

# Global Capital

## The Philippines in the Regional Currency Crisis

*Gonzalo M Jurado*

Foreign short-term capital is the initiator of the currency crisis now sweeping Asia. There existed a vulnerability in the affected countries consisting of their massive exposure to foreign capital and foreign loans on the one hand and their limited capacity to service these on the other. Short-term capital speculated against these countries' currencies and depreciated them to depths never known before. In this essay, Philippine macro institutions are commended for shielding the Philippine economy from more severe damage, particularly the Bangko Sentral ng Pilipinas for implementing a market-driven foreign exchange rate policy. It suggests courses of action to prevent the occurrence of similar problems in the days ahead.

**I**N THE CURRENCY TURMOIL SWEEPING ASIA WE ARE WITNESSING for the first time the power of a segment of global capital to shape and reshape the economies of nations. This segment exhibited its power by enriching nations through its entry into their markets; now it is demonstrating its capacity to destabilize countries through its sharp movements in and out of these markets.

These movements are not whimsical. The very same powerful self-interest that enables this segment of global capital to provide stimulus to growth in receiving countries permits it to exploit the weaknesses of markets and mobilize the momentum of action to attack even strong and basically sound markets. Market devastation is the result—deep and wide in some countries, less so in others.

The controllers of foreign short-term capital saw in the misaligned fundamentals of Thailand an opportunity to attack the baht. Their success there emboldened them to assault the Philippine peso, the Indonesian ru-

piah, the Malaysian ringgit, the Singapore dollar, and the South Korean won, with varying results. Soon they took on the Hong Kong dollar and the Taiwan dollar where they were repulsed in each case. No one is certain that they will not return to the Hong Kong dollar and Taiwan dollar or that they will spare the Chinese yuan, the Australian dollar and the New Zealand pound. There is no telling that the contagion will not spread to Japan or that, think of the unthinkable, it will not reach the United States (US).

The complexity of the interaction between external agent and national entity, not to mention the novelty of the phenomenon, has given rise to two explanations, the first partly correct and the second almost totally wrong. The first assigns all responsibility to currency speculators, absolving national entities of any responsibility for the crisis. This explanation is at best incomplete. The other explanation blames the victims, depicted as attracting destabilization either through their haste in reaching better developed status or, as the case may be, their slowness in attaining that goal. In its clearest form, this explanation has no explanatory power and is a tautology.

This essay attempts to understand the currency crisis in Asia: how it came about, its current dimensions and impact, how the Philippines has fared in the crisis, and, possibly, how the crisis will end. The focus is on short-term foreign capital and its interaction with domestic conditions in bringing about the crisis. Central to its argument is the contention that unless the role of short-term foreign capital is placed at the center of the analysis no sense can be made of what is going on.

But before the reader is overwhelmed by such words as turmoil, turbulence, destabilization, and attack, it is necessary to define the event that is being described by such words: depreciation. A currency is said to depreciate when its value in terms of another currency is reduced. Thus when 25 pesos exchanged for US\$1, the peso was worth 4 US cents. When it took 40 pesos to exchange for US\$1, the peso was worth 2.5 US cents. The peso is then said to have depreciated by 37.5 percent  $[(4-2.5/4)]$ . A depreciation has beneficial effects: it encourages the export sector to earn more foreign exchange, to employ more people, and raise their incomes; it stimulates all those sectors that are linked to it, and discourages imports, thus promoting indigenous growth. Yet it has deleterious effects as well. It raises the prices of imported goods, shrinks import-dependent industries and all those in-

dustries that are connected to them, thus creating unemployment and loss of income. Many economists favor depreciation for stimulating and accelerating growth in an economy. Yet in the current context where depreciation rates are going up to almost 70 percent regionwide, where governments are forced to postpone socially necessary projects and businesses to slow down production and lay off workers, it seems callous and nonsensical to talk of the beneficial effect of depreciation. The words that are in current use—turmoil, destabilization—are used here to emphasize the point that reference to beneficial effects at this time is hardly appropriate.

#### FOREIGN CAPITAL AND DEVELOPING COUNTRIES

THE starting point of this analysis is the spread of capital to various parts of the world economy after World War II. The thinking was to encourage the movement of capital from capital-surplus areas to capital-deficit areas in order to assist the latter to develop their economies. Such thinking was initially not shared by many countries, least of all the poor ones in whose minds memories of colonialism still lingered. But pragmatism prevailed and governments began attracting foreign investment. Today the role of foreign investment in generating output, causing employment and creating income and wealth in developing countries, no longer seems in dispute.

Foreign investment consists of long-term and short-term investment. Long-term foreign investment or, using its current name, foreign direct investment (FDI) results in factories, office buildings, purchases of raw materials from local suppliers, mobilization of labor, and so on. Because it

takes up residence in the country of its operation, FDI has a stake in the soundness of the country's economy, the strength of its political institutions, and the durability of its social order. Without such economic, political, and social stability in the country in which it operates, FDI will not be able

to realize profits, much less repatriate them to its owners. The same cannot be said of short-term foreign investment which is channeled into shares of stock, 30-day bills, and other short-term financial instruments for the purpose of making quick profits. Given its narrow time band it is generally not concerned with the long-term stability of the host country.

Some Asian countries have achieved success in attracting long-term

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Foreign portfolio  
investors are dominant  
in Asian stock markets.

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foreign investment. In terms of annual levels, FDI in Malaysia is the highest among the countries in the region and that in the Philippines the lowest. In terms of growth between 1985 and 1995, FDI in the Philippines has grown the fastest (by 123-fold) while that in Singapore has grown the slowest (by 3.72-fold).

### **Surge in Foreign Direct Investment**

(US\$ million)

<b>Year</b>	<b>Philippines</b>	<b>Indonesia</b>	<b>Malaysia</b>	<b>Singapore</b>	<b>Thailand</b>	<b>South Korea</b>
1985	12.0	310.0	694.7	809.0	163.2	-353.0
1986	127.0	258.0	488.9	1529.0	262.5	-725.0
1987	307.0	385.0	422.7	2630.0	357.9	76.0
1988	936.0	576.0	719.4	3537.0	1105.4	371.0
1989	563.0	682.0	1667.9	2005.0	1775.5	505.0
1990	530.0	1093.0	2333.0	3541.0	2444.0	-268.0
1991	544.0	1482.0	3998.0	4361.0	2014.0	-320.0
1992	228.0	1770.0	5183.0	887.0	2113.0	-481.0
1993	1238.0	2004.0	5006.0	2665.0	1804.0	-773.0
1994	1591.0	2109.0	4348.0	2376.0	1366.0	-1715.0
1995	1478.0	4348.0	5800.0	3006.0	2068.0	-1753.0

Source: Asian Development Bank, *Key Indicators 1997*, Table 33.

The contribution of short-term capital to development in Asian countries can be seen in the rapid growth of stock markets in these countries. From almost nothing 30 years ago, these are now enormous institutions. The Thai stock exchange is 10 times the size of the Philippine stock exchange. The biggest absorbers are foreign hedge fund managers and other controllers of short-term capital. So dominant are these foreign portfolio investors in the stock markets that when they so much as spend a few million dollars—a fraction of the funds in their control—on local stocks they bring about a bull run. Conversely, when they sell, they trigger a decline and, in the extreme, may even cause a collapse.

When net portfolio equity investment and other short-term flows are added to net FDI, the total amounts become truly enormous. Among the

Asean 5, Malaysia and Indonesia in 1995 had the highest net private flows from all sources while the Philippines had the lowest. In terms of expansion rates, the flows over the ten-year period into Singapore grew the fastest (by more than 50-fold) while those into the Philippines expanded the slowest (by less than 6-fold).

### The Flow of Funds

Net Private Flows from All Sources\*  
(US\$ million)

Year	Philippines	Indonesia	Malaysia	Singapore	Thailand	South Korea
1985	787.7	464.1	785.4	-211.4	1162.7	1446.1
1986	392.4	786.3	806	79.5	-211.4	578.8
1987	-305.5	688.5	-411.8	950.4	363.6	-1033.4
1988	286.5	638.7	-1700.8	1681.8	2048.4	-850
1989	540.2	960.9	738.9	2899.2	4839.4	-123.9
1990	639.1	3235	1799.3	3216.7	4497.6	1572.3
1991	404.5	3372.9	4157.7	1443.2	5032.6	3111.8
1992	-776.6	4577.4	60007.1	3320.2	4303.4	2742.4
1993	3278.1	1050.4	11269	3377.7	6800.4	3207.5
1994	4746.9	7748.2	8893.4	5785.8	478.1	4991.2
1995	4605	11648.5	11924.2	5137.4	9142.9	7482.3

\*Refers to the sum of net FDI, portfolio equity flows, net flows of long-term public and publicly guaranteed debt from private creditors, and net flows of total private nonguaranteed debt.

Source: Asian Development Bank, *Key Indicators 1997*, Table 39.

*Vulnerabilities.*<sup>1</sup> When a recipient country is dependent on foreign capital, defined as consisting of both autonomous investment (direct and portfolio) and external borrowings, particularly short-term, it becomes hostage to the movements of that capital. The size of foreign capital existing at any time in any country is the sum total of all annual flows into that country minus a depreciation allowance. In the normal state of affairs this sum is a huge multiple of the annual flows. In accounting language, these are the total external liabilities of the recipient country. To the extent that this is large, so will the country's need for a current account surplus and reserves to settle or service it be great. Should the current account be in deficit or

the reserves too low or perceived to be too low for settling or servicing these liabilities, short-term capital may consider it in its interest to abandon the country. When it does so it can precipitate a run on the market, effectively launching an attack on the country's currency.

The vulnerability of an economy to short-term capital can be seen, for instance, in the behavior of portfolio capital in the Philippines. In the 1990 to 1996 period, net flows of portfolio investment were extremely erratic, going up to a positive US\$200 million in 1995 then down to a negative US\$250 million in 1996. Compare that with the behavior of FDI which was steadily positive. The stock markets in all the affected Asian countries had been declining prior to the collapse of their currencies, sending omens that short-term capital in the affected countries was flying out.

There are other areas in the macrosystem that can give rise to vulnerabilities which short-term capital can exploit. First, if the resource balance (savings minus investment) is in deficit, the implication is that the country is relying on foreign investment to fill the gap, meaning that it will require proportionally higher foreign exchange earnings or reserves to meet its obligations. If the deficit is persistent, the vulnerability becomes serious.

Second, if the fiscal balance (tax revenues minus government expenditure) is in deficit, the government is using private debt to finance its spending, stoking inflation in the process, exerting pressure on the trade balance, and creating foreign liabilities. If this deficit in the fiscal balance is persistent, as in the previous case, the vulnerability becomes serious.

Third, if the trade balance (exports of goods and services minus imports of goods and services) is in deficit, either the reserves will be used to finance the deficit or more foreign loans and other obligations will be incurred. The vulnerability intensifies as the deficit persists.

Fourth, if inflation is taking place, imports will become attractive, a trade deficit will arise, and more external loans will be used to close the trade gap, increasing the burden of the external obligation. Finally, if the currency is overvalued (i.e. if its exchange rate is numerically lower than is consistent with market forces), the correction of the macro fundamental misalignments will be difficult, if not impossible, and will encourage short-term capital to quit the market.

We now know from present experience that the vulnerabilities arising from the inadequacy of the reserves (whether real or imagined) or from the

misalignment of the other macro fundamentals are not the only considerations for abandoning a market. The state of the financial system and the perceived strength (or weakness) of the monetary authorities' determination to support the exchange rate can encourage or discourage an attack on the currency.

If the banking system is found to have overexposed itself to uncollectible loans (to the property sector in Thailand, for instance) or crippled itself with crushing short-term external debt (as in Thailand, Indonesia and South Korea) so that its ability to service its external obligations is put in doubt, short-term capital may conclude that it is time to flee. Further, if the monetary authorities are perceived to be without resolve to support the exchange rate or that their ability to do so is limited (unlike Hong Kong and Taiwan authorities who publicized their determination to defend their respective currencies' peg with the US dollar at any cost), short-term capital may be emboldened to attack the currency.

*Capital Flight and Speculation.* Capital flight takes place when holders of wealth, including investors, long-term and short-term, abandon a market because they consider it a poor risk for their holdings. When conditions—political, social as well as economic—improve, the controllers of

capital expect to return and resume normal operations. By contrast, speculation occurs when holders of wealth, mostly short-term investors, abandon a market, hoping to make a profit on their return. Such action takes the form of dumping the market's currency in order to depreciate it, returning after the depreciation, and

reaping the profit. Capital flight is based on misaligned macro fundamentals. Speculation, as will be shown below, is only remotely related to them.

It must be pointed out that speculators are legitimate participants in the free market rather than outsiders destabilizing it. They are as much a part of the free market as small and medium enterprises, and the instinct they exhibit is in the finest tradition of the system in which they operate. So long as the focus of the system is the realization of profit, everyone—speculator or not—deems it as a right to exploit a profit opportunity when it appears.

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Speculators are  
legitimate participants  
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Consider hedge funds under the management of international investment houses and people like George Soros. These are funds put together from thousands of people around the world for investment so that these funds yield reasonable returns to their owners. Like deposits in a bank, these funds can be pulled out from the investment houses by their owners. Since we do not fault bank depositors for withdrawing their deposits simply because they are stirring up a bank run why should we condemn fund managers for withdrawing their funds from markets they sense as approaching insolvency, even if their hope is to make money out of the withdrawal? Bringing in the moral issue that speculators should exhibit a social conscience is laudable but it basically runs against the grain of the system. In this context, individuals and enterprises that are honoring the entreaties of their governments to desist from joining the speculators are to be admired, for they are protecting the larger interest while sacrificing their own.

Capital flight has no intention of depreciating a currency. But depreciation is precisely the objective of speculation. Speculation operationally means converting one's holdings of a currency into another currency, in the hope that the abandoned currency will depreciate. If it does, the speculator wins and reaps a profit which is made up of the difference between the price paid for the acquired currency before the depreciation and the price received for it after the depreciation. If the abandoned currency does not depreciate, as in Hong Kong and Taiwan, the speculator loses.

Once a speculative attack is mounted, no one knows who will join in. Everyone who perceives an opportunity to make a profit is a possible candidate. Some of the joiners will be 'willing' but some will be 'reluctant'. Willing participants include those who will dump the currency under attack, hoping to make a profit once they return to it. Reluctant participants, on the other hand, will be those who have to cooperate with the speculators simply because it is their duty to serve their depositors and other clients. Some banks belong to this category.

We now also know, from current Indonesian experience, that the intensity and duration of a speculative attack hinge partly on a subjective consideration: the confidence of the business sector and the general public in the ability of the authorities to steer the economy out of the turmoil. If that confidence is lacking, the business sector and the community may decide to dump their own currency in favor of another currency, thus deepening

the depreciation and prolonging the crisis.

How does a speculative situation end? It does so when the speculators have all returned to the original currency, reaping their profits, convinced that the exchange rate will depreciate no further, while the holders and earners of the stronger currency are no longer holding back on their possession, similarly convinced that the weakened currency will weaken no further. At that point the exchange rate stabilizes. It returns to the old equilibrium rate if, first, that exchange rate was market-determined prior to the attack and, second, if nothing else has changed in the interim. The story will be different if the speculation involves many countries, as in the current context. In this case, where internally induced misalignments are intensified by the regional contagion effect, the new rate will reflect both correction to the internal misalignment and the competitive effect of the regional contagion.

#### CONDITIONS IN THE ASIAN COUNTRIES

THE question that needs to be raised here is whether economic conditions in the Asian countries were in such a bad state that they in effect served to provoke interested parties to attack their currencies. Or, put in the form of a question, did the countries bring the attack upon themselves because of the misalignment of their macro fundamentals? Would they have given up on their external obligations because their reserves were not enough to meet these responsibilities?

*Reserves.* The reserves constitute the first line of defense of any economy whose currency becomes the target of a speculative attack. The Asian countries were not deficient in reserves. Among those in the Asean, Singapore had the largest reserves (almost US\$77 billion) while the Philippines had the smallest (not quite US\$12 billion). South Korea had an equally impressive US\$67 billion.

Usually measured in terms of their equivalent in imports, Indonesian reserves in 1996 were good for 5.5 months; Malaysia, 4.6 months, Singapore, 7.5 months; Thailand, 6.3 months; South Korea, 5.6 months; and the Philippines, 4.4 months. Since reserves good for three months' imports are normally considered sufficient, these obviously are not a pittance.

However, relating reserves to imports is a nation-oriented concern.

**Not Strapped for Cash**International Reserves  
(US\$ million)

Year	Philippines	Indonesia	Malaysia	Singapore	Thailand	South Korea
1985	1,098.3	5,989.0	5,677.2	12,847.0	3,003.2	7,819.3
1986	2,611.0	5,264.4	6,941.1	12,939.0	3,776.2	8,135.5
1987	2,311.9	7,094.6	8,572.6	15,277.0	5,205.6	9,316.6
1988	2,168.5	6,321.4	7,491.1	17,073.0	7,112.8	20,991.0
1989	2,398.2	6,699.9	8,733.4	20,345.0	10,507.9	23,209.9
1990	2,035.9	8,656.7	10,658.8	27,748.0	14,258.3	24,448.2
1991	4,436.2	10,358.0	11,717.0	34,133.0	18,392.5	24,519.6
1992	5,335.4	11,482.4	18,024.5	39,885.0	21,183.5	30,133.2
1993	5,934.3	12,474.4	28,182.7	48,361.0	25,439.5	36,565.8
1994	7,125.4	13,321.5	26,339.0	58,177.0	30,280.2	46,701.9
1995	7,756.6	14,907.3	24,698.3	68,695.0	36,938.8	60,610.2
1996	11,747.4	19,396.0	27,847.0	76,847.0	38,644.5	67,293.8

Source: Asian Development Bank, *Key Indicators 1997*, Table 34.

What matters more to speculators is the amount of reserves relative to the perceived total external liabilities. In other words, the capacity to repay at any time and at all times. Based on this consideration they act as they see fit.

*External Debt.* Total debts represent a part of the country's overall exposure to external capital, the other part being the amount that must be paid regularly to amortize foreign investment and profits repatriated to their owners. In 1995, these ranged from an extremely large 56.9 percent of the gross national product (GNP) for Indonesia, 51.5 percent for the Philippines, to a moderate 10.5 percent for Singapore.

The actual debt burden was heavy in the middle 1980s, except for Singapore, but seemed to decline after that. By 1995, the debt service ratios, referring to the ratio of total debt service (for both principal and interest) to the value of exports, had fallen to modest levels, ranging from an

**Burden of Debt**

(Percent)

	Philippines	Indonesia	Malaysia	Singapore	Thailand	South Korea
<b>Total External Debt/GNP</b>						
1975	27.9	36.7	22.3	12.7	12.5	-
1985	89.1	44.4	69.9	23.1	45.9	68.8
1993	64.9	58.7	43.8	9.7	34.9	19.6
1994	60.8	57.2	44.0	11.2	34.4	23.4
1995	51.5	56.9	42.6	10.5	34.9	26.1
<b>Total External Debt Service/Exports</b>						
1975	-	-	5.1	1.5	12.0	-
1985	31.6	28.8	30.4	4.3	31.9	31.2
1993	25.6	33.6	8.6	0.7	13.7	9.5
1994	18.9	30.7	9.3	0.5	13.5	7.3
1995	16.4	30.9	7.8	0.5	10.2	4.9

Source: Asian Development Bank, *Key Indicators 1997*, Table 36.

infinitesimal 0.5 percent for Singapore to a moderate 16.4 percent for the Philippines. The exception was Indonesia, whose ratio increased to 30.9 percent.

*Current, Fiscal and Resource Balances.* With the exception of Singapore which had an enormous surplus (14.9 percent of GNP in 1996), the Asean countries uniformly showed persistent deficits in their current account balance from the middle 1970s to the middle 1990s. In 1996, these ranged from 8.0 percent of GNP for Thailand to 3.8 percent for Indonesia. Malaysia and the Philippines had ratios of 5.5 percent and 4.1 percent, respectively. Outside of Asean, South Korea was in the same boat showing a deficit of 4.9 percent of GNP. These deficits do suggest a vulnerability, especially for Thailand.

All affected countries, except South Korea, passed the fiscal test with flying colors. All showed fiscal surpluses in 1996 with Thailand showing the biggest, 3.0 percent of its gross domestic product (GDP). However South Korea's deficit, 0.2 percent of GDP, is so small it would take a micro-

**Plus and Minuses**

## Macrofundamental Balances

Year	Philippines	Indonesia	Malaysia	Singapore	Thailand	South Korea
1975	-6.0	-3.8	-5.5	-10.2	-4.2	-9.1
1985	-0.3	-2.3	-2.1	0.0	-4.0	-1.0
1996	-4.1	-3.8 <sup>a</sup>	-5.5	14.9	-8.0 <sup>a</sup>	-4.9

**Fiscal Account**

(Percent of GDP)

1975	-1.4	-3.9	-8.5	0.8	-1.7	-2.1
1985	-1.9	-3.7	-5.7	-4.4	-4.3	-1.2
1996	0.5	0.4	0.8	-	3.0	-0.2

**Resource Account**

(Percent of GDP)

1975	-4.1	0.7	0.5	-10.9	-6.2	-8.9
1985	-4.5	1.8	5.1	-1.9	-3.4	1.5
1996	-9.1	1.3	-1.3	15.4	-6.9	-3.0

<sup>a</sup>Refers to 1995Source: Asian Development Bank, *Key Indicators* 1997.

scope to see it.

The resource balance refers to the savings-investment account. Three of the affected Asian countries have a vulnerability in this area. The Philippines, with a resource gap of 9.1 percent of GDP in 1996 appears to face the most grievous risk, followed by Thailand with 6.9 percent, then South Korea with 3.0 percent. A fourth country, Malaysia, with 1.3 percent resource deficit, cannot be said to be vulnerable specially as it had surpluses in previous years. The two other countries, Singapore and Indonesia, had surpluses, with Singapore coming up with a gargantuan 15.4 percent of GDP, making it, as indeed it has become, a prospective investor in other countries.

*Inflation.* Four countries show a vulnerability in the price area. In the three-year period of 1994 to 1996, the Philippines and Indonesia showed inflation rates ranging from eight to nine percent, rates considered in the upper range of the normal in developing countries. Thailand and South

Korea displayed rates ranging from five to six percent which in the developing world are in the lower range of the normal. On the other hand, Malaysia and Singapore exhibited strong price stability, specially the latter, which can serve as a role model even for the developed countries.

### Consumers' Corner

Price Indexes and Inflation Rates

	Philippines	Indonesia	Malaysia	Singapore	Thailand	South Korea
<b>1990 = 100</b>						
1985	67.9	71.0	90.7	93.9	82.6	76.8
1990	100.0	100.0	100.0	100.0	100.0	100.0
1992	129.3	117.4	109.3	105.8	110.0	116.1
1995	163.9	152.9	121.4	113.5	126.4	135.1
1996	177.8	165.0	125.6	115.1	133.8	141.8
<b>Annual Changes</b>						
1994	9.0	8.5	3.7	3.1	5.1	6.2
1995	8.1	9.4	3.4	1.7	5.8	4.5
1996	8.4	7.9	3.5	1.4	5.9	5.0

Source: Asian Development Bank, *Key Indicators 1997*. Country Tables.

*Exchange Rate.* This is the macro fundamental that seems to offer the most irresistible target to speculators. Were the Asian currencies overvalued? Were their exchange rates misaligned? Looking at nominal values, the exchange rates in the Asian countries can be classified into three groups, one for those which depreciated over the 1985 to 1996 period, another for those which remained more or less unchanged, and a third for those that appreciated. The Philippine peso and the Indonesian rupiah belong to the first category, the Malaysian ringgit and the South Korean won to the second, and the Thai baht and Singapore dollar to the third.

Were these rates reflective of market forces? For the Philippine peso which depreciated nominally by 29 percent in the eleven-year period and the Indonesian rupiah which went down in nominal value by 53 percent, the answer is probably yes. Their depreciation can be interpreted as an accommodation of changing purchasing power parities with the US, their

**Speculators' Arena**

Exchange Rates Per US\$

Year	Philippines (peso)	Indonesia (rupiah)	Malaysia (ringgit)	Singapore (dollar)	Thailand (baht)	South Korea (won)
1985	18.61	1,111	2.48	2.20	27.16	810
1990	24.31	1,843	2.70	1.81	25.59	708
1995	25.71	2,249	2.50	1.42	24.92	771
1996	26.22	2,342	2.52	1.41	25.34	804
<b>1997</b>						
June	26.37	2,446	2.52	1.43	25.77	889.4
July	27.66	2,518	2.58	1.45	30.32	890.5
Aug	29.33	2,800	2.75	1.50	32.48	895.5
Sept	32.39	3,055	3.02	1.52	36.30	909.5
15 Dec	39.10	5,714	3.86	1.68	46.90	1,565

**Percent Depreciation June-15 Dec**

32.6	57.2	34.7	14.9	45.0	43.0
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Source: Asian Development Bank, *Key Indicators 1997. Country Tables.*

main trading partner. A similar argument can be advanced for the firmness of the Malaysian ringgit and the strengthening of the Singapore dollar because of the solid price stability in the two countries and, with respect to Singapore, unequalled economic performance in the last three decades. It seems doubtful, however, whether the same argument can be made for the South Korean won and the Thai baht. Relative to those of their main trading partner, the US, prices in these two countries went up in the last decade. It can be said therefore that on the basis of purchasing power parity alone, these two currencies were overvalued.

To sum up, Indonesia had two misaligned fundamentals (current account deficit and slight inflation), Malaysia had one (current account deficit), Singapore had none at all, Thailand had three (current account deficit, resource balance deficit, and overvalued currency), while the Philippines had three (current account deficit, resource balance deficit, and inflation). With regard to South Korea, three misaligned fundamentals can

be ascribed to it (current account deficit, resource balance deficit and overvalued currency). That these misalignments required corrective action is

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## Were the Asian currencies overvalued?

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obvious. Whether they were so large or so persistent as to become the stimuli for speculative attacks is arguable, however. In fact, given the record of economic performance of these countries in the past, these misalignments seem to be of little consequence.

All the same, it is now a fact of history that the turmoil started in Thailand with short-term capital launching an attack on the baht. The Thai Central Bank unsuccessfully defended the baht, losing a reported US\$20 billion in the process. The baht, which stood at B25 to the US dollar prior to the attack, soon fell to B32. The success of the attack on the baht emboldened the speculators to attack other Asian currencies, bringing these down to levels previously unheard of. By 6 January 1998 from six months earlier, the Indonesian rupiah had depreciated nominally by 67.5 percent, the Malaysian ringgit by 41.8 percent, the Singapore dollar by 18.5 percent, the Thai baht by 51.5 percent, the South Korean won by 55.3 percent, and the Philippine peso by 41.3 percent.

It is not easy to say how much of these depreciations was caused by internal misalignments and external contagion. One can say that the Philippine peso fell the least because its pre-attack rate was the most realistic. After all, the peso had depreciated nominally by almost 30 percent in the decade prior to the attack. But how does one explain the total deterioration of the Indonesian rupiah, whose nominal depreciation in the period prior to the attack was almost twice that of the peso and, indeed, was the highest in the region? Similarly, why is the Malaysian ringgit not in dire straits, given the fixity of its exchange rate in the last decade?

We do not have the appropriate price deflators for the affected Asian countries and hence, cannot compute real effective exchange rates for them; but going strictly by the rates now appearing on the market and using 6 January 1998 as a base, it can be shown that in June 1997 the Philippine peso relative to the Indonesian ringgit, the Thai baht and the South Korean won was substantially undervalued. If reports are true of the Indonesian situation, it is the loss of confidence by many Indonesian businessmen in the ability of their government to manage the problem that is push-

ing the rupiah downward (Pernia 1997). In South Korea, it is the sheer size of the country's short-term loans (reported to be in the order of US\$100 billion in 1998) that is putting the pressure on the salvage funds and sending the won to unprecedented depths. It is a similar concern for short-term exposure that is sending the Thai baht spinning out of control. In addition to the currency impact, financing companies and banks have collapsed: 58 in Thailand, 16 in Indonesia, and at least five in South Korea.

As in the Mexican case of 1994 but in a much bigger way this time, the International Monetary Fund (IMF) came to the rescue. The IMF extended a rescue package of US\$17 billion to Thailand, another US\$23 billion to Indonesia, with Singapore and Japan pledging an additional US\$10 billion each if necessary, and a massive US\$57 billion to South Korea in addition to tens of billions more promised by Japan. The Asian Development Bank also promised to extend assistance to the affected countries as needed. Neither Malaysia nor the Philippines required any financial support. (Of course it can be shown that these support packages are ultimately in support of the foreign banks that gave out loans to the afflicted countries. But that matter is beyond the scope of this article.) The IMF laid down conditions that the recipient countries close down bankrupt banks and investment houses, postpone or abandon big ticket projects that require enormous amounts of foreign exchange, and straighten out various macro fundamentals. The rescue effort eased the turmoil but did not stop it. As of this writing, the crisis continues.

#### OBSERVATIONS

DID the countries bring this devastation upon themselves because their macro fundamentals were misaligned? Alternatively, is this crisis the handiwork of speculators?

To begin with, there is hardly any country in the world today, specially among developing ones, that has no misaligned macro fundamental. Almost all exhibit a vulnerability of one degree or another. Until this crisis happened, the penalty for a misaligned fundamental has been a combination or all of the following: the forced depreciation of the currency, the loss of reserves, the declaration of a unilateral moratorium on debts, a tailspin of the economy (Mexico in 1994).

But this crisis is unique. While the country in which it started, Thai-

land, had the worst current account deficit in the region and a misaligned exchange rate, it did not have the worst of the other fundamentals in the region. For instance, its resource deficit, inflation rate and debt service ratio were smaller than those of the Philippines and its fiscal surplus was certainly larger than that of the Philippines. Even with respect to Malaysia, Thailand cannot be unambiguously considered as weaker in macro fundamentals.

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The IMF rescue eased the turmoil but did not stop it.

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All the same, it is not far-fetched to say as a starting proposition that the capital flight in Thailand was caused by the country's current account deficit and fixed exchange rate.

If that is the case, how can one explain the capital flight in the Philippines whose current account deficit was modest, one-half that of

Thailand, and whose currency had nominally depreciated by 29.4 percent in the 1985 to 1997 period? Or the capital flight in Indonesia which had only a very small current account deficit (3.8 percent of GNP) and had what can be called a market-determined exchange rate, the rupiah having depreciated nominally by 54 percent in the period 1985 to 1997? Perhaps one can say that the turbulence in Malaysia occurred because the country had similarities with Thailand, both with current account deficits and strong currencies, but how does one explain the turmoil in Singapore whose current account was healthy (a huge surplus of 14.9 percent of GNP) and whose currency had in fact strengthened over the years because of exemplary economic performance? In the case of South Korea, neither current account nor exchange rate, as misaligned as they were, nor the rest of the fundamentals seemed to justify capital flight.

The relation between fundamentals and turbulence becomes more tenuous when the results are taken into consideration. Here, we see that Indonesia—the country most severely affected by the turmoil—is one with basically sound fundamentals. By contrast, the country which is most vulnerable, the Philippines, is the least damaged among the affected countries.

Finally, even a severe exaggeration of the importance of misaligned fundamentals cannot possibly account for the kind of depreciation rates we are seeing, which are approaching the debauched rates in Europe after World War I. At this point, the self-destructive argument is no longer convincing.

A MORE COMPLETE VIEW

WHAT then caused the Asian currency meltdown? There is nothing in the evidence to overthrow the hypothesis that the answer is speculation. Recall that the problem began in Thailand where an unprecedented surge in the demand for US dollars swamped the country's reserves and in a few days forced the baht to depreciate by 20 percent. In quick succession the pressure came to bear on the Philippine peso, the Malaysian ringgit, the Singapore dollar, and the Indonesian rupiah, causing the depreciation of these currencies. The assault reached the Hongkong dollar and the Taiwan dollar but was unsuccessful in each case. Soon it engulfed the South Korean won, forcing it to collapse. Only speculation can trigger the regionwide unraveling of currencies at such a speed.

That the motive was speculative—to gain from a depreciation of the currencies—was clearly demonstrated in the attack on the Hong Kong dollar from 20 to 23 October 1997. Here was a currency whose exchange rate could not possibly be suspected of being misaligned. Stable as it was at a level based on market forces, it was suddenly being dumped by the hundreds of millions on the market. When the Hong Kong monetary authorities called their bluff, the speculators abandoned the effort with their tail tucked between their legs.

Who were the speculators? Three candidates can be nominated: local capital, FDI, and foreign short-term capital. Given their long-term viewpoint, the first two can be described as having no interest in a depreciation of the local currency, a matter which can be shown to be contrary to their fundamental concerns. Only foreign short-term capital, with its narrow time horizon and quick profit orientation, has the motivation to push for such a course of action. As we look at the affected Asian economies we find that they had one thing in common: a staggering exposure to foreign capital, including a vast short-term component. Here then is the commanding general of the speculative attack.

Perhaps foreign short-term capital merely wanted to recoup its investments in Thailand but once it found that it could also force a depreciation it saw an opening for speculation. It practically had an iron-clad guarantee of success: the knowledge that the other Asian countries also had crushing loads of foreign obligations and that their ability to service these would be

problematic even in the best of circumstances, however substantial their international reserves might be.

Although the attack on the Asian currencies (with the possible exception of the Thai baht) was speculative, its impact served to expose the weaknesses of the economic structures of the affected countries: not just high exposure to short-term foreign capital but imprudent financial institutions and even defective accounting systems. That explains why the depth of the depreciation in the affected countries differed: very deep in Indonesia and South Korea where the discovered ills were of overwhelming proportions, somewhat less so in Thailand, Malaysia and the Philippines, and much less in Singapore.

Clearly, the speculator thesis has something to recommend it but it is incomplete. It does not hold the affected countries responsible for laying the ground for the one single vulnerability that matters—the hugeness of their exposure to foreign capital, particularly to foreign short-term capital. The responsibility of the affected countries lies not in the fact that they attracted huge amounts of foreign capital to accelerate their growth, but in their almost total amnesia of foreign short-term capital's potential for destabilization and their singular failure to set up safeguards against such perverse potential. Given the lack of weight of macro fundamentals, it is not surprising that the IMF's call for corrective action now focuses on the restoration of business confidence, the strengthening of the financial system, and the judicious management of the rescue funds.

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The speculator thesis  
is incomplete.

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#### THE PHILIPPINES IN THE CURRENCY CRISIS

WHY should the country with the worst macro fundamentals among the affected countries suffer the least from the currency crisis? The answer has several strands. To begin with, and this should be emphasized, the country's exposure to foreign capital is smallest among the affected countries. It used to be pointed out that the Philippines, to its embarrassment, was attracting the smallest amounts of foreign investment in the Asean region. This is turning out to be an advantage in the current context.

Secondly, the country had already put in place much of the necessary reforms in the economic sphere—liberalization, greater transparency, and

prudential regulation of the banking system, for instance—that lessen its vulnerability to uncertainty. Such reforms are only now being recognized by the seriously affected countries to be indispensable to the restoration of business confidence and the resumption of normal economic activity.

Thirdly, the operating institutions of the government in the various macro fundamental areas were working in the right direction. The fiscal sector was turning in a surplus. The resource sector was overcoming the severe handicap of low domestic savings with increasing efficiency in attracting foreign investment (whose short-term component is unfortunately the source of the current disturbance, as this paper shows). The trade sector was accelerating the generation of exports to match the import bills bloated by the increasing demands of development. And, lastly, the monetary sector was stabilizing prices and ensuring the international convertibility of the currency, through prudent action on interest rates and the money supply.

While all major institutions in the macro fundamental areas were performing well, the *Bangko Sentral ng Pilipinas*, the country's frontline institution in the battle of the exchange rate, was not doing badly either. Through the use of the various monetary policy instruments available to it (including open market operations, the interest rate, actions in the foreign exchange market, liquidity ratios, reserve requirements and administrative rules) it tried to achieve its twin goals of stabilizing prices and ensuring the international convertibility of the peso.<sup>2</sup> The extent of its success can be seen in the declining rate of inflation and the almost 30 percent nominal depreciation of the currency in the last 11 years, both noted earlier.

A word about the exchange rate. The exchange rate of a currency may be (a) fixed by law or by decision of the monetary authority; (b) allowed to fluctuate within a limited range; or (c) allowed to fluctuate freely in response to changing market forces. In the first case, the rate can become unrealistic and the currency overvalued if prices in the country are rising faster than prices abroad. In such an event a depreciation will be appropriate to restore the country's international competitiveness. In the second case, the rate can also become unrealistic and the currency also overvalued if the exchange rate's change is too limited to reflect the actual changes in relative prices. Then a depreciation will be called for to restore the

country's competitive standing. In the third case (Friedman's flexible rate), the rate is always realistic and the currency always 'correctly' valued because the rate reflects the equilibrium of market forces. There will never be any need for a depreciation, or for that matter appreciation, in this case. The Philippine peso exchange rate belonged to the second category.

*Framework of Monetary Policy.* In the last two decades the Bangko Sentral has been guided in its decision-making by a broad policy framework along the lines of the quantity theory of money. In this framework, it takes the growth rate of GDP as given (by the economic planning authority); sets a 'permissible' inflation target (in coordination with the planning, fiscal and other authorities); and then, using given credit velocities, sets about achieving the monetary targets (M2 and M3) appropriate to the income and price goals. The price target is particularly important since price stability is one of the two major objectives of the Bangko Sentral's very creation.

*Open Market Operations.* The most important policy instrument the Bangko Sentral uses to attain monetary targets applies to open market operations—the sale and purchase of Bangko Sentral papers to and from the banking system depending on whether the Bangko Sentral wishes to contract or expand the money supply. Two broad types of papers are transacted: the Bangko Sentral's own repurchase and reverse repurchase papers and Treasury Bills, the last being the primary responsibility of the fiscal sector but under the Bangko Sentral's operational management.

*Interest Rates.* The Bangko Sentral uses the interest rate it charges on its papers and the interest rate deemed acceptable by the Treasury on its bills of various lengths of time to influence the levels of interest rates in the private banking system. By raising or lowering the interest rates it charges the commercial banks on these papers, the Bangko Sentral influences these banks to similarly raise or lower their lending rates to the business sector. High lending rates charged by commercial banks slow down production, dampen price increases, and strengthen the exchange rate which in turn undermines the country's international competitiveness. The opposite is also true: low lending rates speed up investment, generate inflationary pressure, and weaken the exchange rate which

in turn improves the country's competitive standing. As a general rule, interest rates should not be raised if the objective is to speed up production or improve the country's global competitiveness and should not be lowered when the aim is the opposite. Rates for 91-Day Treasury Bills had been in the range of 12 to 14 percent since 1993 and so with interbank call loans (ICLR), and overnight and term Bangko Sentral repurchase and reverse repurchase loans.

### Where It's Worth Saving

Interest Rates on Savings Deposits

	Philippines	Indonesia	Malaysia	Singapore	Thailand	South Korea <sup>/b</sup>
	Savings Lending <sup>a</sup>		Savings Lending <sup>a</sup>			
1985	19.8	28.2	19.0	9.27	5.57	13.0 17.5 6.25
1987	10.0	13.3	18.0	4.50	3.47	7.25 15.0 5.50
1990	17.3	24.3	19.0	6.57	5.51	13.75 19.0 6.50
1992	12.8	19.4	19.0	8.03	2.47	8.50 16.25 -
1995	10.2	14.6	16.0	6.55	4.01	10.62 16.25 -
1996	8.0	14.8	17.0	-	3.99	9.25 15.25 -

<sup>a</sup> on loans and discounts

<sup>b</sup> on export credits

Source: Asian Development Bank, *Key Indicators 1997, Country Tables*.

Has the use of interest rate policy by the Bangko Sentral been consistent with the attainment of its twin goals? It should be pointed out that bringing prices down to prevent inflation and weakening the exchange rate to make it globally competitive are basically conflicting objectives. The Bangko Sentral would have to fine-tune its interest rate instrument to achieve both.

There are two ways of determining whether interest rates on bank loans are high or low. The first is by comparing them over time and, second, by comparing them cross-sectionally with rates in neighboring countries. Using the first comparison, interest rates of Philippine banks have been on a secular decline since 1985. As against 1985 when rates stood at an average of 28.2 percent, in 1990 at 24.3 percent, they were down to 14.8 percent in 1996. In June 1997, just before the speculative attack on the peso, they were at their lowest yet, 13.5 percent.

Of the countries in Asia, only Thailand and the Philippines report

**Getting Value for Money**

Interest Rates in the Philippines (1997)

	BSP Reverse RP			91-Day T-Bill	Savings Deposit	Lending
	ICLR	Overnight	Term			
Jan	10.59	10.54	10.75	10.83	7.96	14.65
Feb	10.55	10.50	10.64	10.66	6.89	12.94
Mar	10.22	10.17	10.21	10.06	6.95	13.71
Apr	10.20	10.05	10.14	9.99	6.42	12.93
May	15.05	15.79	11.60	10.87	6.80	13.45
Jun	14.37	14.36	10.47	10.49	7.23	13.27
Jul	24.79	25.72	14.57	12.18	8.84	19.47
Aug	18.21	15.61	12.77	14.16	10.47	21.86
Sep	15.74	12.00	13.90	15.35	10.53	24.35
Oct	33.87	12.10	12.69	16.53	-	26.70
Nov	12.10	12.00	12.84	15.89	-	25.08

Source: Bangko Sentral ng Pilipinas, Department of Economic Research.

lending rates. The rest, including the other affected countries, report only rates on savings deposits. Philippine and Thai lending rates are about the same levels. Indonesian rates paid on savings deposits are higher than Philippine lending rates, especially after 1992. If Indonesian rates on savings were increased by, say, 50 percent to allow for bank spread, their excess over Philippine lending rates would be even more pronounced. Malaysia, Singapore and South Korea are apparently low-interest rate countries so that it is reasonable to believe that Philippine, and for that matter, Thai and Indonesian, rates are higher than corresponding rates there.

The foregoing refers to nominal interest rates. If we deflate these rates by their corresponding price indexes we find that real interest rates are uniformly lower in all affected countries, but particularly so in the Philippines where the inflation rate is higher.

The conclusion on interest rates then is that in terms of time or space, Philippine nominal and real interest rates on loans, particularly in the 1990s, were not high. These rates can be described as being consistent with

the Bangko Sentral's price stabilization objective and exchange rate objective of preventing the strengthening of the peso.

*Actions in the Foreign Exchange Market.* The guiding principle here, from the standpoint of exchange rate stabilization, is to purchase foreign exchange when there is a need to weaken the peso and sell when there is a need to strengthen it. The monetary authority was a net buyer of foreign exchange from 1990 to 1996, with total net purchases of US\$13.5 billion. In particular, the Bangko Sentral, after its establishment in July 1993, accelerated the purchases, buying almost US\$3.0 billion in 1994, almost US\$2.0 billion in 1995, and more than US\$4.6 billion in 1996—a sum exceeding by 28 percent the total purchases of the old Central Bank's in the previous four-year period. In the first six months of 1997, the Bangko Sentral purchased another net US\$168 million.

### Buying into the Currency Market

BSP Net Purchases/(Sales)  
(US \$ Million)

Period	1990	1991	1992	1993	1994	1995	1996	1997
Jan	0.500	-60.500	234.900	249.100	7.000	196.000	638.100	39.500
Feb	-5.000	-26.000	255.500	204.300	122.300	-242.400	437.450	700.000
Mar	191.200	56.300	244.990	201.600	481.100	-127.000	227.830	314.500
Apr	42.200	493.760	65.500	74.400	648.500	25.000	583.300	-329.000
May	1.000	405.780	-98.000	-91.000	177.100	385.700	780.900	-240.000
Jun	0.000	197.915	65.000	-1.300	645.800	624.000	463.290	-317.500
Jul	-0.750	50.200	211.400	-116.300	282.600	800.700	615.700	-1830.350 <sup>a</sup>
Aug	-38.500	10.900	12.300	-204.800	28.000	321.070	666.650	-90.000
Sep	-54.600	80.500	363.300	-213.400	142.500	-74.200	-198.000	-20.500
Oct	-95.450	195.450	336.900	-115.900	102.000	57.850	-172.640	-707.500 <sup>b</sup>
Nov	-23.000	237.700	238.700	-41.600	145.500	-273.500	440.000	-72.000
Dec	-81.700	203.800	319.850	3.000	146.500	281.900	114.900	0.000
Total	-64.100	1845.805	2250.340	-51.900	2928.900	1975.120	4642.480	-2552.850

<sup>a</sup> Includes some US \$ 500 million for debt service.

<sup>b</sup> Includes some US \$ 400 million paid for the import bills of the oil companies.

Source: Bangko Sentral ng Pilipinas, Department of Economics Research.

These actions of the monetary authority were intended to prevent the strengthening of the peso, consistent with the need for making the local currency internationally competitive.

*The Liquidity Ratio.* Another policy instrument which the Bangko Sentral uses to tighten or loosen the money supply for price stabilization or exchange rate convertibility purposes is the liquidity ratio, i.e. the percentage of total deposits required of commercial banks to place in government securities. This ratio has always been on the low side—about 4 percent for many years—to enable the banks to enjoy high liquidity. Only after the attack on the peso was this ratio increased, to prevent the banks from joining in the speculation, and then subsequently lowered to restore their liquidity. Again, the actions of the Bangko Sentral through the liquidity ratio can be broadly described as consistent with making the peso internationally competitive.

*Reserve Requirements.* The Bangko Sentral as a rule does not use the reserve requirement for influencing the money supply or the exchange rate. It uses it as a prudential rule, a 13 percent reserve requirement on commercial banks, more to protect the banks' financial capability to meet their obligations at all times rather than to influence monetary targets or the exchange rate. In the context of current experience, however, the requirement is turning out to be an effective deterrent upon banks that may indulge in reckless lending or other activities that could compromise their financial integrity.

#### ACTIONS AFTER JULY 1997

WHEN an exchange rate is under pressure, either from a trade deficit or from speculation, the monetary authority can raise interest rates and liquidity ratios and sell some of its reserves in order to lessen the pressure. It can also reverse the direction of its actions once the pressure has eased. The Bangko Sentral did all these in the weeks after the speculative attack. First, it raised the interbank call loan rate to 24.8 percent in July, lowered it to 18.2 percent and 15.7 percent, in August and September, respectively, and raised it to a high 33.9 percent in October. It then brought it down again to 16.7 percent in November. Rates for overnight and term Bangko Sentral reverse repurchase papers were similarly raised in July to 25.7 percent and

14.6 percent, respectively, and have been lowered since then. For 91-day Treasury Bills, rates had steadily gone up, from 12.2 percent in July to 15.9 percent in November.

The Bangko Sentral also tried, in the first three days of the attack, to support the 26.40 exchange rate, losing some US\$1.3 billion in the process. From then on up to November, it adopted a wider volatility band for the exchange rate, losing a much smaller amount, US\$300 million, as it tried to smooth out extremely wide day-to-day upward fluctuations. While data for December are not yet available, one can guess that, all told, the Bangko Sentral lost some US\$2.0 billion in the defensive effort in 1997. One is tempted to score this against the Bangko Sentral—‘squandering’ US\$2.0 billion for a failed enterprise. This is Monday morning quarterbacking. At that time no one knew the extent of the attack and, if the defense had succeeded, what would have been the reaction? A visiting scholar has said that given the stakes it was a small price to pay (Jager 1997).

In the wake of the assault, the Bangko Sentral also raised the liquidity ratio to 8 percent by September, to discourage the banks from joining in the speculation. But this was brought down to 5 percent by November, to enable the banks to resume normal operations. Finally, the Bangko Sentral tightened various administrative rules to alert the banks against faulty loans, discourage them from participating in the speculative assault on the peso, and ensure their observance of sound banking practices. This was meant to assure everybody—speculator or not—that the banking system was sound.

In sum, the Bangko Sentral allowed the exchange rate to be more or less determined by market forces, pushing interest rates down to weaken the peso and, when necessary, purchasing dollars heavily from the dealing system to prevent the strengthening of the peso.<sup>3</sup>

Yet the peso remains under pressure as this is being written. With the currencies of its neighbors being crushed relentlessly to the ground, it is not difficult to conclude that the peso is increasingly becoming a victim of contagion.<sup>4</sup>

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The peso is becoming  
a victim of contagion.

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However, in the helter-skelter of the currency crisis, long-term foreign capital in the Philippines has shown a cooperative behavior. Available in-

formation<sup>5</sup> shows that it has not joined the caravan of speculation and continues to implement expansion plans, even as it has slowed down just as all other actors on the economic scene have. This is one of the sources of stability that is enabling the economy to weather adverse circumstances.

Long-term foreign investment in-place is expanding but that is not the end of the story. More FDI are coming in to add to the country's productive capacity, a fact that ignores speculators altogether. This also is attributable to a marked improvement in the investment climate in the economy itself brought about by continuing policy reforms and possibly the efforts of the President in his foreign travels.

#### RECENT ACHIEVEMENTS AND AGE-OLD PROBLEMS

THE country was riding on the back of an economy which was becoming healthy when the ill winds came. Shrunken by 0.6 percent in 1991 and barely changed in 1992, its gross domestic product (GDP) was steadily recovering, expanding by 5.5 percent in 1996 and expected to grow even faster, by 6.0 percent, in 1997. And this growth was being achieved in an environment of stable prices. At 9.0 percent in 1994, inflation was down to 8.4 percent in 1996.

At the same time, investment was rising, from 14.3 percent of GDP in 1985 to 24.9 percent in 1996, but still below the rate of 30.9 percent of GDP of 1975, however. Perhaps the greatest accomplishment was in the field of exports. Against the stagnation of earlier years, the growth rates here were 16, 18.5 and 29 percent in 1993, 1994 and 1995 respectively, the last being the highest ever achieved in Philippine history. In 1996, the growth rate was 23 percent.

Employment was also up, with some 3.0 million new opportunities being opened up to the labor force in the period 1993 to 1996 compared to some 1.7 million in the preceding comparable period of 1990 to 1993. Even temporary labor migrants (or overseas Filipino workers) were apparently beginning to come home as total arrivals began exceeding total departures beginning 1996.

Although it is holding up under difficult circumstances, the country has severe problems that can become even worse under the impact of the regionwide currency contagion. To begin with, pushing the economy to reach even the modest growth rates of 4.2 percent and 5.5 percent for GDP

in 1995 and 1996, respectively, from the negative rates of the early 1990s, has not been easy: some firms had to slow down and some workers had to lose their jobs because of trade liberalization, etc. Reaching the targeted 6 to 7 percent growth for 1997 is now out of the question. The 4.5 percent rate projected by the IMF is more likely.

Agriculture remains in the doldrums, lacking irrigation facilities and infrastructure support and being unable to move out of age-old techniques. The industrial sector, saddled by antiquated equipment and now crushed by sharply increased costs, is performing at a fraction of its potential. The rate of inflation, though down from the double-digit rates of earlier years, needs to be brought down some more, perhaps to 4 to 5 percent. Unemployment, despite recent achievements, is still high, at 8.4 percent of the labor force. And notwithstanding various social reform agenda, poverty remains endemic.

The postponement of investment and cutbacks on production, which have been dictated by the climate of uncertainty, can only decelerate growth to turtle pace, increase unemployment and intensify poverty all around. Slashes in government spending, necessary to relieve pressure coming from the demand side, will result in the sacrifice of social development programs and the postponement of infrastructure.

Since September, interest rates on loans by commercial banks have been sky-high, effectively destroying the business sector's ability to withstand and overcome the debilitating impact of the depreciation. The high rates on export credits are particularly deplorable. They prevent the one single sector that can benefit the most from the currency depreciation from pulling the economy back up to normal levels. A combination of moral suasion and good old policy inducements by the *Bangko Sentral* has not been successful so far. Prudent though it may be, this regime of exorbitant interest rates by the commercial banks is inimical to our national development objective.

#### THROUGH A GLASS DARKLY

WHEN will the currency crisis end? Right now speculators are operating on the knowledge that when a currency depreciates, the other currencies will also have to depreciate if they are to remain competitive. Moreover, if the depreciation of the first currency is, say, 50 percent, the rest will also

have to depreciate by more or less the same degree. The differences in degree of depreciation will be determined by the realism of the exchange rates prior to the depreciation. The more realistic the exchange rate of a currency prior to the depreciation, the lower the degree of the depreciation required of that currency, and vice versa. At this writing, the Philippine peso's depreciation is the least in the region, implying that its exchange rate prior to the attack relative to its neighbors' was the most realistic.

But the story is not over yet. As they reap more gains in Indonesia, Thailand or South Korea, speculators will continue to harass Malaysia, Singapore, and the Philippines. At some point, already long reached in the author's view, the depreciation rates will no longer bear any relation to long-term market forces. A speculative situation is short-lived when the victim of attack is just one country, as in the case of the United Kingdom in 1993. But not when a vast region is involved, in which case the forces of competitive depreciation join up with the speculative forces, prolonging the crisis.

At this point there seems to be only one way to check the regional contagion: satisfy the demand for US dollars of all speculators and all who have joined them in Indonesia and South Korea, using up all the resources provided by the IMF and more if necessary. If this is not done, speculators will be emboldened to move on to Australia and New Zealand. Latin America, with all its vulnerable countries, may be next.

Will the contagion ever reach the United States? It can—but under a different science-fiction type scenario. Because its currency is the currency of refuge, the US dollar cannot be dumped unless the speculator demands gold or physical assets like the White House—the US dollar being only a piece of paper. Only three countries in the world today—Japan, Germany, and France—have the power to reverse the international flow of events. If these three countries act together and dump the one trillion US dollars in their possession and the US is unable to meet their demand for compensation, the US will be declared internationally insolvent. This should stop speculation on the yen, or on the deutschemark or on the frenchfranc.

That scenario apart, however, the effects of this massive regional depreciation crisis on the US can be predicted. US exports to the affected Asian countries will shrink, as these products will now be more expensive for Asian buyers. This can result in production cutbacks and increases in

unemployment in the US. On the other hand, US imports from the affected Asian countries will increase, as these products will now be cheaper than before. The result will be deficits in the US current account in the short- and medium-term and, possibly, a recession in the long-term.

This scenario has nothing to do with falling dominoes. It comes straight out of globalization—the increasing interdependence of countries, large and small, developed and developing, with conflicting interests, the accelerating breakdown of man-made barriers to communication, travel, and investment, and the intensifying competition in various fields of human endeavor among nations.

We now have enough evidence to believe that to speculators, only one macro fundamental matters: the size of the reserves in relation to the size of the perceived international liabilities. Related to this, the state of the financial system through which speculators operate also matters. A third point is not a macro fundamental: the expressed resolve of the monetary authorities to defend the currency at any cost. We now know a fourth point: that when the country's holders of wealth and its business community lose confidence in the credibility of their government in a speculative situation, they join the speculators.

These are important lessons but they do not go into the heart of the matter: the country's degree of exposure to foreign short-term capital, mostly portfolio investment, and how this degree affects the likelihood of being subjected to a speculative attack. Since developing countries need foreign short-term capital for their development, in particular for the development of their capital markets, their imposition of controls on foreign short-term capital can only be of a degree that does not scare it. The problem immediately translates itself into one of striking a compromise or effecting a trade-off.

*Future Tasks.* The tasks that lie ahead are of two types: (a) the immediate and short-term tasks that flow out of the lessons learned to prevent speculation and (b) the medium and long-term tasks that strengthen the ability to resist once a speculative attack is launched.

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To speculators, only one macro fundamental matters: the size of the reserves.

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The first order of the day will be to lessen the destabilizing capability of foreign short-term capital. While continuing to attract this capital into the country, greater transparency should be required of the operations of the stock market and other mechanisms of stock ownership transfer at the corporate level. The stock market and individual corporations may, for instance, be required to reveal the identities of buyers and sellers of shares of stocks, say, beyond a certain amount, if that revelation is necessary to chart large movements of shares at the stock exchanges.

The integrity of the financial system should be strengthened mainly by the strict enforcement of rules preventing overexposure to external debt. Bangko Sentral supervision may need to be made more rigorous to ensure the banks' compliance with rules of prudent borrowing and lending. As with investors in the stock markets, the identities of movers of large amounts of foreign exchange through the financial system or out of it should be known as part of the transparency program.

The international reserves should be built up, measured not in terms of months of imports but in terms of capacity to service foreign obligations, where foreign obligations are very broadly defined to include not just all public and private loans but all profits to be repatriated, capital to be amortized, and other autonomous capital movements.

In the medium- and long-term, we simply have to rely on sound macro fundamentals to ensure success in warding off and defending against speculators. To this end, we should (a) actively promote exports, to exploit the opportunities brought about by the peso depreciation, although these will have to be limited given the more severe depreciation rates of our neighbors; (b) postpone big ticket imports like giant aircraft though we need these urgently to improve our air transport system; (c) intensify efforts to raise the domestic savings rate by providing incentives to the public to deposit their money in banks, giving the public wider access to the stock market, trimming down the current operating component of the national budget—to reduce reliance on foreign investment, the source of our national vulnerability to speculators; (d) broaden the tax base, enhance the tax collection effort and improve the allocation of expenditures; and (e) keep inflationary pressures down.

With respect to the macro fundamental that serves as the battleground of the speculators, we should adopt a flexible exchange rate policy, a policy

that permits the rate to be determined by market forces. To do this we should allow for a wider volatility band, intervening only to smooth out fluctuations beyond the band as was done in the past.

Finally, we should set up safety nets for those enterprises and people that are adversely affected by the depreciation. These are industries whose imported inputs have become costly because of the depreciation, workers who have lost their jobs, people who have suffered cuts in their incomes, and the families dependent on them. For enterprises to regain their competitiveness, safety nets should consist of technical assistance, provision of well-trained manpower and exposure to new techniques of production. For people, safety nets should include assistance in acquiring new skills or upgrading old ones, learning entrepreneurial abilities, transitional financial support until they can develop more permanent means of livelihood.

Obviously no one single country can hope to deal successfully with speculators operating on a regional basis. Countries will need to cooperate with one another in order to overcome them. That is why such initiatives as those launched by APEC (Asia Pacific Economic Cooperation) in Vancouver in October 1997 and endorsed by the Asean in Kuala Lumpur in December 1997 toward the promotion of financial stability in the Asian region need to be supported. These include enhanced regional surveillance; intensified economic and technical cooperation to improve domestic financial systems and regulatory capacities; adoption of new IMF mechanisms on appropriate terms in support of strong adjustment programs; and a cooperative financing arrangement to supplement, when necessary, IMF resources (APEC 1997).

Finally, as proposed by Prime Minister Mahathir Mohamad of Malaysia, there is a need to work towards including foreign short-term capital within the scope of the World Trade Organization (WTO). In this way, foreign short-term capital, along with commodities, services and people, can contribute to the development of less-developed countries even as it promotes the attainment of its own goals.

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We should adopt a flexible exchange rate policy.

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NOTES

The author wishes to acknowledge Diwa Guinigundo, Director of Research, Bangko Sentral ng Pilipinas, for providing much useful data; Ernesto M Pernia, Cayetano W Paderanga, Ponciano S Intal Jr, and Josef T Yap for insightful comments and suggestions; and Federico M Macaranas, along with Josef Yap, for sharing the viewpoint developed in this paper. It goes without saying, however, that the author alone is responsible for the views expressed in this paper.

1. The discussion here refers to the external and internal balances of national income in nominal terms, viz.:  $e \cdot pf (X - M) + eR = (S - I + T - G) \cdot pd$ , where X - quantity of exports, M- quantity of imports, R - external obligations, S - domestic saving, I - investment, T - tax revenue, G - government expenditure, pd - domestic price level, pf foreign price level, and  $e = pd/pf =$  exchange rate in domestic currency.

2. See Republic Act No.7653, Chapter III, Articles I - II.

3. It is one of those strange twists of fate in day-to-day living that one of the country's better-performing economic institutions, the Bangko Sentral, has to be the subject of an attack for performing the way it did. See Exchange Rate Policy: Recent Failures and Future Tasks by ES De Dios, BF Diokno, RV Fabella, FM Medalla and SC Monsod in *Public Policy*, Vol I, No 1. This article criticizes the Bangko Sentral for adopting a stable exchange rate policy through what it claims as the imposition of high interest rates, instead of devaluing the currency to help solve the country's declining international competitiveness. It says that the peso-dollar exchange rate strengthened as a result of this policy and made the country a target of externally induced destabilizing forces. It suggests setting a benchmark level for the peso and from there 'engineering' regular depreciations, to ensure the currency's continuing competitiveness.

The article has many problems.

- (a) Contrary to its main argument that the Bangko Sentral has propped up the peso through high interest rates, interest rates in the Philippines have been declining since 1985 and were down to 14.8 percent just prior to the speculative attack. Moreover, when compared to those in neighboring Asian countries, they were at a moderate level, with average rates in the mid-1990s being more or less at the same level as those of Thailand's and approximately one-half of those in Indonesia. Only after the July 1997 crisis did interest rates go up, but this was done precisely to counter the speculators. Now if interest rates were not high, what happens to the argument?
- (b) The article says that because of high interest rates on the peso, dollar holders were attracted to the peso, thus strengthening the peso. This is a Philippine rendering of a universal chorus except that in the Philippines it is false, as shown in (a). What is true is that dollars were coming

in increasing amounts beginning in 1993 to take advantage of the country's improved investment climate. This is the result of political policy, not monetary policy.

- (c) The Bangko Sentral increased its purchases of dollars precisely in order to prevent the strengthening of the peso and was a net foreign exchange purchaser since 1994. That explains why the reserves exceeded planned levels and in 1996 went up to a height never before known in Philippine monetary history. The article says the Bangko Sentral did not do enough.
- (d) The article holds Indonesia up as a role model for the Philippines to follow—a model of a country periodically ‘engineering’ a depreciation of the currency to ensure its competitiveness—but now that Indonesia is in a bad state, it accuses it of suffering from hubris. The same goes for its reaction to Thailand and other affected Asian countries. It previously pointed to these countries as having successfully overcome the same problems that remained unsolved in the Philippines, but the article now heaps ridicule on them for trying to get the most out of their success.
- (e) Using the measure of the real effective exchange rate, the article claims that relative to some of its Asian neighbors in the first quarter of 1997 the Philippine peso was overvalued by 17 percent. This calculation has been falsified by current events. Using the rates currently appearing on the market with December 1997 (or any other month after July 1997) as base, it can be shown that the Philippine peso was undervalued relative to its neighbors in the first quarter of 1997, the exact opposite of what is claimed in the article.
- (f) The article says that the Bangko Sentral used US\$4 billion in its attempt to defend the peso. That is false. The correct figure is probably US\$2.0 billion, as shown here.
- (g) The article insists that countries are individually responsible for the depreciation rates that are being forced on their currencies. Yet it acknowledges that depreciation must be relative, to take into account what is happening to neighbors. The second part of the argument renders the first part irrelevant.
- (h) To the reasoning that the peso exchange rate was more or less market-determined because it was reflecting market forces, the article replies that a market-determined price is not necessarily a competitive one. This article is in limbo. All sellers, be they exporters or producers for the local market, are competitive at that rate once they sell at that rate. The article also refers to new textbooks providing an interpretation of market-determined price that is different from what is generally accepted in economics—that it is a price deemed mutually acceptable to both buyers and sellers, with sellers recovering their full cost of production at that price. Show us these new textbooks, please.

- (i) The article is full of admiration for the forces of the market—a forgivable inclination—and yet, when it comes to the exchange rate, it proposes reckless intervention.
- (j) Describing ‘future tasks’, it proposes that the Bangko Sentral must fix a benchmark rate at a starting point, then periodically ‘engineer’ a depreciation after that to ensure the rate’s competitiveness. However, it does not tell us who will determine the benchmark rate and the rates of depreciation at succeeding points in time. Is this person or entity superior to the market? The Indonesians are our friends but have we become so bankrupt in ideas that we must copy their failed procedure?
- (k) The article quotes Friedman on speculation but does not inform us that Friedman was arguing for flexible exchange rates, rates that are changing in reflection of changing market forces. Friedman was precisely against the fixed benchmark and periodic devaluation procedure proposed in the article.
- (l) Finally, the article exhibits a lack of interest in facts. Instead of basing its arguments on data and other quantitative information which it could have accessed had its authors bothered to do so, it prefers to propagate unverified claims and unsubstantiated assertions, in the process misleading the public not to mention Congressional committees.

4. Upon performing Granger causality tests, the Research Department of the Bangko Sentral ng Pilipinas found that, under one-day and two-day lag scenarios, past values of the Thai baht and the Philippine peso contribute in explaining each other’s current values. However, for three-day to five-day lag scenarios, past values of the baht help explain the current value of the peso while lagged values of the peso do not help explain the current value of the baht. Documents are with the Research Department, Bangko Sentral.

5. See *Manila Bulletin*, 15 December 1997, page B-1, citing results of a survey conducted by AYE Consultants.

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# Absorbing the Shock of Depreciation

*Vicente B Valdepeñas Jr*

**T**HE Bangko Sentral ng Pilipinas is the independent central monetary authority envisaged in the 1987 Philippine Constitution. Its job is to provide policy direction on money, banking and credit as well as supervise banks and similar financial institutions operating throughout the Philippines. The Bangko Sentral was legislated into existence on 10 June 1993 by Republic Act No. 7653, nearly a year after the Ramos Administration began. As the new central bank, the Bangko Sentral started its operations on 2 July 1993. Its primary objective is to maintain price stability that is conducive to the balanced and sustainable growth of the Philippine economy. The Bangko Sentral is also responsible for preserving the international value of the peso and maintaining its convertibility into other freely convertible currencies for both current account and capital account transactions in the balance of payments of the Philippines with the rest of the world.

The general policy of the Philippines on preserving the international value of the peso since 1970 is to float the exchange rate. This policy of floating the exchange rate is anchored on the idea that frequent and gradual adjustments in the exchange rate are less costly, less destabilizing and less disruptive to the national economy than a fixed exchange rate system. In addition, a floating exchange rate provides opportunities for adjusting the external competitiveness of Philippine production as its efficiency increases. This is because the floating exchange rate accommodates

changes in the market supply and demand conditions. If more US dollars, for example, are demanded in the Philippines than are supplied, the peso price of the dollar tends to increase, implying that the Philippine peso depreciates relative to the dollar. On the other hand, if more dollars are supplied than are demanded, the peso price of dollars tends to decrease which means that the Philippine peso appreciates in relation to the US dollar.

This floating exchange rate was reinforced on 24 August 1992, some two months into the Ramos Administration,

when Circular No. 1353 was issued by the Central Bank liberalizing foreign exchange regulations throughout the Philippines. Under this circular, foreign exchange may be freely sold and purchased outside the banking system. It also allows foreign exchange receipts, acquisitions or earnings, to be deposited in foreign currency accounts, whether in the Philippines or abroad, or brought out of the Philippines. In the case of foreign loans and foreign investments which will eventually require servicing with foreign exchange purchased from the Philippine banking system, the proceeds of these foreign loans and foreign investments shall continue to be sold for pesos to the authorized agent banks of the Central Bank. The same requirement applies to payments for schemes or arrangements which take on the character of a loan.

This liberalization of foreign exchange transactions within the jurisdiction of the Philippines has encouraged significant capital inflows into the country, both foreign direct investments (FDI) and portfolio investment. By end-1993, for example, the Philippine Stock Exchange was rated by the World Bank's International Finance Corporation as yielding the highest returns in the Asia Pacific region, and the third highest returns throughout the world. The liberalization process has had the effect of linking the Philippine capital market with all the capital markets of the global economy. The Philippines has embarked on the globalization that is swiftly turning the entire world into a global village, with access to interna-

tional capital on the best terms anywhere in the globe at anytime over the 24 time zones operating across the world.

However, the same liberalization and globalization also imply that any changes in the financial and capital markets of the world would be communicated to the Philippines through fiber-optic and satellite communications in a matter of seconds.

This is exactly what happened on 2 July 1997 when the Bank of Thailand devalued its domestic currency, which for many years had been pegged to the US dollar at around 25 baht. In the following week, as the rest of the Southeast Asian financial markets reeled from the Thai baht devaluation, exchange rates in Indonesia, Malaysia, the Philippines and Singapore depreciated in rapid succession. By 31 October 1997, the Indonesian rupiah had depreciated by 47.8%, the Malaysian ringgit by 36.4%, the Philippine peso by 32.5% and the Singapore dollar by 10.6%. The Thai baht by this time had depreciated by 62.4%. The growing trade interdependence among the Asean countries, in which intra-Asean trade by end-1996 amounted to US\$155.2 billion or 10 times its comparable value in 1987 of US\$14.7 billion, tended to facilitate the communication throughout the Southeast Asian region of the contagion of depreciating Asean currencies.<sup>1</sup> The increasing crossborder migration of capital within the region did not help immunize any one Asean country from the virus of competitive depreciation as portfolio investment funds from overseas swiftly liquidated

their 1 or 2 percent country placements and fled for cover elsewhere in the global capital market.

In their initial efforts to keep their depreciating currencies within a moderate range of adjustments, the Asean central banks generally intervened in their respective foreign exchange markets as well as in their money markets, driving up domestic interest rates in the process. However, after using up a fair amount of their respective international reserves, they realized that such a policy of intervention turned out to be no match to the persistence and virulence of the speculation which had come to drive the volatilities in their respective foreign exchange markets. In the more recent weeks, as the Asean communities accommodated the reality of depreciating currencies, public policy has increasingly focused on bringing down interest rates so that incremental domestic investment continues while incremental exportation is being invigorated. Together, this twin growth in domestic investment and exports would keep overall economic growth on track.

In the case of the Philippines, central banking policy in the face of this currency turmoil is aimed at ensuring the stability and soundness of the country's financial system, the stabilization of the exchange rate around a market-determined level, and the moderation of interest rates conducive to new business development. To strengthen the financial system in the country, the Bangko Sentral ng Pilipinas adopted several measures in June 1997, well before the turbulence hit the

currencies of the Asean region. On 5 June 1997, for example, the Bangko Sentral limited banks' exposure to real estate activity to 20% of their overall loan portfolio. This was meant to prevent riotous asset-price inflation or a financial bubble from destabilizing the banking system and eventually crippling the national economy towards a recession. On 6 June 1997, the Bangko Sentral also required the banks to keep in liquid assets 30% of the 100% cover for all foreign exchange liabilities of their respective foreign currency deposit units or FCDUs. On the same day, it issued guidelines to the banks for raising the quality of their bank management in their recruitment of officers and board directors. On 1 October 1997, it upgraded the ground rules for the determination of past due accounts as it reduced by 50% the number of installments in arrears. In addition to requiring on 1 October 1997 a general loan-loss provision on top of making provisions for probable losses linked to individually-identified bad accounts, the Bangko Sentral also raised the loan-loss provision by another 2% of banks' gross loan portfolio. It also endorsed to the Congress an amendment of the 1948 General Banking Act which would enable the Monetary Board to adopt internationally accepted standards for risk-based capital requirements.

As these measures intended to ensure the soundness and predictability of the banking system were taken, the Bangko Sentral also adopted further measures to rationalize foreign exchange trading throughout the Philippines. On

22 July 1997, for example, it required the banks to have prior clearance of all their non-deliverable forward contracts before selling them to non-residents, including offshore banking units. Such instruments had been heavily used by speculators to drive up demand for US dollars thus artificially leading to further depreciation of the peso. In its efforts to keep banks from using their dollar resources for speculation, the Bangko Sentral on 1 July 1997 initially cut back by 50% their allowable overbought foreign exchange position to 10%. This was later brought down to 5% of their unimpaired capital or US\$10 million, whichever is lower. In the meantime, the banks' oversold position was raised from 10% to 20% enabling them to sell more of their dollar holdings and increase the supply of foreign exchange in the market. On the same day, the Bangko Sentral also reduced from US\$100,000 down to US\$25,000 the maximum amount that banks can sell on over-the-counter (OTC) basis. Subsequently, on 17 September 1997 and 2 October 1997, as a measure to prevent banks from channeling dollar transactions through their subsidiaries and affiliates, the Bangko Sentral required banks to consolidate their accounts with such subsidiaries and affiliates in the computation of their net foreign exchange positions.

In the course of its management of overall liquidity in the money market, the Bangko Sentral in mid-July 1997 adjusted upwards its overnight borrowing rate all the way to 32% from its end-June level of 15%, as speculation on the

peso/dollar rate became rampant. As a parallel action, it raised its overnight lending rate to 34% from its end-June level of 17%. By 20 August 1997, the Bangko Sentral found it necessary to temporarily suspend its overnight lending facility in order to keep overall liquidity at bay. However, as conditions in the money market improved, it eventually reduced its overnight lending rate. In addition to the statutory reserve requirement of 13% and in order to tame the inflationary tendencies implied by a depreciation of the peso, the Bangko Sentral on 31 July, 14 and 27 August 1997 and raised the level of the banks' liquidity reserves by four times from 2% to 8% and required them to keep these in the form of short-term market-yielding government securities bought directly from the Bangko Sentral. Since then, however, as the money market normalized, the liquidity reserves have been reduced by one percentage point on 15 October 1997, while another one percentage point reduction was effected on 15 November 1997.

But in the 10 November 1997 survey of 110 financial officers at the CFO Forum in Manila, conducted by the New York-based public relations outfit Burston-Marsteller, as many as 38% of the respondents identified foreign exchange risk to be among the risks they expected to affect their businesses over the next 12 months, while 32% of them also recognized interest rate risk as part of these risks (AWSJ 1997). Political risk was likewise listed by 10% of these respondents,

credit risk by 9%, liquidity risk by 7% and inflation risk by 4% of the same respondents. Moreover, the survey also disclosed that as many as 55% of these chief financial officers failed to hedge their foreign exchange risk.

To remedy this situation in the increasingly exposed and vulnerable private corporate sector of the Philippine economy, the Bangko Sentral ng Pilipinas installed on 22 December 1997 the non-deliverable forward (NDF) foreign exchange facility or the currency risk protection program (CRPP). As it operates, the non-deliverable forward market provides participants clues on how the currency is expected to trade in the forthcoming months. The obligations eligible for coverage under the NDF or CRPP facility must have been registered, unhedged and booked as of 19 December 1997 which still remain outstanding at the time an application is put forward for the NDF/CRPP facility. In this facility, all settlements are made in Philippine pesos because what bothers the unhedged market participant is the variability or volatility in the peso price of the foreign currency to which he or she is exposed.

Over and above these measures to strengthen the Philippine financial system, rationalize foreign exchange trading and manage overall liquidity in the system, it is also important to recognize that adjustments to a currency depreciation are either eased or aggravated by the economic fundamentals prevailing in a nation. In this regard, the Philippine economy managed to grow by 5.8% in GNP terms and by 5.1% in

GNP terms in 1997 (Philippine Star 1998). By either measure, this pace of economic growth is 2.5 times more than the growth of the national population. It provides the cushion for absorbing the shocks of adjustments in response to the peso depreciation. Moreover, merchandise exports rose by 23.2% in the first 11 months of 1997, outpacing merchandise imports which increased by 10.6% (NSO 1998). With exports growing 2.2 times faster than imports, the country's current account deficit has leveled at 4.5% of its GNP, the same rate achieved for the whole year of 1996. Overall prices went up 5.1% on average (NSO 1998) in 1997 even as domestic liquidity (M3) was rising by 23.6% by end-September (Bangko Sentral 1998). Interest rates as indicated by the three-month Treasury Bill averaged 19.286% at the end of the auction last 26 January 1998. They will probably move moderately downwards as the national government turns up a surplus in its budget during the year. The basic balance in the Philippine balance of payments as of end-June 1997 remained positive as it had been in the last six years, which suggests that the international financial community is willing and ready to finance the current account deficit of the country with long-term money. All told, then, the Philippine economy seems robust enough to absorb the shocks of the adjustments arising out of the peso depreciation.

While the peso fell sharply within the week that it was depreciated, its rate of depreciation since 11 July 1997 on the basis of its five-day moving average has proceeded more gradually through 5

January 1998. It moved erratically since then, somewhat in tandem with the volatilities experienced by the Indonesian rupiah over the same period. As a matter of fact, although the peso depreciated half of the time, it also appreciated the other half of the time. Since 22 September 1997 the momentum for peso depreciation has been dissipating, with the 25-day momentum notably moving downwards and pulling in the same direction as the 40-day momentum

of the peso-dollar rate. This is also corroborated in the generally narrowing volatility band around which the peso has depreciated or appreciated, as is suggested by the peso/dollar depreciation in actual pesos and centavos. When a logarithmic trend is fitted to the downward and upward swings of the peso/dollar rate since 15 July through 29 January 1998, it can be seen that there is a clear trend for the peso/dollar rate to stabilize towards an equilibrium.<sup>2</sup>

#### NOTES

This is an updated version of my Statement at the UP Mindanao Regional Conference on Planning, 15 November 1997, Davao City. The update includes measures taken by the Bangko Sentral ng Pilipinas since mid-November 1997 through 30 January 1998, as well as economic and financial developments in the Philippines since then.

1. A Granger Causality test on Thai baht/US\$ and Philippine peso/US\$ movements since 2 July 1997 through 4 September 1997 yielded an F-statistic of 5.3626 with probability of 0.00864, signifying the prevalence of contagion.

2. In the course of using the financial modelling technique known as Generalized AutoRegressive Conditional Heteroskedasticity (GARCH) on the peso/dollar rate volatility as observed between 2 July 1997 and 29 January 1998, an ARCH coefficient of 0.8612 was obtained signifying conditional heteroskedasticity implying that today's large or small volatilities echo yesterday's large or small volatilities as in a random walk; while a GARCH coefficient of 0.1280 also emerged, which is less than unity implying that the volatilities will not persist. That is, they will dissipate as the peso/dollar rate stabilizes to an equilibrium value.

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