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Distinguished Lecture

Managing Temporary Capital Inflows: Lessons from Asia and Latin America

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1. THE NATURE OF CAPITAL FLOWS IN THE 1990s

As witnessed by Mexico and Argentina in 1995 and by the Southern Cone countries of Latin America in the early 1980s, the macroeconomic adjustment to a sudden reversal of foreign capital flows can be extremely painful. There are at least four major reasons why governments and central banks should care about the sustainability of the capital flows which their economies can tap abroad:

- First, international capital markets are highly imperfect due to enforcement problems and information asymmetries. Trade in financial assets, unlike trade in goods, is incomplete and intertemporal, based on promises to pay in the future. The time lag between financial transaction and contract completion, coupled with incomplete insurance markets and other distortions, can generate abrupt and destabilising market corrections. Financial markets often do not discipline the recipient countries when the latter do not face an upward supply curve for foreign capital but rather face a horizontal supply curve due to currency appreciation and falling spreads charged by lenders, until capital rationing sets in [Devlin *et al.* (1994)].
- Second, any shortfall in capital inflows will require immediate cutbacks in domestic absorption to restore external balance. The savings-investment balance is more likely to be achieved through cuts in investment than through higher savings in the short term, compromising future output levels. Current output levels fall to the extent that rigidities prevent resource reallocation [Devlin *et al.* (1994)], so that contractionary disabsorption effects outweigh expansionary substitution effects.
- Third, the expansion of domestic credit connected with unsterilised capital inflows may not be sound enough to stand the rise in domestic interest rates and the fall in domestic asset prices that go with a reversal of these inflows [Rojas-Suarez and Weisbrod (1994)]. The resulting breakdown of domestic financial institutions provides incentives for monetary expansion and fiscal

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deficits incurred by the public bail-out of ailing banks.

- Fourth, temporary capital flows may lead to an unsustainable appreciation in the real exchange rate. The appreciation is in conflict with development strategies based on the expansion of exports and efficient import substitution, which centrally relies on a reliable and competitive exchange rate. Temporary appreciation causes sub-optimal investments, which are costly to reverse, and undermines active trade promotion, export diversification, and productivity growth and breeds capital flight [Fischer and Reisen (1993)]. Large swings in real exchange rates, often a result of temporary capital flows, have been found to significantly depress machinery and equipment investment, and thus long-run growth performance [Agosin (1994)].

The precarious data base of capital flows, as well as the fact that capital flows are fungible, highly substitutable, and endogenous with respect to external shocks and internal policies, make it difficult to measure their “temperature” [Claessens *et al.* (1995)]. With respect to the inflows to Latin America, Calvo *et al.* (1993) early on pointed to their cyclical character, while Reisen (1993) has stressed their temporary nature by pointing to the completion of privatisation, the one-time repatriation of flight capital, to short-term maturities, and to exchange rate-based disinflation in the region. Others, like Dornbusch (1992), held that the flows were not hot money at all but lukewarm-to-cool-money to stay, such as foreign direct investment—and that the share of cool money would go on rising. Nunnenkamp (1993) argued that the structure of capital inflows to Latin America resembled closely those of East Asia (an observation not confirmed by Table 1) and that the reversibility of capital inflows was linked to country-specific policy performance. Such interpretation of the origins and permanence would exclude any major role for policy intervention, since the revival of capital flows would be home-made and any reversal would be due to policy slippages. Subsequent econometric studies [reviewed in IMF (1994)] have contradicted such optimistic interpretation. These studies suggest that cyclical external factors accounted for some 30 to 50 percent of the variation in capital flows to developing countries, playing a greater role in Latin America than in Asia. The implicit warning that these studies carry, namely, that a rise in OECD-country interest rates would lead to a halt or even a reversal of capital flows, was partly confirmed by the \$40 billion reserve loss of Mexico during 1994 and by net outflows from dedicated emerging market funds during 1994.

For industrialised countries, Turner (1991) recently examined the volatility of different capital-account items in order to arrive at a distinction between the permanent versus temporary and the autonomous versus accommodating flows. For the period 1975-1989, the capital flows that were most closely correlated with financing requirements were classified as the most accommodating, and the most

accommodating types of capital flows closely corresponded to the most temporary flows, proxied by their standardised variability (coefficient of variation) over the period 1975-1988. Finally, Turner made a ranking of four capital-account items, ranging from the most autonomous and permanent to the most accommodating and temporary (i.e., volatile) flows: (i) long-term bank lending; (ii) foreign direct investment; (iii) portfolio investment; and (iv) short-term bank flows.

A closer inspection of different capital-account items tends to confirm Turner's results:

- Long-term bank lending includes essentially syndicated Euro-loans, amounting to more than \$200 billion in 1994. The OECD (1995) reports the average maturity of the recorded Euro-credits. A striking observation is that the average maturity on these syndicated loans to borrowers from the OECD countries is *shorter* than to borrowers from the developing countries. During the 1990s, the average maturity for the OECD borrowers has oscillated between 5 and 6 years, while borrowers from the developing countries enjoyed average maturities of between 6 and 9 years. The longer maturities for developing country borrowers are explained by the high proportion of long-term project loans in syndicated lending.
- Foreign direct investment—particularly welcomed by developing countries for giving access to state-of-the-art technology, increasing the scope for export growth, and promoting competition in the host country—is largely determined by non-cyclical considerations. Being rather governed by long-term profitability-expectations, it is less subject to sudden shifts in investor sentiment. While on an annual basis, large fluctuations of foreign-direct-investment *flows* are regularly observed, foreign-direct-investment *stocks* are largely illiquid and irreversible. Foreign direct investment, which is little dependent on financial market sentiment, has bad-weather qualities.
- Portfolio investment is a mixed bag with respect to its stability. Investment by pension funds and life insurance companies can be taken as long-term investment, since these funds follow a buy-and-hold strategy rather than a trading strategy in the emerging stock markets. Unlike banks and most other investors, pension funds and life insurers benefit from regular inflows of funds on a contractual basis and from long-term liabilities (with no premature withdrawal of funds), which together imply little liquidity risk [Davis (1995)]. As long as these funds are underinvested in the emerging stock markets (as measured by their percentage share in world stock market capitalisation) and as long as the emerging stock markets display a comparatively low return correlation *vis-à-vis* the OECD stock markets, developing countries can expect further equity-related capital flows from pension funds and life insurers

[Fischer and Reisen (1995)]. In order to tap these flows, developing countries must strive for investment grading by the major credit-rating agencies.

- Equity-related investments by domestic residents with overseas holdings, by private foreign investors, and from managed funds (country funds and mutual funds) are largely governed by cyclical determinants and oriented at short-term returns. In the course of the early 1990s, the decline in returns on riskless assets in the US and other OECD countries has led, not to an acceptance of falling returns, but to a growing tolerance of risk. Mainly via mutual funds, this has brought much speculative money to the emerging stock markets. The mutual funds have to publish regular (by now, even daily) asset prices and can suffer large redemptions at any time when there is bad news. Chart 1, displaying net flows and asset prices for seven funds dedicated to emerging stock markets, underlines their volatility. What is more, with the need to have sufficient cash to pay off clients redeeming their holdings, a widespread crisis, such as the one that developed after the devaluation of the Mexican Peso in late 1994, forces fund managers to sell in markets totally unrelated to the origin of the crisis.
- Any other portfolio investment, in particular the bond-related, should be considered as volatile. Borrowing through corporate or government bonds, the most important component of Latin American capital inflows in the 1990s (see below), is largely governed by interest rate differentials and is, thus, akin to reversal. The average maturity of Latin American international bonds has fallen below 4 years during the 1990s so that a large part of the outstanding bonds can be fairly rapidly withdrawn; moreover, a concerted response to sustain external financing is difficult to organise as claims are dispersed among numerous bond holders [Griffith-Jones (1994)].
- Short-term bank lending and borrowing facilities (such as Euro medium-term notes and Euro-commercial paper) are particularly cyclical and volatile. Any developing country interested in sustained growth should be wary whenever firms and banks incur these borrowings.

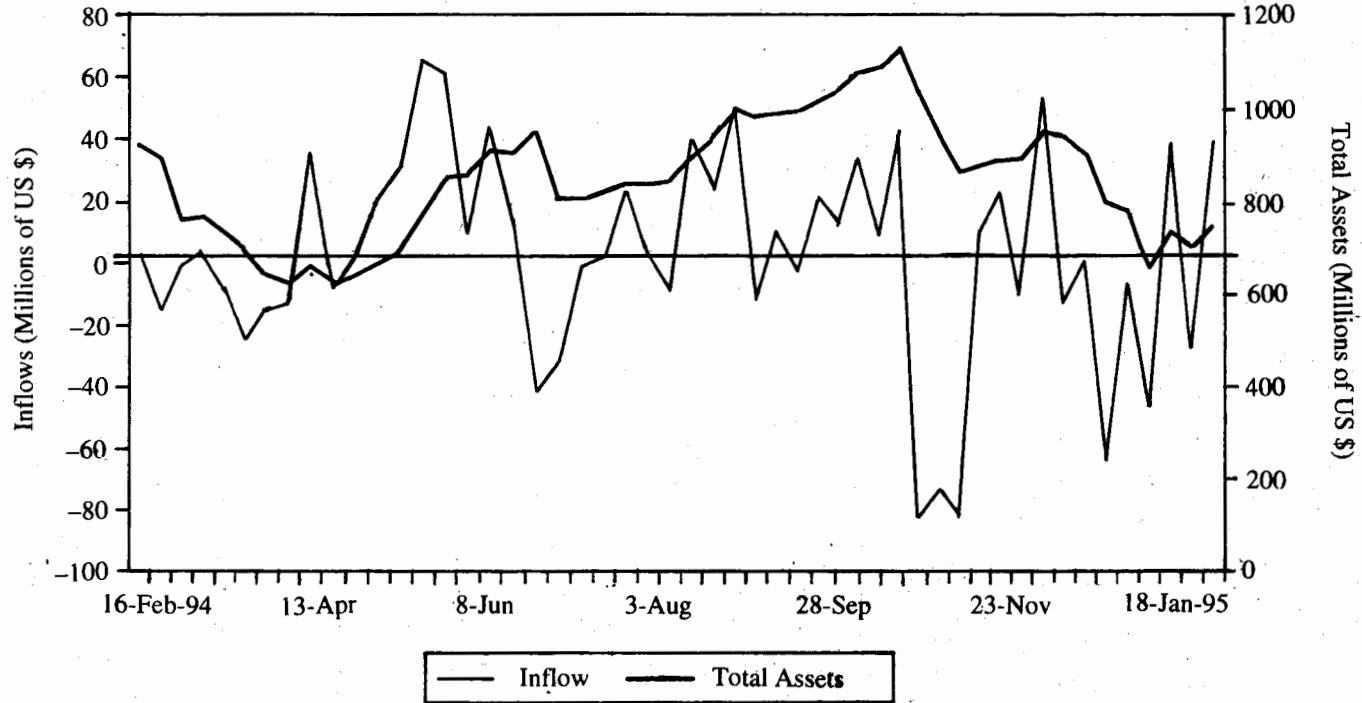
2. THE 1990s CAPITAL FLOWS: ASIA AND LATIN AMERICA IN PERSPECTIVE

Putting the 1990s surge of capital flows into a broad regional perspective may be useful for two reasons: First, Asia and Latin America compete in international capital markets, and second, Asia (ex-Philippines) may offer valuable policy lessons to Latin America (ex-Chile). However, country policies and experiences vary within the two regions, requiring to supplement the regional perspective with a more country-specific analysis.

Chart 1.

7 Dedicated Emerging Market Funds

Source: LDC Debt Report



Temporary Capital Inflows in Asia and Latin America

Table 1
*Two Episodes of High Capital Flows,
 Asia and Latin America Annual Average*

	1978-82		1990-93	
	Asia	Latin America	Asia	Latin America
Gross Capital Inflows, bn \$	19.3	36.5	74.7	36.7
of which (percent)				
– FDI	15.0	15.1	37.1	33.5
– Portfolio	3.6	4.9	14.2	68.1
– Other “Long-term”	53.9	63.6	21.7	–32.1
– Other “Short-term”	27.5	16.4	27.0	30.5
Net Capital Inflows, bn \$	15.8	26.3	46.6	23.8
Reserve Accumulation	6.9	0.6	31.0	18.0

Source: IMF, *World Economic Outlook*, October 1994; own calculations.

Many observers have been drawn to an overly optimistic interpretation of the capital flows of the early 1990s by some regularities between Asia and Latin America and by some differences to the flows that preceded the debt troubles of the 1980s. Unlike in the 1980s, capital flows were not pulled in by deficit-running government budgets and public enterprises, but essentially by private investors and private firms. Unlike the 1980s, when bank lending prevailed in both regions, risk capital has been flowing to both regions as portfolio and direct investment. As a share of gross capital flows, FDI rose from 15 percent during 1978-82 to 35 percent during 1990-93 in both regions (see Table 1). Another similarity between both regions is the size of *net* capital flows in terms of their gross domestic product and the high percentage share of these net flows that have gone into foreign exchange reserves. But beneath the surface, some important differences loom large for the composition and sources of capital flows:

- First, although the share of FDI in gross capital inflow is only slightly higher in Asia than in Latin America, its *nature* differs between the two regions. In Latin America it has mainly taken the form of debt/equity swaps and privatisation, which do not necessarily generate additional capital formation. In Asia, by contrast, foreign direct investment has mostly been in the form of acquisitions or the setting-up of new enterprises [BIS, (1994)]. The different composition of

FDI may determine its macro economic consequences: in Asia it is more likely to add to domestic investment and it is also more likely to be skewed towards export production (rather than construction of shopping malls, for example) than in Latin America.

- Second, the *share and the nature* of portfolio flows differ markedly between the Asian and Latin American capital accounts. In Asia, portfolio flows accounted for just 14.2 percent of gross capital inflows, compared with a corresponding percentage share of 68.1 percent in Latin America. Round three-quarters of portfolio investment to Latin America were borrowings in international capital markets, while only a quarter consisted of equity-related flows [Group of Thirty (1994)]. Not only is the equity-related share of portfolio flows higher in Asia than in Latin America, it is also likely to come from more stable sources. Pension funds and insurance companies often limit their investment to those countries which have been assigned investment-grade credit ratings by rating agencies such as Moody's and Standard & Poor's. Currently, only Chile and Colombia in Latin America carry the investment grade stipulated by the portfolio allocation guidelines of pension funds, while in Asia the grade is enjoyed by China, Indonesia, Korea, Malaysia, Taiwan, and Thailand. This explains why 4.6 percent assets of UK pension funds (for which such a breakdown is available) had by 1993 been invested in Asia, compared to only 0.6 percent in Latin America.
- A third difference in the composition of capital flows is that lending classified as "long-term" by the IMF constitutes a fifth of Asia's gross inflows while it has been negative in Latin America, thanks to Brady-type debt reduction and limited new lending. On the other hand, Latin American firms and banks tapped short-term borrowing facilities slightly more than was done by the borrowers from Asia.

The fact that it is difficult in practice to distinguish between permanent and temporary capital inflows confronts the policy-maker in the recipient country with a *specific transfer problem*. He has to make the basic decision *whether to accept or resist the capital inflow* [Williamson (1994)], or how much to accept and how much to resist. (A third possibility is to induce a transfer, as Mexico did in 1994, by offering dollar-linked short-term government paper and by selling foreign exchange reserves to defend the exchange rate as investor confidence started to wane.)

Table 2 shows that on average both regions accepted around half of the transfer accomplished by a current account deficit in the balance of payments, while the other half went into the build-up of foreign exchange reserves. But the regional averages hide important country differences. In Asia, Indonesia, the Philippines, and Thailand accepted most of the inflows by running current account deficits; in Latin

America, Mexico, Argentina, and Peru belong to this group. By contrast, Malaysia and Chile have resisted most of the transfer by building up foreign exchange reserves (and sterilising them—see below).

Table 2
*External Financing of Major Capital Flow Recipients, Avg. 1989-94
 in Percent of GDP*

	Current Account Deficit	+	Reserve Accumulation	=	Direct Foreign Investment	+	Net other Financing
	(1)		(2)		(3)		(4)
China	-0.5		0.8		2.6		-2.3
India	1.5		0.8		0.2		2.1
Indonesia	2.3		0.8		1.2		1.9
Korea, South	0.0		0.4		0.3		0.1
Malaysia	2.6		6.4		6.9		2.1
Philippines	4.2		1.8		1.1		4.9
Thailand	5.8		3.2		2.3		6.7
Avg. Asia	2.3		2.0		2.1		2.2
Argentina	1.5		0.6		1.7		0.4
Brazil	-0.1		1.1		0.3		0.7
Chile	0.7		3.6		2.5		1.8
Colombia	0.4		1.5		1.5		0.4
Mexico	5.3		0.3		1.4		4.2
Peru	3.3		2.4		0.3		5.4
Avg. Latin America	1.4		1.5		1.3		1.6

Sources: J. P. Morgan, *Emerging Markets Economic Outlook*, December 16, 1994; World Bank, *World Debt Tables 1994*; own calculations.

3. MACROECONOMIC PRE-REQUISITES AND THE USE OF CAPITAL FLOWS

The choice whether to accept or to resist the transfer should not only be guided by the composition and volatility of capital flows but also by two different economic theories. The first is the *sequencing literature* which recommends linking the acceptance of capital inflows to the progress in fiscal and monetary stabilisation, domestic financial liberalisation, prudential supervision, and trade liberalisation [Edwards (1990); Fischer and Reisen (1993)]. Fiscal consolidation is a necessary pre-requisite because it obviates the temptation to finance unsustainable budget

deficits a bit longer, thanks to inflows; and because regular tax revenues obviate the need for governments to rely on the implicit taxation of domestic financial intermediation. Low inflation and inflationary expectations prior to heavy capital inflows obviate the temptation to use the exchange rate regime (a nominal peg, an active crawl, or a pure float) to help speed up the disinflationary process with heavy capital inflows: the costs of misallocation involved in the inevitable real currency appreciation, which is due to inertial inflation, are largely documented [Fischer and Reisen (1993)]. The risk that capital flows are skewed towards non-tradables is also increased by the extent of price distortions in the local economy; to avoid “immiserising” capital inflows [Brecher and Diaz-Alejandro (1977)], domestic financial liberalisation, trade liberalisation, and solid export diversification had better precede a period of heavy capital inflows. Strict regulatory and supervisory policies are important to minimising moral hazard (including corruption, fraud, and excessive risk-taking) in the banking system and to ensuring the health and viability of domestic banks. Another important pre-requisite, not emphasised enough in the sequencing debate, is a high domestic savings ratio. Otherwise, to the extent that capital inflows stimulate domestic investment (as they should), countries risk running too quickly into a balance-of-payments constraint.

Table 3 shows that Asia (in particular East Asia) and Latin America differed with respect to the macroeconomic pre-requisites for capital inflows to raise efficiency and growth without compromising stability. First, with fragile public finances, Latin America has relied in the past on inflationary finance much more than Asia, as witnessed by seigniorage as a percentage of the GDP during the 1970s and the 1980s. While most of the heavy capital importers had reduced their budget deficits by the early 1990s, at least India and Brazil did not fulfil the fiscal requirements for sustainable capital inflows according to the size of their budget deficits, and the Philippines looked fragile for the relative size of her public debt. Second, again in striking contrast, the heavy capital flows of the 1990s have raised inflation levels in Asia, while capital flows have gone along with falling inflation levels in Latin America, thanks to heavy real appreciation of currencies. Third, prior to the 1990 flows, black market premia in Latin America have largely exceeded those in Asia, indicating a higher anti-export bias and the risk of immiserising capital inflows in Latin America. Export promotion has been more deeply anchored in Asia than in Latin America, as witnessed by the much more dynamic export growth; again this may indicate that the damage done to the diversification and fostering of exportable production, when volatile real exchange rates undermine the confidence in the government’s commitment for active trade promotion, is much greater in Latin America than in (East) Asia. A final striking difference is the level of gross domestic savings. In Asia, they are mostly solidly in the 30-plus range as a percentage of the GDP; in Latin

Table 3

Pre-requisites for the 1990s Episode, Asia and Latin America

	Avg. Seigniorage 1970-88 % of GDP	Govt. Budget 1988-93 % of GDP	Public Debt 1994 % of GDP	Avg. Black Market Premium Post-trade Reform up to 1992	Export Growth, US\$ avg. p.a., 1980-92	Gross Domestic Savings, avg. 1989-91 % of GDP
China	n.a.	-2.6	n.a.	88.0	11.9	33
India	1.5	-7.4	45	23.8	5.9	24
Indonesia	1.4	-0.6	39	8.9	5.6	37
Korea, South	1.6	0.5	22	3.0	11.9	36
Malaysia	1.3	-3.7	58	0.0	11.3	33
Philippines	1.0	-3.3	96	4.6	3.7	20
Thailand	1.0	3.3	16	1.2	14.7	34
Avg. Asia	1.3				9.3	31
Argentina	4.2	-5.9	22	12.1	2.2	19
Brazil	2.3	-46.9	40	51.7	5.0	24
Chile	3.7	2.0	18	16.1	5.5	28
Colombia	2.1	-0.4	22	12.9	12.9	24
Mexico	3.1	-3.2	32	10.3	1.6	20
Peru	3.6	-4.0	42	11.5	2.5	17
Avg. Latin America	2.9					22
Memo: Pakistan	2.0	-7.4		7.7	4.3	14

Sources: Seigniorage: Easterly and Schmidt-Hebbel (1994); Govt. data: J. P. Morgan, *Emerging Markets Outlook*, Dec. 1994; Black Market Premium: Dean, Desai and Riedel (1994); Exports: World Bank, *WDR 1994*; Savings: World Bank, *World Tables*, 1994.

America they are far below. Note the important country outliers within the two regions (Chile, Philippines), though.

The second body of theory on which to base the decision whether to resist or to accept inflows is derived from the mechanics of the debt cycle. The mobilisation of external savings has been the classic role for capital flows to developing countries, where the relative capital shortage should offer higher returns than in the developed world.¹ According to the *debt cycle hypothesis*, rarely validated empirically, external savings raise domestic investment and growth, which in turn stimulates savings which eventually contribute to the elimination of net foreign debt. Such virtuous circle hides five requirements, again rarely complied with in practice [Devlin *et al.* (1994)]:

- First, external capital flows should consistently augment investment, rather than being diverted to consumption.
- Second, the investment must be efficient.
- Third, the country must invest in tradables (rather than construction and other non-tradables) in order to be able to create a trade surplus to accommodate the subsequent switch in the transfers required to service the debt.
- Fourth, an aggressive domestic savings effort is called for, with the marginal savings rate exceeding the country's average savings rate.
- Fifth, the virtuous circle requires capital exporters willing to provide stable and predictable flows at terms which are in line with the recipient country's factor productivity.

Table 4 shows that generally the ingredients for the virtuous circle of capital flows are more likely to be found in Asia than in Latin America, with the confirmation of the often-made observation that Chile and the Philippines should change places. Other than in the Philippines, the Asian capital importers did not divert external savings into higher consumption (shares of the GDP). In particular in India, Indonesia, and Thailand, the private sector responded to inflows by augmenting investment (shares of the GDP), and in Malaysia and again Thailand, government consumption was considerably reduced in the wake of capital inflows. By contrast, the Latin American capital importers did divert the flows on aggregate into higher consumption shares, with the exception of Chile and Colombia. In Mexico and Peru, private consumption boomed, and in Argentina and Brazil government consumption was raised by more than four percentage points of the

¹While the conventional neoclassical proposition suggests that capital will flow from capital-rich to capital-poor countries, the new growth theory strips the investor of the essential motive to move capital to capital-poor countries if the returns to capital are nearly constant (and not decreasing in the capital-labour ratio as predicted by neoclassical theory). For more, see Krugman (1993).

Table 4

Macroeconomic Adjustment to Capital Inflows, Asia and Latin America
% of GNP, Avg. 89-93 vs. Avg. 85-89

	Change in Private Consumption	Change in Govt. Consumption	Equipment Investment Avg. 89-91	Real GDP Growth, % p.a. 1994	Short-term External Debt End 1994
China	-1.5	0.1	n.a.	11.5	2.4
India	-4.2	-0.3	12.5	6.0	3.2
Indonesia	-4.3	-0.6	n.a.	7.0	13.2
Korea, South	-0.7	0.5	12.8	8.0	5.6
Malaysia	2.0	-1.7	n.a.	8.6	8.6
Philippines	1.8	1.4	10.6	4.7	12.1
Thailand	-3.7	-1.8	19.3	8.5	15.7
Avg. Asia	-1.5	-0.3	13.8		
Argentina	-1.1	4.3	3.6	5.8	3.4
Brazil	-2.3	4.0	n.a.	4.3	6.4
Chile	0.0	-1.7	8.6	6.3	6.7
Colombia	-0.3	0.5	8.2	4.8	5.2
Mexico	3.6	0.2	9.6	3.1	16.5
Peru	7.7	-1.7	9.7	12.7	15.0
Avg. Latin America	1.2	0.5	8.8		

Sources: IMF, *International Financial Statistics, Emerging Markets Investor*, March 1995; J. P. Morgan, *Emerging Markets Outlook*, December 1994; UN, National Accounts.

^a Nominal US dollar exchange rate adjusted for local versus US consumer prices. Index numbers higher than 100 denote appreciation.

GDP. These findings imply that Latin America, unlike Asia, did not raise the marginal savings rate above the average savings rate when capital flows rolled in.

While since 1988 investment efficiency, as measured by incremental capital output ratios, is reported by the Group of Thirty (1994) as “quite comparable” for the two regions, investment and growth rates have been considerably higher in Asia than in Latin America. Machinery and equipment investment, rather than construction investment, has not only been shown to explain importantly long-run growth performance, i.e., growth *rates* [De Long and Summers (1991)], but it is also more likely investment in tradables necessary for later debt service. Table 4 displays a striking difference for the two regions here, with equipment investment averaging 13.8 percent of the GDP over the 1989-91 in Asia, compared to just 8.8 percent in Latin America. The analysis thus gives grounds for scepticism whether the Philippines (in Asia) and Latin America (except Chile and Colombia) have used the recent inflows in a way that will sustainably foster growth and development.

Table 5 points to a final striking regional difference in the use and effects of capital inflows. In Asia, inflation levels generally increased (with the mild exception of Malaysia and the Philippines), reflecting the reluctance of policy-makers to accommodate capital inflows with an upward float of the exchange rate and the subsequent incapacity to fully control domestic monetary aggregates. In Latin America, Argentina, Mexico, and Peru used exchange rate policy and capital flows to rapidly lower inflation levels; Argentina and Mexico anchored the exchange rate and inflation expectations at the US dollar, while Peru followed the domestic monetarist approach (as did the Philippines). The real exchange rate, comparing the exchange rate-adjusted rise in local consumer prices relative to the United States, appreciated over the 1990s by almost 70 percent in Argentina and by more than 20 percent in the Philippines, Brazil, Colombia, Mexico, and Peru. The real exchange rate is an important relative price for determining the relative consumption of and investment in tradables versus non-tradables. The real exchange rate thus helps predict *future* problems, to generate a trade surplus. It does not, however, indicate changes in *current* external competitiveness which are better denoted by the *real effective exchange rate*. The latter indicator is an index of the country's trade-weighted average value against the currencies of its principal trading partners, adjusted for relative price changes based on indexes most closely measuring the prices of domestically produced finished manufactured goods. With exchange-rate-based disinflation, or with a nominal appreciation of the exchange rate, producer prices generally fall more rapidly than do consumer prices, which include non-tradables not exposed to world market competition. Another reason is often the consolidation of government budgets implying withdrawal of various subsidies that

Table 5

Exchange Rate Regimes and Real Exchange Rates, 1990s

	FX Regime	Annual CPI Inflation Dec.-Dec. 92-94	Real Exchange Rate CPI/US-CPI 1990=100 Sept. 94	Real Effective Exchange Rate, Trade-weighted WPI-based, 1990=100 Sept. 94
China	Adjustable peg	8.8-27.0	75.9	n.a.
India	Adjustable peg	8.0-9.4	75.7	78.7
Indonesia	Passive crawling peg	5.0-10.0	105.3	97.0
Korea, South	Managed peg	4.5-6.3	101.6	82.0
Malaysia	Managed peg	4.9-4.2	108.9	106.2
Philippines	Managed floating	8.2-7.8	126.9	103.2
Thailand	Managed peg	3.0-4.6	111.4	98.4
Argentina	Currency board	17.5-3.4	168.8	107.2
Brazil	Passive crawling peg	1149-936	130.5	105.4
Chile	Target zone	12.7-9.0	119.0	115.1
Colombia	Managed floating	25.1-22.0	133.9	119.5
Mexico	Active crawling peg	11.9-7.0	122.2	111.6
Peru	Floating	56.7-16.0	122.0	96.4

Source: IMF, *International Financial Statistics*; *Emerging Markets Investor*, November 1994.

enter the consumer price index but not the producer price index. Finally, any productivity surges will be reflected in falling producer prices, but not immediately in falling consumer prices. The real effective exchange rate has nowhere appreciated more than twenty percent over the 1990s, quite in contrast to earlier experiences in the Southern Cone of Latin America. Note, however, that the relative competitive position has deteriorated in Colombia, Chile, and Mexico but, thanks to discretionary devaluation, improved in China and India.

Table 6 summarises the discussion in this section, possibly involving more a personal judgement than a picture to be comfortable with. Nevertheless, the serious lack of pre-requisites for massive capital inflows as stipulated by the sequencing literature, the failure to use funds in a way that would be consistent with a smooth passage through the debt cycle, and a massive appreciation of the relative price for non-tradables should be cause for concern. In Mexico and Argentina, this has already produced debt troubles, while the Philippines and Peru look equally fragile.

Table 6

	Fulfilled Most Requirements Derived from the Sequencing Literature	Used Funds in Consistence with Debt Cycle Hypothesis	Followed Real FX Target Approach	Number of No's
China	No	n.a.	Yes	1 or 2
India	No	Yes	Yes	1
Indonesia	Yes	Yes	Yes	0
Korea, South	Yes	Yes	Yes	0
Malaysia	Yes	Yes	Yes	0
Philippines	No	No	No	3
Thailand	Yes	Yes	Yes	0
Argentina	No	No	No	3
Brazil	No	No	Yes	2
Chile	Yes	Yes	Yes	0
Colombia	Yes	Yes	No	1
Mexico	No	No	No	3
Peru	No	No	No	3

4. POLICY LESSONS OF THE 1990s FOR THE NEXT EPISODE OF HEAVY INFLOWS

As a result of monetary tightening in the OECD area, still in a relatively early phase (in early 1995), net capital flows to the emerging markets will fall appreciably in 1995 and stay low through 1996. But there will be the next recession in the OECD

area, say from 1997 on, and falling asset returns and interest rates in the OECD countries will not fail to push heavy flows of cyclical money into the emerging markets again. This section aims at drawing advice from recent experiences, for the use of finance ministries and central banks, on how to proceed in dealing with the supply of temporary capital.

Identify the Nature of the Shocks

Let us assume that the authorities first observe a rise in foreign exchange reserves. Such rise must not necessarily be due to a flattening of the supply-side curve of foreign capital. Frankel (1994) has recently analysed three different sources of the disturbance, i.e., the rise in foreign exchange reserves within the traditional IS/LM framework. He distinguishes three sources of rising foreign exchange reserves:

- (i) An improvement in the trade balance, caused by prior devaluation, as in the Colombian case of the early 1990s and now to be experienced in Mexico. Improving terms of trade or superior productivity growth may also cause reserve inflows through a trade balance surplus.
- (ii) A domestic monetary disturbance, which can be either a contraction in domestic money supply or an increase in the demand for money, which could be in response to a domestic exchange-rate-based stabilisation programme.
- (iii) Finally, the focus of attention in this paper, the foreign exchange reserves may rise as a result of a drop in external interest rates and asset returns, as happened in the OECD area at the start of the 1990s.

Frankel (1994) shows convincingly that an attempt to discern the nature of the disturbance is likely to be most useful in deciding the appropriate macroeconomic response. An improvement of the trade balance that tends to persist will appreciate the real exchange, either through nominal appreciation of the currency or through monetary accommodation. When the underlying cause of the trade imbalance is the excess of domestic spending over production, as in the United States, the trade balance can only be restored by adjusting private or public spending through changing savings, budget deficits or investment.

When a rise in foreign exchange reserves results from an increase in the demand for money, the optimal response is monetary accommodation to that rise in the demand. A sterilisation attempt would entail needlessly high interest rates and a contraction of economic activity. When the shock originates in domestic monetary contraction, the optimal response is very much governed by the country's degree of

financial openness. A completely open economy will only allow the option to let the currency float upwards if monetary contraction is to be sustained. But restrictions on short-term inflows open the option to avoid nominal appreciation and to sterilise capital inflows in order to keep the money supply on target.

The final case is that of an exogenous fall in world interest rates. The resulting capital inflows cause the domestic currency to appreciate in real terms, unless there is sterilised intervention on the foreign exchange market. The nominal exchange rate appreciates when it is flexible, as in Peru and the Philippines; the domestic price level rises when the nominal rate is pegged, as happened in Hong Kong over the early 1990s. With either fully floating or pegged exchange rates, the real exchange rate appreciation resides in the failure of the monetary authorities to supply the mix of assets which foreign and domestic investors are now demanding. The authorities do nothing in the floating-rate case; they issue money in exchange for foreign assets in the pegged-rate case; they should issue bonds instead, by engaging in sterilised intervention [Kenen (1993)]. Sterilised intervention of the 1990s inflows has been practised most aggressively in Chile and Malaysia, as indicated in Chart 2. The chart measures the degree to which both countries sterilised by relating foreign exchange reserves to money; money is defined as M1 (and not as the monetary base) because the latter aggregate is affected by how the sterilisation is carried out [Rojas-Suarez and Weisbrod (1994)].

Identify the Limits of Foreign Indebtedness

Only very rough rules of thumb are available to set a prudent limit of the size of capital flows that can be accepted [Williamson (1994)]. While in 1994 many observers started to realise that Mexico's current account deficit was reaching a level that would be unsustainable (8 percent of GDP), there was no theory behind such observation. In practice, the intertemporal budget constraint does not help, because many poor countries have been allowed to run deficits for an almost unlimited time-period. Some capital flows, such as foreign direct investment inflows, are less vulnerable to withdrawal and are not debt-creating; but they cannot be fully ignored either, since they also generate a need for foreign exchange earnings to service remittances. Economists therefore, when asked to assess prudent limits for current account deficits, tend to concur with a debt-dynamics equation:

$$d_t = d_{t-1}(i^* - n) + c_t \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (1)$$

where the debt/GDP ratio rises when the interest rate on existing debt, i^* , exceeds the GDP growth, n , or by the amount of the current account deficit as a fraction of the GDP, c_t . The relevant interest rate here is the effective rate, which is the weighted average across all kinds of debt, creditors, and currency denominations.

Equity-related inflows can be incorporated in principle, by giving them lower weight in the effective interest rate.

A prudent limit for current account deficits can be derived from here. It is obvious that the size of the sustainable deficit depends very much on the effective interest rate and on the country's growth rate. With more concessional flows or equity-related inflows, a bigger deficit ratio can be sustained; the same holds for a high-growth country. An often-quoted rule of thumb [Williamson (1994)] for the debt/GDP ratio is that it should not exceed 40 percent. Once the country has reached that level, the current account as a fraction of the GDP should prudently not (at least for long) exceed the difference between its growth rate and the effective interest rate. Here we have a major difference between, say, Mexico and Thailand, whose current account deficit also reached 8 percent of the GDP in 1994. Table 7 gives a stylised account of that difference, assuming a debt/GDP ratio of 40 percent (which, in fact, has been reached in both countries).

Table 7 demonstrates that there is nothing automatically unsustainable about a country running a high current account deficit relative to the GDP, as long as it is matched by a high growth rate. Likewise, a low-income country such as Pakistan can run a higher deficit on its current account than Mexico, even when its growth potential is similar, because her average interest cost will be round two percentage points lower.

Table 7

The Sustainable Current Account Deficit and the GDP Growth

	Interest Service, % of External Debt (1)	–	Dollar Inflation ^a (2)	–	Real Annual GDP Growth Potential ^a (3)	=	Sustainable Current Acc. Deficit ^b (4)
Mexico	6.7		3.0		4.5		0.8
Thailand	6.9		3.0		8.5		4.6

Source: World Bank, *World Debt Tables 1994-95*; own calculations.

^aAssumed.

^bOn debt-creating flows, with no increase in the debt/GDP ratio.

Discourage Above-limit Short-term Inflows

Capital market failures can call for direct measures to discourage capital inflows. In particular, developing-country borrowers are faced with a supply curve

of foreign savings that is horizontal until a certain net debt position (the level of which is unknown *ex ante*), but which at some point turns steeply upward. As Chile experienced in the early 1980s and Mexico did recently, private market participants do not internalise the social cost of their borrowings abroad [Harberger (1985)]. That market failure, not unlike the congestion externality in road traffic, justifies capital controls on short-term inflows, such as a tax on short-term external credits. The underlying paradigm is that the monetary authorities (a) pursue longer-term objectives than do private agents operating in financial markets, and (b) that they are better informed about future macroeconomic trends and their long-term effects on the economy [Zahler (1992)]. Before resorting to capital controls, however, the monetary authorities should eliminate any remaining subsidies to inward investment, such as free deposit insurance [Williamson (1994)].

One cannot be dogmatic about the benefits of having completely unrestricted capital flows; even the major market participants agree. As J. P. Morgan notes in the latest *Emerging Markets Economic Outlook* (March 17, 1995): “Most countries in Asia explicitly restrict short-term inflows and limit foreign borrowing by residents. The two most successful economies in Latin America—Chile and Colombia—do likewise” (p.12).

Chile, after having phased out the subsidies provided to inward investment by debt-equity swaps, imposed a 20 percent reserve requirement against foreign holdings of bank deposits, and it was raised to 30 percent in 1992. Further, a tax of 1.2 percent was imposed on short-term external credits. Colombia imposed a 3 percent tax on transfers from abroad in 1991. Malaysia reimposed foreign exchange control measures in early 1994, limiting banks’ holdings of foreign funds that were not trade-related or intended for investment in plant, equipment, or inventory stocks; Thai mutual funds have been prohibited from purchasing non-Thai assets; even Singapore prohibits short or long Singapore \$ positions unless the documentation can be produced for the underlying trade transaction, and portfolio controls still apply to Singaporean financial institutions; Korea and Taiwan have never lifted certain foreign exchange controls—Taiwan, in fact, placed a ceiling on foreign holdings of listed Taiwanese shares [Reisen and Yéches (1993); Glick and Moreno (1994) and Greenwood (1994)]. Asia also restricts equity inflows more than Latin America, again with the exception of Chile. Table 8 confirms the restrictedness of Asian stock markets by comparing the regions’ global market weights (IFC global index) with those where foreigners are free to invest (IFC investible index).

Foreign exchange controls, however, have their well publicised drawbacks. First, if they could be enforced effectively, they would do so at the cost of interfering with the international integration of financial markets; such interference

invites misallocation of resources because the country's residents face other prices and returns (generally, lower) for a given asset than do people elsewhere, and because the controls may preclude the benefits (important in poor countries) of consumption smoothing. Second, the effectiveness of capital controls tends to erode over time since people find ways to evade them, which in turn risks to trigger an ever tighter net of capital controls imposed by the authorities.

Table 8
Stock Market Investibility, 1993

	Stock Market Weights (%) within Emerging Markets	
	Global	Investible
Asia	63.7	42.5
Latin America	31.1	48.8
– Chile	3.5	1.6
Other Emerging	5.4	8.7

Source: IFC, *Emerging Markets Factbook 1994*.

Observe the Trade-off between Price Stability and Competitiveness

In February 1993. Former Mexican President Carlos Salinas said to *Business Week* [as quoted in Dornbusch and Werner (1994)]:

“We must bring inflation down to a one-digit level this year. Some say, ‘Why don’t you relax your inflation goals a bit so we can have better growth rates?’ And I respond: There is no trade-off between inflation and growth.”

This has been shown to be a dangerous proposition.² The growth costs of

²It should be noted that Mr Salinas’s proposition was explicitly supported by the OECD (1992) in its first Mexico Survey: “...the conditions are nearly in place for a hardening of the exchange rate commitment to one of keeping a stable parity rather than letting the rate crawl: public finances are under control, export performance is good, and inflation is moving towards a rate where the differential *vis-à-vis* the United States could be appropriate for a rapidly developing economy with rising relative prices of non-tradables” (p. 183). My own reading of Mexico’s situation begged to differ already then [Reisen (1993)]: “...some countries—notably Mexico, Argentina and Peru— are heavily dependent on short-term capital inflows vulnerable to quick reversal in the event of change in investor sentiment. Note that the structure and maturity of capital inflows depend on the exchange rate regime. As long as a peg to, say, the US dollar is credible, it allows investors to exploit nominal domestic-foreign interest rate differentials in short-term interest rates; the peg is apt to raise the “hot money” share in capital inflows (p. 131) ...Mexico’s recent experience points to the considerable risks of exchange rate-based disinflation. The country enjoyed exceptionally favourable circumstances for pegging the currency to the dollar: long-established fiscal balance, supportive income policies, a cheap dollar in PPP terms, and an initially undervalued peso. If even in Mexico inflationary inertia is sufficiently high to translate the active crawling peg into substantial real exchange rate appreciation, the peg is unlikely to work in other poor countries.” (p. 142).

immoderate inflation levels should not blind us to the complication of getting to low inflation. But little support can be derived from Mr Salinas's faulty analysis for the popular Mexican saying: "The problem is not the *tipo de cambio* but the *cambio de tipo*." The choice of the exchange rate regime is crucial, when inertial inflation causes a trade-off between a domestic inflation target and a target for the real exchange rate.

What should be done when stabilisation of the domestic price level does not precede an open capital account? It is tempting for the monetary authority to either let the currency purely float in order to control monetary aggregates or to resort to exchange rate-based disinflation by means of an active crawl or by means of a currency-board arrangement. Although theoretically elegant, such exchange-rate regimes carry considerable risks of generating an unsustainable overvaluation as a result of volatile capital flows.

The complication for exchange rate management arises because inflation tends to be built into expectations, via implicit (or even explicit) indexation in goods and labour markets. This makes goods prices and labour costs sticky, while financial markets tend to be forward-looking. This asymmetry between the labour market and financial markets raises stabilisation costs by producing real exchange rate overshooting. If the government which wants to bring down inflation firmly believes in domestic monetarism, as it did in New Zealand from 1984 to 1988 and recently in Peru, it will dismantle controls and opt for a clean float. With a clean float of the exchange rate and no capital controls, the effectiveness of monetary policy is enhanced by both domestic demand (tight credit) and foreign demand (strong currency). However, the effectiveness of monetary policy has an immediate and often persistent cost in terms of external competitiveness [Journard and Reisen (1992)].

In developing countries, exchange rate pegs translate easily into overvalued real exchange rates. Capital inflows tend to be powerless to arbitrate away large interest rate differentials *vis-à-vis* industrial countries. To be sure, interest rates embody country risks (higher than in the OECD countries) and real overvaluation fuels the exchange risk premium. But there are institutional factors, too, which explain the much-observed lack of interest rate convergence towards world levels [Fischer (1993)].

With positive nominal interest rate differentials against the world financial markets (reflecting microeconomic causes or the ongoing stabilisation effort), a credible peg can induce excessive portfolio inflows, which easily exceed the sterilisation capacity of the central bank. The resulting excess demand can, in principle, be eliminated by fiscal or income restraint. In many developing (and some industrial) countries, however, the opposite is likely to happen because excessive

inflows tend to undermine support for restrictive policies. When exchange rate pegs help to bring down inflation, the disinflation performance is often unsustainable [Larrain and Reisen (1994)]. Exchange rate-based disinflation starts to succeed once the implied overvaluation dampens domestic wages and prices, helped by growing unemployment and appreciation. The correction of excess unemployment and overvaluation will imply a return to higher levels of inflation. It is thus wise not to be overambitious and single-minded with inflation targets in the low-level single-digit rate when capital flows in. The experiences in the early 1980s and 1990s in much of Latin America and Asia provide a case for targeting money *and* real exchange rates simultaneously. The main instrument to achieve both targets simultaneously is the sterilised intervention of temporary capital inflows.

Sterilise Net Capital Inflows³

When the rise of foreign exchange reserves is identified to originate abroad, central banks are advised to absorb such rises (to resist nominal appreciation), while simultaneously reducing domestic credit in order to avoid an inflationary increase in the money supply. As the Mexican authorities learned in 1994, sterilised intervention is an asymmetric policy which provides useful short-term relief in the case of excessive *inflows* but is rapidly ineffective in the case of *outflows* when foreign exchange reserves rapidly fall to zero. Sterilised intervention will also be more effective in coping with excessive inflows when it is supported by other policy instruments. Many economists are dismissive of sterilised intervention, however.

First, while there is agreement among economists that non-sterilised intervention (just as any other monetary policy) can affect nominal exchange rates, the effectiveness of sterilised intervention is much more controversial. Changing the composition of central bank assets without changing their aggregate size, it is often argued, cannot be an effective policy to influence the relative price between two monies. Such agnosticism ignores the *portfolio-balance* channel; in the case of capital inflows, the corresponding rise in the central bank's net foreign assets will be sterilised by a rising supply of domestic-currency bonds. If domestic and foreign bonds are imperfect substitutes (due to currency or sovereign risk), investors will require a higher expected return on domestic bonds to hold their larger outstanding stock; the currency will tend to depreciate. Casual observation suggests that the portfolio-balance channel can be exploited by developing-country authorities. Uncovered interest parity does not hold, and there exists a stable relationship between domestic government debt and the domestic-foreign interest differential.

A second objection to sterilised intervention, particularly raised in the Latin

³For an extensive discussion of sterilised intervention in developing countries, see Frankel (1994) and Reisen (1994).

American context [Calvo, Leiderman and Reinhart (1993)], stems from the alleged fiscal costs, this objection is based on two arguments: (a) To dampen the appreciation, the central bank typically has to swap low-yield foreign exchange for high-yield domestic bonds; the accumulated interest differential can become an important fiscal (or quasi-fiscal) burden. (b) Sterilised intervention deprives the government of a reduction in its debt-service burden by preventing the decline in the domestic interest rate that normally accompanies a capital inflow. Both arguments are unlikely to hold in present value terms if the capital inflow and exchange rate appreciation are correctly assessed as temporary:

- With risk premiums in domestic interest rates sufficiently small, the short-term fiscal losses derived from swapping low-yield foreign exchange for high-yield domestic bonds should be partly offset by a subsequent capital gain derived from the appreciation of foreign exchange reserves. The central bank, like Friedman’s stabilising speculator, should make money by buying dollars when they are cheap (in peso terms) and by selling dollars when they are dear.
- While it is true that sterilised intervention prevents a decline in interest rates that normally accompanies a capital inflow, it does not follow that alternative exchange rate regimes would compare favourably in the longer run. Sterilised intervention aims at dampening real exchange rate overshooting. This implies less real appreciation of the exchange rate first, and less real depreciation back to the equilibrium rate later. Interest parity requires a corresponding move in real interest rates: with sterilised intervention, the lower real appreciation entails a comparatively higher level of real interest rates which is then offset by a comparatively lower interest rate level when the currency depreciates.

Third, developing countries may experience practical problems with sterilised intervention due to underdeveloped domestic securities markets [Fischer and Reisen (1992)]. Lack of government debt paper (which is often the case in Asian countries) forces central banks to issue obligations of their own, swelling central bank liabilities relative to the monetary base. Putting pressure on the refinancing schedule of central bank liabilities, sterilised intervention can endanger future control of the monetary base. In such cases, most Asian central banks do not shy away from (sometimes mandated) transactions to manipulate the flow of liquidity into the banking system in response to external capital flows. They often swap government excess savings (originating, say, in social security funds or public enterprises) held with banks into (and out of) government bonds [Reisen (1993)]. This practice can be considered as a generalised form of sterilised intervention. It should be noted that the approach relies on the existence of public-sector savings, and hence on “fiscal complicity”.

Sound government finances are also a precondition for a more activist fiscal policy for managing the domestic demand, implying a macro effect and a composition effect [Corbo and Hernandez (1994)]. By tightening government consumption, the interest rate can be lowered and some of the capital inflows attracted by positive interest differentials choke off. The composition effect also helps to avoid an appreciation of the real exchange rate as most of government consumption tends to be spent on the non-tradable service sector.

Another possibility is to respond to capital inflows by raising the reserve requirements on the banking system. Rising reserve ratios, however, drive a wedge between lending rates (which rise) and savings returns (which drop) and diminish the efficiency of the financial system as borrowers are diverted to lenders, who may escape such reserve requirements [Williamson (1994)].

Even the Hong Kong Monetary Authority has gradually introduced more instruments for monetary control, such as open market operations in bills and bonds, a liquidity adjustment facility, and a variable reserve requirement imposed on the major note-issuing bank. "As a result, the Hong Kong currency board is no longer a textbook example of a passive agency issuing and redeeming notes on demand but much more akin to an activist central bank" [Greenwood (1994), p. 7]. Those who advised Mexico in early 1995 to switch to a currency-board system should take notice.

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Comments

1.

Professor Reisen's lecture, on a matter of current relevance and concern, is indeed useful.

Underlying the problems posed by short-term capital flows is the changed international monetary system, often referred to as the non-system. Frequently used concepts remain vague and of little help in formulating and guiding policy. To take an example, a recent IMF document explains significant misalignment as a situation where "exchange rates are divorced from economic fundamentals or reflect inappropriate or unsustainable policies". This explanation only causes one to reflect further: for example, how do we judge a policy or a set of policies to be inappropriate or unsustainable? Rudiger Dornbusch adopts a more operationally useful approach: misalignment, he says, is a situation when a country tries to fight inflation with an exchange rate policy. Thus, the usefulness of Helmut Reisen's paper lies in his efforts to clarify some of these concepts.

I do not particularly wish to reopen yesterday's discussion on whether the IMF is a strong or a weak institution, but I would like to mention, *en passant*, that historically the IMF has had little to do with the exchange rate policies of the industrial countries; for example, it had no role in the Plaza or Louvre accords on exchange rate arrangements. At one time, Peru too refused to declare a par value. Its recent decision to accept what are perhaps weak promises made by Russia dilute its monetary character and point to its ongoing transformation into a development finance institution. One could of course find other instances of the gap between the IMF's mandate and its actions. That is not the point. The point is that the IMF, to borrow some words from Barry Eichengreen and Peter Kenen, was less an enforcer of rules than a repository of understanding on which international monetary collaboration has rested.

The term "non-system" refers to the emergence of private global financial markets. This has fundamentally altered the reality that the IMF was intended to manage. Promoting exchange rate stability and adjustment are still the IMF's goals, but the institution lacks the resources and the power to pursue these goals.

The global financial markets (the non-system) are capricious in their behaviour. Markets display a delayed response or they overshoot: though a situation takes time to build up, access to credit is denied abruptly and suddenly; and credit is not restored even well after the stabilisation and adjustment policies have been put in place. Asymmetry characterises the extent of difficulties posed by currency appreciation *vis-à-vis* currency depreciation. How do markets assess a country's credit-worthiness? And do they really provide a discipline for a government's

policies? The markets offer no guide to what should be the focus of policy, i.e., exchange rates, or economic fundamentals, or macroeconomic policies.

Private business involved in international trade sees exchange rate volatility as a matter of serious concern. The use of parity, though, in whatever manner, is unhelpful, and only invites bets from the markets; very large resources can be mobilised for the purpose. The G-3, i.e., USA, Germany, and Japan, clearly prefer to target policy to domestic goals. They desire policies geared to domestic objectives. The Europeans in EU desire greater integration. These diverse objectives make it very likely that any changes to the international monetary system would be evolutionary rather than revolutionary. There is a wide gap between the mandate of a national central bank and the developments that it is expected to influence.

Governments face an inner conflict: trade is to be free but, in the interest of economic stability, there is a need to control international financial flows.

The global financial markets, the non-system, do have a mechanism for money creation and exchange rate determination, and also appear to have their own informal code of conduct. But these markets operate in what is for all purposes a legal and institutional vacuum. The Bank for International Settlements comes closest to a global monetary institution of the future. Thus far, its efforts at building a regulatory regime seem to follow crises: the Basle Concordat of 1975 followed Herstatt in 1974, and its 1983 revision came in the wake of Banco Ambrisiano. There followed the Capital Accord of 1988, and the Basle Committee's Minimum Standards for Effective Supervision were approved after the BCCI fiasco in 1992. The Bank for International Settlements also has committees on banking supervision and on payments and settlements. However, it lacks an enabling inter-governmental treaty.

What could the government or the central bank action expect to achieve. This raises the question of whether intervention works and how well-understood is the relationship between the exchange rate regime and policy targets such as inflation. By focusing on exchange rates, and not policies, are we focusing on the symptoms rather than the disease? How is one to Judge, in a situation of freedom of capital movements, whether the exchange rate was influenced by intervention and not by other factors? (Was a target specified before the intervention?) The ERM was seen as a means of reducing volatility at inception (1979), but the focus shifted in the early 1980s to controlling inflation, and, more recently, the ERM is seen as part of the movement towards integration. Until September 1992 it had worked in all three areas.

I subscribe to the Bank for International Settlements view that, broadly speaking, the capital inflows to East Asian economies are more nearly identifiable with investment and capital formation whereas the inflows to Latin American

economies are rather more transitory. This is not a universally held view. In particular, John Williamson recently argued that the susceptibility to a currency crisis seems to bear some relationship to the depth of current account deficit (expressed as a ratio of the GNP); and this, for example, could hypothetically place Thailand in a Mexico-like situation.¹ Some recent work by Michael Dooley and others that argues that real fungibility exists between different types of capital flows would, *prima facie*, provide some support to John Williamson's point of view.² Actual developments in East Asia do not, however, bear out this line of reasoning.

I also agree with Professor Reisen when he points to the ambiguity of the link between financial liberalisation and economic growth. Indeed, Philippines was the first among the East Asian countries to liberalise but is noticeably absent from the list of "miracle" economies.

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¹John Williamson made the remark in the course of a discussion at the National Economists Club, Washington, D. C., March 16, 1995.

²See Stijn Claessens, Michael P. Dooley and Andrew Warner. "Portfolio Capital Flows: Hot or Cold". *The World Bank Economic Review*, January 1995.

2.

This paper provides a topical, incisive, and well-argued warning for policy-makers grappling with the management of capital accounts in a volatile financial world.

My comments on the paper can be divided into two categories:

- (A) The paper presented at the conference appears to be an abbreviation of a larger work. Certain clarifications, therefore, are required on specific points which seem to be muddled.
- (B) The relevance of the paper to economies which are marked by uncertainty and instability. In such circumstances, the volatility of the domestic policy environment can be reinforced by external instability.

(A) Clarifications

A.1. The paper has an extremely interesting set of statistics in a table on page 5 but no comment on it in the main text. Table 1 shows that whereas net capital inflow to Latin America was nearly twice as high as to Asia between 1978-82, the picture is reversed completely a decade later. Thus, net capital inflows to Asia were double those of Latin America between 1990-93. Not only does this fact deserve a comment in the text but also its implications need to be explored. For example, have the global effects of the recent Mexican crisis been mitigated by the fact that, in contrast to the 1980s, Latin America's significance has declined considerably? While there have been knock-on effects on other emerging markets, the global repercussions of a similar collapse in a major Asian country could be even worse.

A.2. There are comparative regional statements, the explanations for which are not evident from the text. For example, it is not clear why Foreign Direct Investment is going into directly productive investments for export in Asia, while it is financing shopping malls and other non-tradable consumption activities in Latin America. This trend is particularly odd in view of the history of LA's volatility.

A.3. One of the central messages of the paper relates to virtuous and vicious circles. It is argued that if you are a stable country, you attract more stable capital flows because you get a sound credit rating from pension funds and insurance companies (p. 6). On the other hand, instability attracts more volatile inflows. While these virtuous and vicious circles are outlined and serve a useful descriptive purpose, it is not clear how one moves from one to the other. Is the paper suggesting that sterilisation is a necessary and sufficient condition for the shift? If so, it is too strong a statement. If sterilisation is a necessary condition only, then what other measures are required for the move to a virtuous circle? This point needs to be explored further.

A.4. Another explanatory query relates to why foreign capital inflows had such a different impact on the two regions under consideration. Why did Latin America finance consumption through foreign borrowing with no rise in the marginal savings rate, while in Asia investment and savings were augmented (page 10).

A.5. it is stated (page 17) that a sustainable current account deficit is a function of the rate of growth. Surely this relationship also depends on other variables, in particular the degree of openness of the economy. Thus, what constitutes a sustainable current account deficit would depend on the trade/GDP ratio for any given level of the growth rate. Perhaps this point could be addressed.

(B) Relevance to Unstable Economies

B.1. The paper has a particular resonance for unstable countries in both Asia and Latin America. The point can be illustrated by the case of Pakistan, which has obvious relevance for this conference. When we discuss the Pakistan case, the comparison should not be with the stable East Asians but with other vulnerable countries, such as the Philippines, which have similar political and economic instability. Accordingly, the author's comments on the following three points would be welcome.

B.2. Pakistan has been undergoing a somewhat unstable structural adjustment programme since 1988. One of the primary causes of instability has been improper sequencing of reform. An excessively large fiscal deficit remained while the capital account and the financial sector were liberalised.

The strain showed in 1992, in particular, when ill-conceived populist consumption schemes, such as the import of tax is, led to monetary financing of the deficit comparable to the Latin American situation. Borrowing from the banking system rose from 0.8 percent of the GDP to 6 percent of the GDP by 1991-92. Along with supply-side shocks in agriculture, the result has been slower growth and the doubling of inflation, since the start of the structural adjustment programme. The question is: How stable a liberalisation programme can be in such a macro environment, and whether the pace of reforms should be held back until the fiscal deficit is reduced? If this is not done, will the liberalisation not backfire and further accentuate instability by creating the conditions for volatility on the capital account?

B.3. it is somewhat ironic that efforts to restore macroeconomic stability were undermined by capital inflows. In 1993-94, major cuts in public expenditure led to a lower fiscal deficit and a sharp reduction in the monetisation of the deficit. However, the rate of growth of the money supply was higher because of the accumulation of foreign exchange reserves. Thus, inflationary pressures did not subside despite better macro management. In these circumstances, does the real solution lie in raising the tax/GDP ratios and the savings rate, rather than in demand reducing sterilisation?

B.4. Finally, it is particularly relevant to comment on the situation of the host country with regard to the conditions in its principal port and commercial city, Karachi. What has been the experience of countries which try and liberalise the capital account when debilitating domestic instability can create the conditions for capital flight? Should a premature entry into a vicious circle be avoided by a more selective and gradual liberalisation? Or are countries such as Pakistan headed towards the problems evident in Latin America?

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