency and notes amounted to \$1755 billion in 2000. The seigniorage earned on these was more than the aid given by the US.

Under the unipolar financial system, the richest country in the world has been appropriating the seigniorage that is created by expanding world trade and that should be shared world-wide and preferably go to the poor. The system is thus clearly unjust.

The unjust system is also unsustainable. Over the medium and long term, the current account deficit of the US cannot keep on growing at the current rate. The US cannot continue to act as the locomotive of the world economy. Unless an alternative source of demand is found, the deflationary tendencies in the world economy could become highly pronounced. The problem will be particularly serious for Asia which has been running large trade surpluses with the US. Similarly, the overvalued exchange rate of US dollar is increasingly unsustainable and the dollar may well be heading for a hard landing. Unless alternative arrangements are made the instability in US dollar will have serious adverse effects on Asia.

Table 1
Growing International Indebtedness of the US during 1993-2000

(In billion of US dollars)

Heads	1993	2000
Assets	3057.64	7189.80
Liabilities	3235.68	9377.25
Net Int. Investment Position	-178.04	-2187.45
Current Account Deficits	-82.68	-444.69
Assets :		
Direct Investment in abroad	1027.55	2467.76
Portfolio Investment	853.53	2406.50
Other Investment	1011.65	2187.14
Reserve Assets	164.91	127.40
Liabilities :		
Direct Investment in US	768.40	2736.87
Portfolio Investment	1335.53	4367.94
Of which :		
Bonds & Notes	962.01	2702.36
Monetary Authority	594.55	1222.03
General Govt.	102.66	533.58
Other Investment	1131.75	2272.44
Of which:		
Currency and deposits	133.73	251.79
Monetary Authority	133.73	251.79
General Govt.	--	--

Source: International Monetary Fund, Balance of Payments Statistics, Year Book, Part 1: Country Tables, 2001 & Part 2: World and Regional Tables, 2001-2000

III. Asian Economic Needs can not be Met under the Present System

a. The Great Economic Slowdown in East Asia

The problem of finding alternative sources of demand is heightened because at present even with the current account surplus with the US, Asia has a huge underutilized productive capacity. The problem is particularly severe for East Asia which is in the grip of the greatest slump in its history since the Great Depression. According to the Asian Development Outlook by ADB (2002), GDP growth in the ASEAN for 2001 was 1.9 percent. The mighty

economy of Japan registered a fall of 0.5 percent in its GDP in 2001 and is expected to register a fall of 1.1 percent in 2002. The Korean economy grew by 3 percent in 2001; Taipei, China declined by 1.9 percent in 2001. The Chinese economy is the only one that grew at the erstwhile typical East Asian rate of over 7 percent. (see Table 2).

The poor performance of 2001 comes on top of the mediocre performance ever since the outbreak of the financial crisis in the region in 1997. In Indonesia, per capita income in 2001 is 10 percent lower than in 1996, in Thailand 6 percent lower, and stagnant in Japan. For Malaysia and Philippines, annual growth rates in per capita income over the last five years has been less than 0.5 percent. Only PRC and Korea have been able to register significant growth rates in per capita income. For the region as a whole, annual average growth rate in per capita income over the last five years (1997-2001) has been 4.9 percent in East Asia and -0.1 percent in Southeast Asia, the lowest recorded for these regions for any five year period over the last 50 years.

Table 2
GDP Growth Rates and Forecasts for Selected Countries

Countries	(Percent)	
	2001	2002
China, People's Republic	7.3	7.0
Hong Kong China	0.1	2.1
Indonesia	3.3	3.0
Japan	-0.5	-1.1
Republic of Korea	3.0	4.8
Malaysia	0.4	4.2
Philippines	3.4	4.0
Singapore	-2.0	3.7
Taipei, China	-1.9	2.8
Thailand	1.8	2.5
Southeast Asia	1.9	3.4

Source: ADO 2002 for all countries except Japan. World Economic Outlook (April 2002) for Japan.

Note: Numbers for 2001 are actual growth rates while those for 2002 are forecasts

Experience around the world shows that with growth in per capita income below 1 percent per year, incidence of poverty is likely to increase. Not surprisingly the same is happening in many parts of the region over the last five years. Between 1996 and 2001, the number of the poor (defined as having income of less than US\$2-a-day) has increased in Indonesia, Philippines, and Thailand. Similarly, the number of unemployed has increased significantly over this period in Hong Kong, China, Japan, Korea, Singapore, and Taipei, China. In Japan and Korea, the rate of unemployment is highest during the post-war period. Even in PRC, the problem of unemployment is becoming serious: according to official statistics, the number of unemployed in urban areas in China has risen from 5.53 million in 1996 to 5.75 million in 1999.

As reported in IMF (2002), the growth of potential output in Japan during the 1990s has been about 2.6 per cent per year (on a production function approach). The actual output growth has been only about 1.3 percent per year. This suggests that as of 2001, the economy is operating about 17 percent below capacity which means a loss of potential output of over US\$700 billion (at 2000 prices) per year (see Table 3).

Similar estimates by IMF Staff of potential output for other countries in ASEAN+3 are not available. However, some rough estimates of potential output were made based on the use of ICORs. As noted in the Table 3 below this approach suggests an estimated loss of

potential output of over US\$300 billion (at 2000 prices) per year in developing Asia in 2001. Thus the potential output rose in East Asia may be as high as one trillion dollars to year.

The loss of potential output has been associated with low capacity utilization in manufacturing and construction sectors. Capacity utilization in manufacturing sector in Thailand in 2001 was as low as 53 percent. In Korea, Philippines, and Taipei, China, these rates were around 75 percent. In Japan, operating rate indices for industries declined by about 20 percent between 1990 and 2001. This under-utilization of capacity is vividly illustrated by slowing production in construction industry in Japan and in IT industries in several East Asian countries.

Table 3
Potential Output Lost in East Asia in 2001
(in billion of Dollars at 2000 Prices)

Countries	Potential Output Lost
Japan	722
PRC	119
Hong Kong, China	26
Indonesia	32
Republic of Korea	55
Malaysia	18
Philippines	1
Singapore	17
Thailand	44
Total	1034

Source: Author's estimates

b. Promoting Regional Public Investment Activity: Regional Keynesianism

The most promising source of recovery in the region is promotion of public sector-led investment. Domestic pump-priming will have to play the crucial role in revival of growth in the region. And pump-priming efforts are being undertaken in several countries, though reluctance under IMF mindset to accept the Keynesian framework even in the conditions of slump is a major hindrance. But in most of the major countries in the region, regional pump-priming can provide a useful supplement to the domestic efforts. For example, in Japan, domestic pump-priming efforts are running into difficulties partly because of the problem of finding worthwhile public works projects and partly because the public debt has already reached high levels and there is a political reluctance to allow public debt to increase much further. However at a regional level there are many viable infrastructure projects which can help to increase utilization rate in Japanese manufacturing and construction sectors. And if a regional institutional mechanism could be developed to channelise Japanese excess savings into loans for these infrastructure projects, regional pump-priming can proceed without increasing public debt in Japan. Even if some concessional financing becomes necessary to make Japanese bidders for these infrastructure projects to be internationally competitive, the public resources required would be a fraction of what is required in domestic public works projects. Similar logic would apply to pump-priming in economies such as Hong Kong, China; Singapore; and Taipei, China where there is large excess capacity in sectors such as IT industry for which there is not enough potential domestic demand but there is potential regional demand which can be transformed into effective demand through regional financing mechanisms.

In a report published by Economic and Social Commission for Asia and the Pacific (ESCAP) in 1994 entitled Infrastructure Development as Key to Economic Growth and

Regional Economic Co-operation, it was estimated that the increment in physical infrastructure facilities required between base period of 1990-92 and the year 2000 for ESCAP member countries excluding Australia, Japan, and New Zealand were approximately US\$1400 billion, of which up to US\$500 billion was identified as available. The financial resource gap was therefore estimated to be US\$900 billion.

More recent comprehensive estimates are not available. But country studies in many Asian countries clearly show that there are public investment programs in several countries whose viability over the long term is not questionable but which cannot be implemented because of shortage of funds and lack of profitability in the short and medium term. Many of these investments have positive externalities in terms of environment and social stability and some public assistance for such investments would be eminently justified, particularly when the opportunity costs of supplying these investment goods from countries with excess capacity is low in the current situation. Individual country efforts are not enough, either in the resource surplus countries (such as Japan) or in resource deficit countries in developing Asia. There is a mutuality of interest in regional co-operation.

One group of such investment needs relate to infrastructure investments for tackling the growing environmental problems in Asia. For PRC alone additional (to the business as usual scenario) investment needs for environment-friendly development with high pay-offs are estimated to be of the order of about 1 percent of GDP (over US\$10 billion per year) during the next 20 years. Over the long term, PRC will have to implement the programs of water transfer from the water surplus south to the water deficit north. The programs for such transfers are at an advanced stage of preparation and needs funds for implementation. There are large programs of watershed management and reforestation in PRC which require huge construction activities. The trend toward urbanization is strong in PRC and there are mega cities emerging in several parts of the country. Over the long-term there is very little doubt that these mega cities will require subway systems for urban transportation. The subways require huge investments upfront for which funds are not currently available. The investments are construction intensive and can provide a fillip to the moribund construction sector in Japan. There are similar viable programs for environment-friendly investments in several other East Asian countries such as Indonesia, Myanmar, Philippines, Thailand, and Viet Nam.

For India alone, the infrastructure investment needs over the next decade are estimated to run into nearly US\$500 billion (Nagesh Kumar, 2002). Some of the main components of these investment requirements are: power generation and transmission (US\$143 billion), exploration and transportation of oil and gas (US\$100-150 billion), coal mining (US\$18 billion), telecommunications (US\$53 billion), expansion and upgrading of roads and highways (US\$34 billion), ports (US\$7 billion), mass rapid transit (MRT) systems for metros (US\$20 billion), and improvement in sanitation and water supply (US\$6 billion).

Regional co-operation can play a major role in improving energy security of East and South Asia. Over the long-term countries in this region would need to develop alternative land routes for transportation of oil and gas from Central and Western Asia to the consumption centers in PRC, India, Japan, and Korea. Central Asia has vast potential of oil and gas but at present lacks the means to transport them to Eastern consumption centers. Among the projects identified for facilitating such transportation are the following:

- Expanding rail transport of oil between Kazakhstan and Xinjiang, PRC as an interim solution to meeting the needs of both Kazakhstan and the PRC;
- Construction of oil pipeline between western Kazakhstan and Xinjiang, PRC;

- Building electric transmission infrastructure between the Kyrgyz Republic and southern Xinjiang, PRC;
- Completing and renovating the gas pipeline from Turkmenistan and Uzbekistan through the Kyrgyz Republic to Almaty, and eventually extending this pipeline to Urumqi.

These and such other projects are viable and essential for long-term energy security of Asia. But their implementation is held up due to the huge amount of resources required upfront. They should be priority candidates for funding under a strategy of regional Keynesianism.

Then there are Pan Asian infrastructure projects. For many decades there have been intensive discussions in Asia on several major infrastructure projects which connect different Asian countries and Europe. Two among them are: the Pan Asian Highway and the Pan Asian Railway. Under the auspices of the UN system, detailed technical work has been done on various components of these projects. ADB has been active in developing infrastructure projects for Great Mekong Subregion. Due to shortage of finance, the progress on these projects has been inadequate. Project for Pan Asian information highway may also be given a boost at this time. The funding requirements for these projects run in tens of billions of dollars and their long-term viability is not questionable. In the context of excess capacity in construction industry in Japan, Korea, and elsewhere, may be now is the ideal opportunity to launch a major project for completion of these Pan Asian projects.

Another area of investment where the long-term viability is not questionable is IT investments in Asia. Despite some progress, the reach of IT facilities in many Asian countries is quite limited. A publicly supported investment program in IT facilities in these countries could give a fillip to the IT industries in the region in particular in Japan; Korea; Malaysia; the Philippines; and Taipei, China.

c. Mobilizing Regional Savings for Regional Investments

The region has adequate savings and productive capacity to make these investments a reality without depending on extra-regional resources. The important insight of Keynesian economics that in the conditions of underemployment equilibrium, investment creates its own savings is particularly relevant for the region today. With increased utilization of capacity of Japan and other major economies in the region through pump-priming investment, incomes will increase and so will savings. The fear of excess demand due to increased investment is misplaced in the region at present.

However, even at the current levels of economic activity, the region has more savings than it is utilizing. During the last five years, annual average of current account surplus (excess of regional savings over regional investments) has been US\$174 billion per year. At end-2000, the region has foreign exchange reserves of US\$1 trillion, much in excess of its needs for transactions purpose and much above the reserve ratios maintained by other major regions such as Europe or North America. These excess reserves represent a clear case of misallocation of resources. Several countries in the region have a large part of their savings deposited in non-regional centers where the rate of return is several percentage points below what the regional borrowers have to pay to the lenders from outside the region. If an institutional mechanism can be developed to utilize a greater proportion of the regional savings for regional investment needs, the savings to the region can be in tens of billions of dollars per year.

The development of viable domestic and regional bond markets is one important proposed means of putting the savings of the region to productive uses. Efforts should be

made to develop bond markets denominated in local currency where the foreign investors will absorb the exchange risk in return for higher fee but in local currency. A great deal of work has yet to be done for harmonization of cross-border listing, trading, clearing and settlements, securities borrowing and lending, repo markets, etc. More efforts are needed for creating regional bond market infrastructures in Tokyo and other financial centers in the region. One of the key projects in the development of such infrastructures should focus on the creation of a single central securities depository (CSD) to perform the safekeeping, clearance, and settlement functions for all securities available in the region. Another type of institution that can facilitate effective intermediation is rating agencies. The region is rather fragmented geographically and many of the economies do not have critical mass of large business enterprises to justify a domestic rating agency capable of establishing the necessary professional reputation for objective analysis and in depth understanding of the political, economic, and social development of the region. There may be a case for pooling resources of the region together to create an economically viable rating agency in the region.

d. Risks on Exchange Rate Regimes

The risks of hard landing of the US dollar are particularly great for Asia, because despite its eminence in many other areas of economic policy, Asia has been far from following optimal exchange rate policies particularly during the last two decades. Under the IMF approach of freely floating exchange rates in Asia have gone through large gyrations which clearly were not favorable to the development of the countries. During this period, the two key currencies for the region for its trade, investment, and finance, the US dollar and the Yen, have gone through great fluctuations. Adjusted for prices (consumer price index with 1995 as base) the dollar was worth 161 yen in 1980. Through some ups and down, it depreciated sharply until it was only 94 yen in 1995, and since then it appreciated to 120 yen in year 2000. Over this period there were year-to-year variations of over 15 percent and four-year variation of over 40 percent. The protection/subsidization that such changes in exchange rates can provide may be larger than liberalization of trade provided by reductions in average rates of tariffs. The risks to trade and finance that such fluctuations introduce are clearly more than what most enterprises can handle comfortably. In principle, these fluctuations can be handled by forward contracts on currencies. But such options are not widely available to all enterprises and in any case the forward market must charge a high premium for assuming these risks inherent in sharp fluctuations.

For individual countries in the region, there were major ups and downs in their effective exchange rates. The fluctuations in individual currencies in the region with respect to the trading partners can perhaps be illustrated by referring to the experience of one country, say, the Philippines. The Philippines exchange rates have maintained a relatively stable link with the US dollar. In real terms (adjusted by consumer price indices), the Philippine Peso declined steadily from US\$0.045 in 1980 to US\$0.028 by 2000, with sharp depreciation of up to 20 percent as in 1983 and in 1998. However fluctuations with the Yen were far greater with up to 45 percent depreciation in one year (1986) and up to 25 percent appreciation in another (1996). With respect to its regional trading partners too the Philippines has gone through some sharp fluctuations. Over the last twenty years, the Peso has undergone mild appreciation with respect to Malaysian Ringgit and sharp appreciation (which hurts Philippines regional exports) with relation to Indonesia and PRC. With respect to Korean Won, Singapore dollar and Thailand Baht, the Peso has been relatively stable over the twenty year period though there were some year-to-year fluctuations. With regard to exchange rates of other countries the sharp deterioration in exchange rates in Indonesia in 1997-98 from 2909 on average for 1997 to 10014 for 1998 was a stark example of mismanagement of exchange rate in conditions of turbulence. It was a cruel blow to the economy, something that Malaysia was able to prevent, even though it would have suffered

the same fate if its leaders did not have the courage to withstand the pressures from abroad. The social, political, and economic difficulties in Indonesia that followed were not unconnected with the failure of the authorities to follow a more appropriate exchange rate policy.

In the post-crisis period, there has been a move toward more flexible exchange rates in the region. However, as the empirical work done by Mashahiro Kwai [2001] shows the “observed” exchange rate arrangements in East Asia indicate that the dollar’s role as the dominant anchor has become prominent once again since late 1998. He also notes that for emerging East Asia, the United States is no longer the most dominant economic partner and the relative importance of Japan is as large as and in some cases larger than that of the United States. Given the continued volatility of yen/dollar exchange rates, this results in excessive fluctuations in effective exchange rates of these countries. As Mr. Kwai mentions, “Free floating rates are inappropriate for developing countries, including those in East Asia, because rates tend to be very volatile and can easily move beyond what the economic fundamentals dictate, exerting harmful impact on trade, investment, and growth.”

While it may be desirable for the region to move away from anchor to the US dollar, it is not easy for any particular country to move unilaterally away from the current US-dollar based exchange rate arrangement to a new arrangement in which the weight of the dollar is smaller and that of other currencies larger. This may result in misalignment of the country’s exchange rate in relation to the other countries in the region which may be competing in the same external market. This demonstrates the potential importance of coordinated action on the part of the countries in the region.

In view of the regional consensus of improving the exchange rate regime for the region, serious discussions are ongoing as to the appropriate regime for the region. At one extreme is the idea of a currency union within a common currency. As part of the initiatives under the Hanoi Plan of Action approved by the ASEAN leaders in December 1998, a Task Force was set up to assess the feasibility, preconditions, merits of coordinated action on exchange rates, and the form an ASEAN currency and exchange rate mechanism may take. The Task Force, consisting of reserve bank officials from the ASEAN countries and chaired by Bank Negara Malaysia was established in August 2000, and the first meeting of the Task Force was held on August 8, 2001.

A second line is that suggested by Mundell (Seminar at ADB, 2001), namely creation of a parallel currency, which involves less of a political commitment. The idea of a parallel currency is that all or most of the East Asian countries could use it. Countries could retain their own currency but link it to the parallel currency in some fashion, and the parallel currency could be the trading currency for the Asian countries.

e. Case for Capital Controls and Regional Financial Security Mechanisms

In the early 1990s there was rapid movement toward liberalization in capital accounts in Asia: in particular in Indonesia, Korea, Malaysia, Philippines, and Thailand. In retrospect it is widely agreed that this liberalization was premature. The financial institutions in these countries were not mature enough and the prudential practices not advanced enough to handle these liberalizations. Coinciding with this liberalization on capital account in these countries there was a rapid growth of hedge funds in the developed countries, which could move huge funds to take advantage of interest rate spreads across the globe. The size of these funds were so large in relation to capital markets of many countries in Asia that they could swap the operations of foreign exchange markets in these countries. The volatility of these funds was too great in relation to the endurance capacity of most of the Asian economies.

Net private capital flows into five countries (Indonesia, Korea, Malaysia, the Philippines, and Thailand) tripled between 1993 and 1996 (from US\$ 22.5 billion to US\$ 67.4 billion). Then in 1997 the flow suddenly reversed and US\$ 15.6 billion flowed out of these economies, with an additional US\$28.2 billion outflows in 1998.

These capital flows comprised primarily of short-term currency loans, which led to the double mismatch of maturity and currency as banks were lending long-term and in local currency for nontradables (primarily real estate). This in turn led to the twin crises in currency (resulting in devaluation) and in banking (resulting in banks becoming overburdened with nonperforming loans with many eventually failing).

The importance attached to capital movements in development policies in recent years is a curious phenomenon, particularly for the countries in East Asia. Most of these countries over the last ten years have had saving of more than 30 percent of GDP, which can be expected to yield GDP growth rates of 7 percent per year or more in East Asian conditions. In this context it is not obvious why the portfolio and loans from abroad should be so important parts of the country's development policy. One can understand the interest of international financiers and hedge funds managers to have the open capital account to benefit from variations in interest rates. But it is not clear why these Asian countries need these funds on any significant scale. In fact the most curious thing was that the large private capital inflows because of their volatile character also became an argument for keeping large foreign exchange reserves where the rate of return was much lower than what the country had to pay to the foreign investors in portfolio and bank loans.

What applies to bank loans applies even more forcefully to portfolio investments. The activities of what has been called "Electronic Herd" are not moved by considerations of marginal productivity of capital in different countries but largely by speculative instincts. The large funds moved by this Herd has been found to be highly destabilizing for developing countries and it is not clear why ASEAN+3 countries with high savings rate need these destabilizing resource flows. Prime Minister Mahathir's characterization of these flows as "unproductive, unnecessary and immoral" may have a large grain of truth in it.

More generally, in the development literature there is now a growing acceptance of the need for caution on opening up of capital accounts. For most developing countries, the issue now is not whether but how to manage capital flows. The Chilean model of taxing short-term flows and Malaysian practice of temporary restraints on capital outflows in the face of crisis as well as a more generalized Tobin tax on capital movements are becoming more acceptable features of capital account management in all countries, both developed and developing. There is a growing consensus in East Asia on more active management of capital flows, particularly the short-term capital and portfolio investments. Policy harmonization on how to manage capital flows is an important potential area for regional co-operation. And such capital controls are unlikely to find support from the IMF because they reduce the profits earned by financial institutions of the US dealing in international currencies.

With some controls on hot money flows, the task of managing exchange rates to maintain some stability in real effective exchange rates would be somewhat easier. However, as the recent experience with commodity prices and trade in IT sector has shown, developing countries in the region have to be prepared for external shocks in trade account. Similarly even with some controls on hot money flows, sudden fluctuations in capital movements cannot be ruled out. As argued by Kwai, "Intra-regional exchange rate stability cannot be maintained and regional contagion cannot be prevented without co-operative action in the areas of international liquidity support to reduce the likelihood of or respond to, a currency crisis." [Kwai (2001), p.15]

f. Inadequacies of the Monetary Co-operation in Asia

Unfortunately, Asian co-operation efforts to date have been not been effective in providing financial security to the countries subjected to financial shocks. Inter-ASEAN network of currency swaps and repurchase agreements set up in 1977 was to provide immediate short-term swap facilities to members with temporary international liquidity problems. Initially set at US\$ 100 million for 5 members with a maximum of US\$40 million receivable per member, it was raised to US\$200 million for US\$80 million per member in 1978. EMEAP (Executives' Meeting of East Asia and Pacific Central Banks) was set up in 1991 with 11 members (Southeast Asian and Australasian members) and its objectives include enhanced regional surveillance, exchange of views and information, and financial market developments. In 1994, a group was set up for four major Asian financial centers (Australia; Hong Kong, China; Japan; and Singapore) which was to review issues related to the stability of the region's financial and foreign exchange markets. Also set up in 1994 was APEC Finance Ministers Group which provided a forum to exchange views and information among members on regional financial developments and to pursue cooperative programs to promote financial sector development and liberalization. In addition there have been longstanding fora in the region for training in central banking and discussion of central banking issues.

These arrangements however proved totally inadequate to help the affected countries during the Asian crisis of 1997. The money available (US\$200million) was of course woefully inadequate and reportedly was never used. Immediately after the crisis, Japan came forward with a plan for an Asian Monetary Fund (AMF) so as to assist in bringing stability to Asian currencies and financial markets. It planned to raise US\$50-60 billion in contributions from participating countries and another US\$50 billion from the Japanese Government. It was to be independent of the IMF and function as a substitute for IMF activities such as regional surveillance. The original membership was to be PRC; Hong Kong, China; Japan; Korea; and Taipei, China. With lukewarm support from PRC and vehement opposition from the US and IMF, the plan was scrapped a few months later. It was argued that the AMF would enhance the moral hazard problem, create a double standard (IMF and AMF), and challenge the IMF leadership.

In place of the AMF came Manila Framework Group (MFG) in November 1997. This framework was totally subsidiary to the IMF and has been largely defunct in practice. At the ASEAN Finance Ministers' Meeting (AFMM) in October 1998 in Washington DC, the ASEAN Surveillance Process (ASP) was officially established based on the principles of peer review for all member states. But this too was to be Technical assistance and capacity building for this process were to come primarily from the Asian Development Bank.

In October 1998 came the New Miyazawa Initiative (NMI). This arrangement was implemented by Japan as a bilateral support mechanism focused on assisting Asian countries affected by the currency crisis in overcoming their economic difficulties and contributing to the stability of international financial markets. The support package consists of US\$30 billion, of which US\$15 billion is available for Asian countries' medium to long-term financial needs for economic recovery provided either as Official Development Assistance (ODA) or untied loans. The other US\$15 billion is for countries' short-term capital needs during the process of implementing economic reforms. Commitments under this initiative as of February 2000 totaled US\$21 billion of which US\$13.5 billion were for medium and long-term support. These are not grants but loans, the objective of which is to support corporate debt restructuring, strengthen the social safety net, stimulate the economy, and facilitate trade finance and assistance to small and medium sized enterprises. There are two short-term swap arrangements (US\$2.5 billion with Malaysia and US\$5 billion with Korea). These are not tied to the IMF and are annually renewable.

In the “second stage” of the NMI, Japan pledged its readiness to assist in mobilization of up to 2 trillion Yen of domestic and foreign private sector funds for Asia through assistance for fund raising in international financial and capital markets (via JBIC and ADB credit guarantees and interest subsidies) and through assistance for investment in Asian private sector enterprises via equity funds. Through this initiative Japan hopes to utilize its abundant savings and promote active use of the Tokyo market.

Probably the most concrete and currently active regional financial arrangement to come out of the Asian crisis was the Chiang Mai Initiative (CMI). The CMI was established by the ASEAN +3 (PRC, Japan, and Korea) Finance Ministers at Chiang Mai in Thailand in May 2000 at the time of the Annual Meeting of the ADB. The CMI has two parts:

- i) ASEAN Swap Arrangement (ASA). This is the swap arrangement originated by ASEAN in 1997 in an amount of US\$200 million. In November 2000 it was enlarged to US\$1 billion and expanded to include all ASEAN members.
- ii) Bilateral Swap Arrangements (BSA) and Repurchase Agreement. The purpose of BSA is to provide short-term financial assistance in the form of swaps to a country in need of balance of payments support or short-term liquidity support. Up to 10 percent of the maximum amount of drawing can be provided for a short-term period without linkage to the IMF. The interest rate was not disclosed but a rate 1.5 percentage points higher than LIBOR has been mentioned by some. The purpose of Repurchase Agreement is to provide temporary foreign exchange liquidity to a country which is in need of foreign exchange liquidity support via the sale and buyback of appropriate securities.

Some see Chiang Mai Initiative (CMI) as a natural progression leading to the renewal of the old idea of Asian Monetary Fund. However for this progression to take place some fundamental rethinking is necessary about the link of Asian program to IMF. Under present conditions, only about 10% of the resources available under CMI can be used without IMF programs. Thus with all the initiatives noted above, the total amount of financial support that can be provided to Asian countries that do not want to take IMF medicine is only about \$2 billion --so small as to be inconsequential. On the basis of poor performance of the countries under IMF programs (see Annexure 1), we argue that so long as the regional co-operation is linked to IMF, it has, under current conditions, no chance of success in reviving growth momentum in the region.

IV. An Outline of Preferred Program of Monetary Co-operation in Asia

Faced with the prospect of slowdown in US economy and hard landing of US dollar, with the background of a large underutilized productive capacity and unstable exchange rates, Asia needs to prepare for an alternative regional financial infrastructure. In what follows we make two proposals for that purpose: (a) an exchange rate regime which achieves relative stability in real effective exchange rates and (b) a regional institution that can create regional parallel currency to help fulfilling the needs of balance of payments shocks and development of the region.

a. *Exchange Rate Regime*

The discussions of regional co-operation for exchange rate policy usually focus on nominal exchange rates. Such co-operation requires co-operation for relative price movements and thus on monetary policy. That naturally bears on sovereignty of monetary management which is difficult to surrender for countries in Asia with widely different levels of development. This then usually leads to pessimistic conclusions about the political feasibility of monetary co-operation in Asia.

It could however be argued that co-operation for relative stability in real effective exchange rate policy is both *more relevant and more realistic*. It is more relevant because what matters for trade and investment flows are real rates more than nominal rates. It is more realistic because such co-operation does not require co-ordination of monetary policies in the region. Each country can pursue its own monetary policy but will try to adjust its nominal exchange rate so as to maintain relative stability in real effective exchange rates. The stability program has to be agreed in broad terms with variation within a band and over a time period, thus avoiding the risk of speculation on the currency. Moreover, the real rates would not be rigid, but adjusted in response to external and/or internal shocks which may cause a fundamental disequilibrium in the rate.

One example of such a policy of real effective exchange rate stability is provided by India during the 1990s. As noted in Table 4, during this period the real effective exchange rate has been kept relatively stable in India. The exact mechanics of this policy needs to be studied and the feasibility of its replication needs to be explored. But broadly speaking, such a policy requires a policy of managed floats in exchange rates to prevent disorderly movements in exchange rates and some restrictions on free flow of short-term speculative capital. In addition, it will be helpful to have a regional balance of payments (BOP) safety mechanism to handle BOP shocks. All these conditions seem to be feasible for most countries in Asia at the present stage of development.

The relative stability in REER in India has been obtained despite its not following any targeting framework. Reserve Bank of India intervenes mainly to prevent disorderly movements in exchange rates. This task is facilitated by India's relative low rates of inflation and limitations of capital account movements. However, this has not required any strict limits on fiscal deficits of the country.

India's performance on stability of REER is in sharp contrast with the fluctuations in REER in many other Asian economies. If India's experience is any guide, relative stability in REER can be obtained without tight program of cooperation on macro-economic balances as is attempted in Europe. A broad argument on avoiding major divergences on inflation and willingness to intervene to prevent disorderly movements in exchange rates can give relative stability in REER.

Table 4
Real Effective Exchange Rate (REER) Movements in India during 1993-2000

Period	REER with 5-country bilateral trade weights (Base: 1993-94=100)
1993-94	100.00
1994-95	105.81
1995-96	102.29
1996-97	103.43
1997-98	105.84
1998-99	97.79
1999-2000	96.74
2001-02	100.76

Sources: Reserve Bank of India Annual Report, 2000-01.

In Asia the inflation rates are not as divergent as they were in Europe in the seventies when Europeans tried a similar system of relative stability in REER and thus Asia is better placed in that respect than was Europe. Of course it will be necessary to have some broad

understanding among the Asian countries regarding macro-policies so that sharp divergences in inflation do not emerge. But it will not be necessary to have tight rules on macro-balances as done under Maastricht Agreement among European countries which are neither feasible in Asia today nor desirable for flexible macro-management.

b. *A Reserve Bank of Asia*

For making regional monetary co-operation effective, it seems necessary to initiate institutional reforms which will be bolder than what has been attempted so far. We suggest establishment of a regional reserve facility, which we call Reserve Bank of Asia (RBA). RBA will have at least US\$100 billion of capital contributed by the member governments, of which perhaps only 10 percent need to be paid up. It will accept deposits from reserve banks of member countries and lend funds to the governments as needed to help the region achieve stability of real effective rates and help the countries in need of short-and medium-term BOP assistance. Minimum deposit levels and maximum borrowing levels in several tranches will be decided according to the economic weights of the member countries. It would develop its own form of policy dialogue and conditionality (preferably through higher interest charges for higher levels of borrowing) based on the regional realities. RBA will pay interest on the deposits close to rates of return currently obtained by Asian central banks on their deposits and will lend at rates with a reasonable margin (say 2 percentage points). It will issue an Asian Currency Unit (ACU) which will be a composite of currencies of member countries with weights in line with the respective value of trade. The ACU will be freely convertible into international currencies. The initial value of ACU could be made equal to 1 US\$. Over time, the value of ACU will be maintained in real terms by adjusting the units of each currency by the index of inflation in the country of the currency. This feature of value maintenance should make ACU an attractive reserve asset much as gold was in the past. ACUs should be increasingly used as the unit of account, as unit for invoicing and as reserve currency by countries in the region.

Over time as ACUs become widely used as reserve currency in the region, RBA will be able to issue ACUs in multiple of its primary reserves and earn seigniorage which could be in tens of billions of dollars. These funds could be allocated to development agencies in the region at concessional rates to help build up the regional public goods and help development of the region in general. With concessional funds coming from within Asia, the tax payers of non-Asian countries would be relieved of the burden of financing development of the less developed countries in Asia on concessional basis and could devote these resources for raising the welfare levels of the poor within their economies or in poor African countries where the needs are clearly more acute.

The operations of RBA will be delinked from IMF conditionality, as has been the case with EU monetary institutions.³ The proposed RBA does not require any financial or intellectual assistance from IMF or the non-regionals. In this situation, there is no basis for waiting for the approval from IMF or non-regionals for setting up the regional mechanism in particular since the record of developing countries under IMF programs in terms of growth and stabilization has been so disastrous.

³ The arrangements proposed here have several points of similarity but also important differences with EMU/EMS/EU arrangements. Among the similarities are: voluntary agreement for unilateral actions by the participating countries, multilateral framework for advice, monitoring and financial assistance, greater liberalization of capital flows within the region than between the region and outside and a concept of an adjustable band for exchange rate. Among the differences are: focus on a band of real effective exchange rates rather than nominal rates (which avoids the need for convergence on inflation and macro-policies), multilateral financial assistance on a large scale, and a parallel currency with stability in real terms from the beginning.

Table 5 presents some illustrative numbers on balance sheet of RBA for five years 2004-2008. It is assumed that Asian countries which have been running current account surplus of well over \$100 billion in recent years will deposit \$100 billion each year in RBA.⁴ Combined with the paid up capital of \$10 billion, this will enable RBA to deposit \$110 billion in the initial year in international currencies. This amount will increase over time as the deposits from member country reserve banks increase. It is assumed that backed by these reserves, RBA can issue ACUs as a multiple of its reserves. In the illustrative table the reserve ratio is assumed to be 33 percent thus enabling the RBA issue ACUs three times the international deposits. It is assumed that RBA will issue 200 billion ACUs every year during 2004-2008.

The profit and loss situation of RBA is presented in Table 6. It is assumed that the income on its international deposits is 2.5 percent per annum. It pays 3 percent per annum on the deposits of ACUs which are assumed to be 80 percent of the ACUs issued, with the rest kept by member country banks for transaction purposes. The rate of interest charged on basic credits (equal to basic deposits) is assumed to be 3 percent per annum and on other credits 5 percent per annum. The system yields substantial profits due to seigniorage currently appropriated by the US and these are allocated to aid in the region.

⁴ Thus there is no recall of the US debt is involved; only a slowdown in the rate of growth of that debt.

Table 5
An Illustrative Balance Sheet of Reserve Bank of Asia

	(In billions of Asian Currency Units)				
	2004	2005	2006	2007	2008
Assets					
Deposits in internationally convertible currencies	110	210	310	410	510
Use of RBA credits	200	400	600	800	1000
Contingent assets (usable ACUs, assumed to be 3 times the international deposits)	(300)	(600)	(900)	(1200)	(1500)
Unused ACUs	100	200	300	400	500
Concessional loans to development banks	3	9	18	30	45
Other assets	0.53	1.08	1.83	2.78	3.93
Total	415.53	826.08	1241.83	1662.78	2088.93
Liabilities					
Capital (agreed)	(100)	(100)	(100)	(100)	(100)
Paid-up	10	10	10	10	10
Deposits from reserve banks of member countries	100	200	300	400	500
Deposits from holders of ACUs (assumed to be 80% of the ACUs issued)	160	320	480	640	800
Contingent liabilities in the form of ACUs held outside the RBA	40	80	120	160	200
Contingent liabilities in the form of unused but usable ACUs	100	200	300	400	500
Unpaid profits	3.53	9.08	18.83	30.78	46.93
Total	413.53	820.08	1232.83	1650.78	2073.93

Source: Author's estimates

Table 6
An Illustrative Profit and Loss Account of RBA during 2004-2008

(In billions of Asian Currency Units)

	2004	2005	2006	2007	2008
Credits issued by RBA	200	200	200	200	200
Of which:					
Outstanding credits against basic deposits	100	200	300	400	500
Other credits	100	200	300	400	500
Income on basic credits at 3% p.a.	3	6	9	12	15
Income on other credits at 5% p.a.	5	10	15	20	25
Income from international deposits at 2.5% p.a.	2.75	5.25	7.75	10.25	12.75
Total income	10.75	21.25	31.75	42.25	52.75
Payments					
On international deposits at 2.5% p.a.	2.5	5.0	7.5	10.0	12.5
On ACU deposits at 3% p.a.	4.8	9.6	14.4	19.2	24.0
Total payments	7.3	14.6	21.9	29.2	36.5
Other expenses	0.1	0.1	0.1	0.1	0.1
Total expenses	7.4	14.7	22.0	29.3	36.6
Surplus	3.53	6.55	9.75	12.95	16.15
Allocated to aid	3	6	9	12	15
Allocated to reserves	0.53	0.55	0.75	0.95	1.15

Source: Author's estimates

In addition to financing regional public goods as discussed above, RBA can help the countries in the region to refinance high cost loans which are also laden with counter productive conditionality. An illustration of refinancing needs is provided by the case of Indonesia. Under the aegis of IMF programs, per capita income in Indonesia has declined by about 8 percent between 1996 and 2001 and on the basis of past record of IMF programs as noted above, there is very little likelihood of Indonesia resuming healthy growth under IMF programs. RBA can replace IMF financing and IMF programs. RBA policy dialogue may emphasize the importance of increasing investment (including public investment) and resuming rapid growth and recognition of acceptance of some amount of inflation to work out the debt burden. For handling the external debt problem it will emphasize tough negotiations with creditors and also help in the process of recovering at least part of the stock of illegal

capital flows from Indonesia, which are estimated by the Indonesian authorities to be over \$200 billion. Indonesia's external debt burden is over \$100 billion but a debt work out with the prospect of immediate payment may reduce the burden substantially. A RBA credit line of say 50 billion ACU over a two to three year period may help Indonesia get out of its present debt and IMF conditionality trap and revive investment and income growth.⁵

V. Concluding Remarks

The paper argues that the current unipolar world of finance is unjust and inefficient for Asia, while it brings tremendous short-term financial and ideological gains to the leader, namely the US. In this situation, the ideas of reform of international financial system to take care of their adverse effects on Asia (based though they are on the American principles of justice and pluralism) are politically unrealistic in the near-term.⁶ The only alternative for Asia is set up a regional financial infrastructure geared to helping the regional economies much as Europe has done. The situation in some ways is similar to the political struggle of Independence pioneered in Asia in the last century which, over time, turned out to be beneficial to both the colonizers and colonized.⁷ The region has a strong moral case as well as financial and technical resources to accomplish the task of bringing pluralism to the world of finance. Hopefully, the general public and the political leaders will see the task in its broader dimensions and muster courage to take the necessary action.

Despite the strong case for a multipolar world of finance and the precedent of EU, the road to enhanced regional cooperation in Asia is not likely to be easy. The level of trust among the major players—PRC, India, Japan, Korea, ASEAN—has not always been high. The fears of domination by one country or another are commonly expressed. In factual terms the tensions in Europe among the major players in the early 1950s were perhaps no less than they are in Asia today and the gains from better utilization of resources in Asia for all Asian countries are no less than what was the case in Europe. But it is an open question whether the political leadership in the region will be able to overcome the emotional impediments to cooperation and forge a consensus in favor of accelerating the pace of cooperation in the region.

The biggest problem in regional cooperation arises when the cooperation framework impinges on sovereignty of nations. The proposals made in this paper, though ambitious, are very light in terms of infringement of national sovereignty. Coordination on exchange rate becomes difficult when stability of nominal exchange rates requires harmonization of

⁵ The principle of using RBA as an intermediary to refinance the loans of Asians to non-regionals by using the reserves held by Asians abroad may be extended to countries such as Saudi Arabia which are increasingly interested in diversifying their reserve holdings.

⁶ Despite volumes written on an expanded role of SDRs, the US with only about 16% of voting power in the IMF has prevented an SDR-based system because that will reduce the seigniorage it earns in the current dollar based system.

⁷ It is worth noting that the rate of growth of GDP was much higher in the post-colonial period than before for both the colonizers and the colonized. See Angus Maddison (2001) p. 185 for the U.K., p. 203 for India.

GDP Per Capita (1990 International \$)					
	1820	1870	1913	1950	1998
U.K.					
GDP Per Capita	1707	3191	4921	6907	18714
Annual Growth rate				1.1	2.1
Period				(1820-1950)	(1950-1998)
India					
GDP Per Capita	533	533	673	619	1746
Annual Growth rate				0.12	2.2
Period				(1820-1950)	(1950-1998)

domestic monetary policies. However, if the aim is to manage stability in real effective exchange rate terms, it does not infringe on independence of monetary policies. Different countries can have independent monetary policies, so long as the resultant differentials in inflation rates are allowed for changes in nominal exchange rates. Establishment of RBA will essentially be just a repeat of what was done at Bretton Woods at the global level without any sacrifice of national sovereignty. Thus the extra regional efforts called for in this paper are for concerted actions for regional self-help without sacrifice of national sovereignty, and to that extent they should be easier to implement. The gains to developing countries in Asia from regional cooperation along the lines mentioned above are easy to identify. If regional Keynesianism helps to finance national infrastructure and IT projects with long-term viability in developing countries, the gains would be obvious. And in order to ensure an equitable distribution of these benefits, an allocation mechanism can be devised similar to what is done for allocation of external assistance by international financial institutions now. To the extent regionalism Keynesianism finances Pan-Asian projects, it should have positive effects on all Asian countries.

If Asian economic cooperation is to be strengthened, Japan, the largest economy of the region, must play a lead role. In the past, serious efforts for regional cooperation were not forthcoming from Japan because it was not clear what Japan was to gain from such efforts. Regional cooperation was largely part of Japan's efforts in promoting investment, trade, and financial flows to the rest of Asia and these could be done in the framework of Japan's own aid and investment programs without any regional effort. If the analysis presented in this paper is valid, Japan may have a lot to gain from the regional cooperation proposed here. The volatility in the yen's exchange rate has been a major source of instability in the Japanese economy, and the proposed RBA with its help in maintaining stable real effective exchange rates for its members may be of enormous help to the economy. More important is the possibility of better utilization of Japan's productive capacity through regional Keynesianism: Japan can gain several percentage points of its GDP and help the revival of its construction and machinery sectors, which are of vital importance to the country, both politically and economically.

More difficult is the task of demonstrating how the proposed changes will benefit the rest of the world, particularly the single most important economic partner of Asia, the US. In substantive terms there is very little doubt that the rise of Asia from its present slump will provide a helpful engine of growth to the world economy and contribute to peace and prosperity in the world. Also if a more developed Asia can look after its financial needs and relieve taxpayers of non-Asian countries of the burden of development aid, it should be welcome news to the common man and to the finance ministries of these countries. The main losers will be global financial intermediaries that appropriate the seigniorage accruing from the current international financial infrastructure. There are some powerful voices in the international community (such as the Meltzer Commission) calling for such decentralization of aid institutions. But much work is needed to convince the international community that they should not undermine Asian efforts for economic and financial cooperation as they have been doing recently, and instead support them as they did for European cooperation. The proposed RBA will lead to some loss of seigniorage accruing to the US at present. However, that should be seen as a move toward more equitable distribution of seigniorage in the world economy. The proposed changes would also mean some constraints on the profligacy of the present generation in the US, which is building up enormous external debts (over US\$2.7 trillion). Any checks to this profligacy should be seen as reducing the economic and financial vulnerability of the future generations of the country.

Will the arguments for fairer globalization prevail over the power of vested interests? Only time will tell. In the meantime, we draw some comfort from the words of John Maynard Keynes (Keynes 1936), on whose ideas the present proposals are based⁸:

“Is the fulfillment of these ideas a visionary hope? Have they insufficient roots in the motives which govern the evolution of political society? Are the interests which they will thwart stronger and more obvious than those which they will serve? I do not attempt an answer in this place. It would need a volume of a different character from this one to indicate even in outline the practical measures in which they might be gradually clothed. But if the ideas are correct—a hypothesis on which the author himself must necessarily base what he writes—it would be a mistake, I predict, to dispute their potency over a period of time. At the present moment people are unusually expectant of a more fundamental diagnosis; more particularly ready to receive it; eager to try it out, if it should be even plausible. But apart from this contemporary mood, the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil. “

⁸ Apart from using the Keynesian approach of active use of public spending when the private sector demand is weak, the present paper uses Keynes’ ideas at the time of Bretton Woods Conference on creating a bancor for providing liquidity in the international system. These ideas were frustrated by the US representative on the argument that the US Congress would not accept the principle of overdraft and credit creation by an international institution beyond the control of the Congress.

References

- Angus, Maddison (2001). *The World Economy, A Millennial Perspective*, OECD.
- Blustein, Paul (2001). *The Chastening: Inside the Crisis that Rocked the Global Financial System and Humbled the IMF*, Public Affairs, LLC.
- Easterly, William (2001). *IMF and World Bank Structural Adjustment Programs and Poverty*, Washington, DC: The World Bank, February.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*, London: Macmillan and Company.
- Kumar, Nagesh (2002). *Towards an Asian Economic Community: Relevance of India*, New Delhi: Research and Information System for Non-Aligned and Other Developing Countries.
- Kwai, Mashahiro (2001). Recommencing a Currency Basket System for Emerging East Asia. Mimeo
- Meltzer Commission (2000). "Meltzer Commission Report." Available at: <http://www.house.gov/jec/imf/ifiac>.
- Stiglitz, J. E (2002). *Globalization and its Discontent*, New York: W.W. Norton & Company.
- The Emerging Markets Eminent Persons Group, (EMEPG) Seoul Report, Rebuilding the International Financial Architecture, October, 2001. Available at : <http://www.asianexchange.org/axfiles/EMEPGR.PDF>

Economic Costs of the IMF programs

In the unipolar financial world, IMF has become an important instrument of enforcing the rules of economic and financial management as deemed appropriate by the leader, namely the US. The existence of IMF programs in a country is often treated as “seal of good housekeeping” and as a precondition for balance of payments support. However, empirical analysis presented below shows that IMF programs are not associated with good performance on economic growth with price stability.

For purposes of development, it seems reasonable to assume that growth (annual per capita income growth of more than 1 percent) with price stability (annual price increase of less than 10 percent) can be regarded as an important criteria for good housekeeping.

Table A1 presents data on per capita income growth and price stability for countries under intensive IMF programs over the last two decades. In 30 such countries, only three (Bangladesh, Morocco, Pakistan) achieved reasonable growth and avoided price instability in the last two decades, as defined above. If growth with price stability is the goal, the probability of failure for countries under intensive IMF programs is, on this basis, 90 percent.

Since 1989, most of the countries in Eastern Europe and Former Soviet Union have had intensive IMF programs. Table A2 notes that none of these countries have achieved growth with stability. A predominant majority of these transition economies experienced rapidly declining incomes and hyperinflation of 50 percent per year or more during their reform period. Only Poland and Slovenia had per capita growth of more than one percent per year and none had inflation rates below 10 percent per year.

This statistical evidence suggests that intensive IMF programs and/or strategy proposed under Washington Consensus are insufficient conditions for performance on growth and price stability. Far from being a seal of “good housekeeping”, IMF program is likely be associated with “bad housekeeping”.

Faced with this overwhelming evidence, economists at the IMF often refer to the “hospital theory”: they argue that there are more sick people in a hospital, as only the sick need to go to the hospital. The problem with this analogy is that this “hospital” seems to be largely a one-way street: very few patients who enter it ever come out healed.

In 1997-98, some East Asian countries followed IMF prescriptions and some others did not. In hindsight, those that did have not performed as well as the ones who did not. Malaysia is a case in point. In 1997, despite strong external and internal pressure to adopt the IMF program, thanks to the pragmatic and independent thinking of Prime Minister Mahathir, Malaysia did not take the IMF route. Five years since the crisis, Malaysia appears to have emerged from the crisis in better shape than its neighbors and there is growing acceptance of Malaysia’s successful program even in the IMF.

The proponents of IMF programs probably have good intentions; but this is not the first time in human history when the good intentions to help others have produced not-so-good results.

Table: A1 Countries with Intensive IMF programs: Performance on Per capita Income and Price Stability

Countries with intensive IMF Programs	Year	Performance: Per Capita Income (constant '95 US\$)		Performance: Price Stability (GDP Deflator ⁹)		Number of IMF purchases
		<i>Per capita Income</i>	<i>Avg. annual growth rate%</i>	<i>GDP deflator</i>	<i>Avg. annual growth rate%</i>	
Algeria	1989	1700		195.8		8 in 11 years
	1999	1569	-0.8	1317.1	21	
Argentina	1983	6933		57E-6		14 in 17 years
	1999	8099	2.6	101	145.8	
Bangladesh	1980	222		33.8		14 in 20 years
	1999	362	2.6	113.6	6.6	
Bolivia	1980	1012		72E-5		15 in 20 years
	1999	956	-0.3	221	88.1	
Cameroon	1988	877		171.8		9 in 12 years
	1999	656	-2.6	251.3	3.5	
Cote d'Ivoire	1980	1044		70.9		15 in 20 years
	1999	787	-1.5	159.2	4.3	
Ecuador	1983	1457		371.3		10 in 12 years
	1994	1563	0.64	76422.0	62.3	
Ghana	1983	308.9		3877		14 in 17 years
	1999	409.5	1.8	204300	28.1	
Guyana	1990	555		410.7		10 in 10 years
	1999	843	4.75	1936	18.8	
Hungary	1982	4449		17.98		9 in 12 years
	1993	4153	-0.62	223.3	25.7	
Jamaica	1981	1597		38.0		15 in 15 years
	1995	1817	0.91	1006.0	26.4	
Kenya	1980	337		80.8		13 in 17 years
	1996	343	0.1	469.0	10.9	
Madagascar	1980	344		45.9		15 in 20 years
	1999	242	-0.18	1050.7	17.9	
Malawi	1980	160.5		12		16 in 20 years
	1999	156.5	-0.13	560.0	22.4	
Mali	1980	305		62		17 in 20 years
	1999	280	-0.45	764.7	14.1	
Mauritania	1980	485		64.6		16 in 20 years
	1999	483	-0.02	238.7	7.1	
Mexico	1982	3387		0.95		13 in 18 years
	1999	3613	0.38	308	60.9	
Morocco	1980	1114		100.0		12 in 13 years
	1992	1293	1.2	219.0	6.75	

Source: The World Bank, World Development Indicator, 2000

⁹ Base year varies for different countries.

Table A1: Countries with Intensive IMF programs: Performance on Per capita Income and Price Stability (cont.)

Countries with intensive IMF Programs	Year	Performance: Per Capita Income (constant '95 US\$)		Performance: Price Stability (GDP Deflator ¹⁰)		Number of IMF purchases
		<i>Per capita Income</i>	<i>Avg. annual growth rate%</i>	<i>GDP deflator</i>	<i>Avg. annual growth rate%</i>	
Mozambique	1987	126	--	4.4	--	--
	1999	198	3.84	167.3	35.4	12 in 13 years
Niger	1980	328	--	73.3	--	--
	1999	209	-2.3	143.6	3.6	13 in 20 years
Pakistan	1980	318	--	91	--	--
	1999	508	2.5	434	8.6	13 in 20 years
Panama	1981	2893	--	95.0	--	--
	1999	3246	0.6	134.0	1.9	13 in 19 years
Philippines	1980	1166	--	40	--	--
	1999	1138	-0.15	327	11.7	16 in 20 years
Senegal	1980	552	--	58.0	--	--
	1999	591	0.36	149.0	5.1	18 in 20 years
Sri Lanka	1980	440	--	17.6	--	--
	1994	680	3.2	82.6	11.7	13 in 15 years
Tanzania	1990	189	--	62.0	--	--
	1999	188	-0.042	379.0	22.2	7 in 10 years
Togo	1980	449	--	119.0	--	--
	1999	327	-1.65	337.0	5.6	14 in 20 years
Turkey	1980	1959	--	25E-2	--	--
	1999	2965	2.2	1661.0	58.9	8 in 20 years
Uganda	1982	236	--	0.28	--	--
	1999	347	2.3	234.8	48.6	15 in 18 years
Zimbabwe	1981	675	--	35	--	--
	1999	703	0.23	799	18.9	9 in 19 years

Source: The World Bank, World Development Indicator, 2000

¹⁰ Base year varies for different countries.

Table A2: Eastern Europe and Former Soviet Union Countries: Performance on Per capita income and Price Stability during 1990-1999

Countries	Avg. Annual Growth Rate in Per Capita Income (Constant Prices) (%)	Avg. Annual Rate of Increase in GDP Deflator (%)
Albania	-0.9	39.8
Armenia	-5.6	215.9
Azerbaijan	-9.6	173.9
Belarus	-2.0	294.2
Bulgaria	-2.7	95.5
Croatia	-1.2	103.9
Czech Republic	-0.3	13.2
Estonia	-1.9	65.7
Kazakhstan	-4.6	188.9
Kyrgyz Republic	-5.7	113.2
Latvia	-4.5	61.0
Lithuania	-3.3	98.9
Macedonia	-1.5	95.5
Moldova	-10.2	141.8
Mongolia	-1.8	57.0
Poland	3.5	25.4
Russian Federation	-5.3	159.3
Slovak Republic	-0.2	11.8
Slovenia	1.6	30.2
Turkmenistan	-7.0	323.9
Ukraine	-8.9	241.7
Uzbekistan	-2.6	206.8

Source: The World Bank, World Development Indicator, 2000

Bibliography

- Ahluwalia, Montek S (2000). *Reforming the Global Financial Architecture*, London: Commonwealth Secretariat.
- Akyuz, Y (ed.), *Reforming the Global Financial Architecture: Issues and Proposals*, UNCTAD, TWN and Zed Books London & New York, 2002
- Akyuz, Y (2000). *The Debate on the International Financial Architecture: Reforming the Reformers*, UNCTAD Discussion Paper No. 148, Geneva, April.
- Blinder, Alan S (1999). Eight Steps to a New Financial Order, *Foreign Affairs*, 78: 50-63.
- Calomiris, Charles W (1998a). *Blueprints for a New Global Financial Architecture*, New York: Colombia University.
- CFR Task Force. *See* Task Force on the Future International Financial Architecture.
- Coeure, Benoit and Jean Pisani Ferry (2000). *An Intellectual and Institutional Retrospective on the Reform of the International Financial Architecture*, Paris: Conseil d'Analyse Economique.
- Crockett, Andrew (2000). Progress toward Greater International Financial Stability. Paper presented to the Conference on Reforming the Architecture of Global Economic Institutions, London: Bank of England, 5-6 May.
- Culpeper, R (2000). Systemic Reform at a Standstill: A Flock of "Gs" in Search of Global Financial Stability. Paper prepared for the Commonwealth Secretariat/World Bank Conference on Developing Countries and Global Financial Architecture, Marlborough House, London, 22-23 June.
- Department of Finance, Canada (1998). Finance Minister announces six-point Canadian plan to deal with global financial turmoil, Press release, 29 September (www.fin.gc.ca/newse98/98-094e.html).
- Eichengreen, Barry (1995). *International Monetary Arrangements for the 21st Century*, Washington, DC: Brookings Institution.
- Eichengreen, Barry (1999b). *Toward a New International Financial Architecture*, Washington, DC: Institute for International Economics.
- Fischer, Stanley (1999). Reforming the International Financial System, *Economic Journal*, 109: F557-76.
- Goldstein, M (2000). Strengthening the International Financial Architecture. Where do we stand? Working Paper No. 00-8, Washington, DC: Institute for International Economics, October.
- Goldstein, Morris (2001). An Evaluation of Proposals to Reform the International Financial Architecture. Paper presented to the NBER Conference on Management of Currency Crises, Monterey, California, 28-31 March.

- Group of 7 (2000b). *Strengthening the International Financial Architecture: Report from the G-7 Finance Ministers to the Heads of State and Government*.
- Group of 22 (1998b). *Report of the Working Group on Strengthening Financial Systems*. Washington, DC: Group of 22 [Willard Group].
- Helleiner, G. (2000). Markets, Politics and Globalization: Can the Global Economy be Civilized? 10th Raul Prebisch Lecture, Geneva: UNCTAD, December.
- International Financial Institutions Advisory Commission (2000). Report: “*Meltzer Report*”, Washington, DC, March.
- International Monetary Fund (IMF) (1999f). *Report of the Managing Director to the Interim Committee on Progress in Strengthening the Architecture of the International Financial System*, Washington, DC: International Monetary Fund.
- IMF (2000). *Report of the Acting Managing Director to the International Monetary and Financial Committee on Progress in Reforming the IMF and Strengthening the Architecture of the International Financial System*, Washington, DC: International Monetary Fund, April.
- International Monetary Fund (IMF) (2001b). *Reforming the International Financial Architecture – Progress through 2000*, Washington, DC: International Monetary Fund.
- Ito, Takatoshi (2000). The Role of IMF Advice: A Postcrisis Examination. In *Reforming the International Monetary and Financial System*, eds. Peter B. Kenen and Alexander K. Swoboda, Washington, DC: International Monetary Fund.
- Kenen, Peter B (2001). The International Financial Architecture: What's New? What's Missing?, Massachusetts: Institute of International Economics,
- Kenen, Peter B (2000d). The New International Journal of Financial Architecture: Reconstruction, Renovation, or Minor Repair, *International Journal of Finance and Economics*, 5: 1-14.
- King, Mervyn (1999). Reforming the International Financial System: The Middle Way. Speech delivered at the Federal Reserve Bank of New York, 9 September, London: Bank of England.
- Knight, Malcolm, Lawrence Schembri and James Powell (2000). Reforming the Global Financial Architecture: Just Tinkering Around the Edges? Paper presented to the Conference on Reforming the Architecture of Global Economic Institutions, London: Bank of England, 5-6 May.
- Lamfalussy, Alexandre (2000). *Financial Crises in Emerging Markets: An Essay on Financial Globalization and Fragility*, New Haven: Yale University Press.
- Martin, Paul (1999). The International Financial Architecture: The Role of Law. Remarks at the Conference of the Canadian Institute for Advanced Legal Studies, 12 July, Ottawa: Finance Canada.

- Ministry of Finance, Japan (2000a). The Road to the Revival of the Asian Economy and Financial System (www.mof.go.jp/english/if022g.htm).
- Ministry of Finance, Japan (2001). *Exchange Rate Regimes for Emerging Market Economies*. Discussion Paper prepared by Staff of the French and Japanese Ministries of Finance, Tokyo, 16 January (www.mof.go.jp/english/asem).
- Mussa, Michael (1999). Reforming the International Financial Architecture: Limiting Moral Hazard and Containing Real Hazard. In *International Capital Flows and the Financial System*, eds. David W.R. Gruen and Luke Gower, Sydney: Reserve Bank of Australia.
- Park, Chul Yung and Yunjong Wang (2000). Reforming the International Financial System: Prospects for Regional Financial Cooperation in East Asia. In *Reforming the International Financial System: Crisis Prevention and Response*, ed. Jan Joost Teunissen, The Hague: Forum on Debt and Development.
- Rodrik, D (1999). Governing the Global Economy: Does One Architectural Style Fit All? Paper prepared for the Brookings Institution Trade Policy Forum Conference on Governing in a Global Economy, Harvard University, April.
- Rogoff, K (1999). International Institutions for Reducing Global Financial Instability, *The Journal of Economic Perspectives*, 13(4), fall.
- Rubin, Robert E (1998). Strengthening the Architecture of the International Financial System, Remarks at the Brookings Institution, 14 April, Washington, DC: US Treasury.
- Rubin, Robert E (1999). Remarks on Reform of the International Financial Architecture to the School of Advanced International Studies, 21 April, Washington, DC: US Treasury.
- Task Force on the Future International Financial Architecture (1999). *Safeguarding Prosperity in a Global Financial System*, Washington, DC: Institute for International Economics. [Cited as CFR Task Force (1999)].
- United Nations (1999). *Towards a New International Financial Architecture*. Report of the Task Force of the United Nations Executive Committee of Economic and Social Affairs, New York, January.
- Williamson, John (2000b). The Role of the IMF: A Guide to the Reports. Paper presented to the Conference on Developing Countries and the Global Financial Architecture organized by the Commonwealth Secretariat and the World Bank, London: Commonwealth Secretariat, 22-23 June.

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