# **The East Asian Currency Crisis**

## A Survey of the Debate on its Causes and Possible Solutions

In 1997, financial market tension in East Asia gave rise to a financial crisis which spread across the region initially, before engulfing Russia and threating various Latin American Economies. This survey looks into the debate surrounding the onset of the initial Asian Financial Crisis in early 1998. One should remember, that in spite of the present scale of the global financial turmoil, the central question remains: why did this global crisis start in a region which many thought to provide a prime example of sound economic management and success.

## 1. Introduction

After years of economic stability, the currencies of various South East Asian countries came under pressure in 1997, as the dollar appreciated against the Yen. A number of South East Asian countries had maintained a currency peg against the US\$ and experienced a deteriorating current account position as well as an increasing foreign debt burden in the process (Dornbusch 1998, Sachs 1997b). To almost all observers, these developments came as a surprise.

Throughout the last decade, the newly industrialized countries of East Asia and South East Asia had been seen as extraordinarily successful economies. Analyses of the underlying causes of this spectacular success tended to focus on the precise nature of government interventions and the development strategy pursued in these countries (cf. Rodrik 1995, Stiglitz 1996). What Criticism there was largely targeted the importance of increased inputs, doubting the beneficial effects of complementary government intervention (e.g. Krugman 1994). Yet, criticism of the latter kind would predict a gradual slowdown in productivity growth, as decreasing returns to further capital accumulation set in; it would not lead one to anticipate a sudden, discrete disruption of the type witnessed in South East Asia in 1997.

The 1997 crisis was largely unexpected. Warnings of fragile financial systems in the region seem to have been few and appeared at a time when the crisis had almost been under way already (cf. Claessens and Glaessner 1997). Analyses carried out at earlier dates did not appear to anticipate anything on the scale of the events that were finally

observed in 1997. This view is also endorsed by Radelet and Sachs (1998) who go to great length to show that the crisis was unanticipated.

This survey looks into various explanations advanced for the international and national causes of the crisis in section 2 and then looks into different approaches to crisis management and prevention in section 3. Section 4 concludes.

#### 2. Causes of the crisis

#### 2.1 The Onset of the Crisis

One central element in the causation of the South East Asian currency crisis has been seen in the dynamics of international investment flows. The role of international lenders and investors in the onset of the crisis is unclear. Wolf (1998a) argues that foreign lenders, commercial banks to be precise, were the main agents in producing the rapid capital outflow and the pronounced overreaction with respect to the underlying fundamental weaknesses. Sachs (1997b) even compares the crisis to the bank runs in Europe and the USA during the 1930s.

Even less clear, is the importance of narrowly defined speculative activity as a determinant of the reversal of capital flows. The IMF (IMF 1997) maintains that foreign speculators and hedge funds had some impact in producing the crisis in so far as they were important in the speculative attack on the Thai baht. Their involvement in other ASEAN countries, however, appears to have been more limited (IMF 1997, IMF 1998). Data on international capital flows and international bank transactions are readily available but there is still a need for further research into the relationship between these short run financial flows and underlying economic fundamentals.

An outflow of funds from the region was likely to be destabilizing, considering the fragile local banking systems and the asset price distortions produced by the previous strong capital inflow. One key question in evaluating the South East Asian currency crisis would thus be how the observed fluctuations in capital and credit flows relate to the underlying structural problems.

#### 2.2 Structural weaknesses in Thailand and other South East Asian Countries

There is little agreement with respect to the exact nature of these structural problems. Certain standard symptoms of external vulnerability –a large current account deficit and predominantly short term external debt- were clearly present (Dornbusch 1998,

IMF 1997, Corsetti et.al. 1998). On the other hand, external creditors remained confident, since other habitual indicators of impending crisis did not appear to be a problem: capital inflows financed investment rather than overconsumption, macroeconomic indicators (such as low inflation and fiscal surpluses) also left little to be desired, as did substantial foreign currency reserves.

In this context, Rodrik (1998) observes that every currency crisis tends to be followed by a new currency crisis model thus demonstrating investors' and researchers' lack of understanding of the problem. Radelet and Sachs (1998) point out that one thing that currency crises tend to have in common is vulnerability towards external shocks in the affected economies. An exhaustive list of possible weaknesses does not appear to be available, although Stiglitz (1998b) identifies one important area of weakness: a combination of deregulated capital accounts and domestic underregulation of the financial sector can be a cause of vulnerability to external shocks. Such a constellation essentially anchors the national financial system to international capital markets and relies to an unreasonable degree on the perfection of these international financial markets. He concludes that insufficient regulation to allow for at least some impact of human fallibility does in itself increase the probability of currency crises (Stiglitz 1998b).

One pervasive problem in a number of South East Asian countries was insufficient prudential banking regulation and supervision, often in the wake of inadequately administered domestic financial liberalization (IMF 1997, Claessens and Glaessner 1997). Claessens and Glaessner (1997) in particular point out that accounting and supervision standards remained inadequate after liberalization; Thai banks, for example, were permitted to wait for up to two years before reporting non performing loans. A problem linked to external liberalization was market segmentation: to the extent that low risk borrowers found it attractive to borrow abroad -either directly or through off-shore financial centers- the domestic financial market would become dominated by relatively high risk credit (Claessens and Glaessner 1997). It has also been pointed out in the World Economic Outlook (IMF 1997) that high profit margins of domestic financial intermediaries in South East Asian Economies often made it expensive to borrow in domestic capital markets and thus motivated high profile firms to take out loans in international capital markets, even if there were no artificial incentives to do so. This process of credit market segmentation not only undermined financial reform (Claessens and Glaessner 1997) but also left domestic financial institutions, which appeared to have proportionately high equity endowments prior to the reversal of asset price inflation, in increasingly vulnerable positions.

Krugman (1998b) takes a somewhat different view in that he emphasizes moral hazard as the central motivating factor in the onset of the crisis, although he agrees that the South East Asian currency crisis was essentially a symptom of a banking crisis or, more generally, of an internal financial crisis. Krugman models the crisis by assuming that domestic financial intermediaries enjoy implicit government guarantees in case of default and therefore undertake excessively risky investment projects based primarily on their highest possible return rather than expected values. This investment behavior would then lead to asset overvaluation, i.e. the resulting market prices in equity markets would not be sustainable in the absence of moral hazard if investors had to bear the full risk of their investment decisions<sup>1</sup>.

In such a setting a crisis would ensue as soon as a.) investment risks materialize and b.) economic agents cease to expect government bail-outs in future cases. If the conditions for moral hazard are removed while equity prices are still overvalued, rapid asset price deflation is bound to follow. This will reduce financial intermediaries' debt-equity ratios even in a constrained domestic scenario but more so if the deflationary contraction is accompanied by a currency outflow and a devaluation in the presence of a significant foreign denominated debt exposure.

This description appears to fit the South East Asian events up to a point, in particular in so far as there was indeed an asset price bubble that burst *prior* to the onset of adverse currency movements (cf. Corsetti et. al. 1998). Radelet and Sachs (1998), however, doubt the importance of moral hazard problems arising from implicit government guarantees. One should bear in mind that the affected South East Asian economies were relatively open to trade before they embarked on financial liberalization. If the domestic currency is not allowed to appreciate as capital flows in, this is likely to lead to a relative asset price increase in non-tradable sectors (cf. Radelet and Sachs 1998, Wolf 1998a). This kind of development would also be in close correspondence to the events observed in the region: while a peg against the US\$ was maintained, asset prices in sectors such as real estate in particular rose dramatically<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Corsetti et.al. provide data on credit expansion and also comment in detail on the role of moral hazard.

<sup>&</sup>lt;sup>2</sup> Krugman (1998a) himself is aware of the fact that there are alternative explanations. He quotes a bank run model by Diamond and Dybrig (1983) which can explain how asset undervaluation can occur in a multiple equilibrium setting.

#### 2.3 The role of corporate debt

It has been pointed out by Radelet and Sachs (1998) that while the Thai crisis was mainly triggered by bank failure the Korean crisis had its roots mainly in unsustainable corporate debt. A number of Korean firms had excessive short term debts and it was a series of bankruptcies that triggered the withdrawal of funds from Korea in 1997 (Corsetti et. al. 1998).

Wade and Veneroso (1998) show that companies with higher debt equity ratios and significant foreign denominated debt exposure are more vulnerable to either external risks such as devaluation or adverse domestic developments like a slowdown in economic growth or a rise in interest rates. The authors argue, however, that a high level of debt exposure had originally been sustainable in the East Asian case. It is argued that in South Korea, for example, high corporate debt exposure was a normal feature and even a crucial element in the development strategy adopted (Wade and Veneroso op. cit.). High debt equity ratios are not only inevitable given South East Asia's high savings rates and savers' preference for bank deposits, but were also made sustainable through co-ordinating government intervention in capital markets. According to Wade and Veneroso (1998), these Asian financial systems were destabilized by liberalization. Wade and Veneroso also reject criticism of crony capitalism yet fail to give due consideration to questions of allocative efficiency, moral hazard and incentive distortions in the affected Asian economies.

#### 2.4 The role of China's exchange rate devaluation

Some disagreement exists with respect to the role of China's currency devaluation before the onset of the crisis. Sachs (1997b) and Wade and Veneroso (1998) argue that China's exchange rate policy and the ensuing increase in competitive pressure were decisive contributory factors to the crisis. This is disputed in the World Economic outlook (IMF 1997) and by Liu et al. (1998), who argue that the exchange rate change and its importance have been overstated: China had relatively higher inflation rates than neighboring countries in the region and therefore saw part of its real devaluation eroded. Also, it was only the official exchange rate that was devalued while an important part of currency transactions was already conducted at the swap rate. Finally, Liu, et al. argue that the exchange rate in question is commonly expressed with respect to the US\$ when the relevant rate is the one with respect to China's main trading partners' currencies.

## 2.5 Overreaction and contagion

It has been outlined above that there were a number of determined structural problems at the heart of the Asian financial crisis and yet the reaction observed in international capital markets goes well beyond what is justified by these structural weaknesses. This view is confirmed by Sachs (1997b) and Radelet and Sachs (1997) as well as Wolf (1998a). Sachs (1997b) states that investors and lenders panicked, ignoring persistently sound fundamentals. Wolf (1998a) says that the inconsistencies in economic fundamentals were far to modest to justify the panic reaction that followed and that some developments –such as a rising current account deficit and repercussions on either the exchange rate or domestic relative asset prices are inevitable and foreseeable consequences of large capital inflows.

This discrepancy in the extent of changes in economic fundamentals and consecutive investor reactions should lead one to ask how exactly investment decisions are linked to economic fundamentals. In many cases, investor behavior is unlikely to be strictly determined in function of the economic conditions of the country in question but may be directly influenced by other investors' expectations. According to this view, the problem at heart is that international investors act on the basis of expectations on expectations rather than judgements on economic fundamentals (cf. Griffith-Jones 1998a). In a frequently quoted passage Keynes (1936) compared this form of investor behavior to a beauty contest in which it has to be decided which candidate will be considered most attractive by other onlookers rather than who is the most attractive. It should then be obvious that changes in perceived ideal standards have a larger potential for volatility than individual preferences or the actual characteristics of the candidates. The analogy easily carries over to the East Asian case where a large number of countries was dependent on a continued supply of short term capital. The availability of short term finance in turn is closely linked to expectations about the future development of capital market confidence, i.e. it finally depends on investors' expectations on what other investors' expect other investors' average expectations to be.

This also implies that in a situation of possible multiple equilibria, crises can easily be contagious to countries which are not confronted by immediate fundamental problems. More specifically an economy with limited structural problems in a process of consolidation can easily be affected by a sudden change in market sentiment. If the country in question is dependent on short term external financing then an expectation

of generalized capital flight leading to liquidity constraints can easily prove self fulfilling and disrupt the domestic financial system.

It is also worth noting that high degrees of volatility such as those observed in the East Asian and other currency crises are in all likelihood propitiated by the joint presence of

- a.) a high incidence of extremely liquid, unregulated international portfolio flows, and
- b.) an absence of sufficiently reliable and well endowed lender of last resort facilities.

These issues are relevant as a background for policy considerations in response to global financial volatility. Issues of crisis management and prevention are discussed in the following section.

#### 3. Solutions to the Crisis

After the outbreak of the Asian financial crisis the IMF has provided emergency finance in a number of cases and has typically imposed short term measures such as interest rate rises and contractionary fiscal policies to stabilize the affected countries' currencies. Moreover, the Fund has usually insisted on structural reform in the financial sector covering improved prudential standards and banking supervision as well as closures of commercially unviable financial intermediaries. Another aspect of IMF reform packages has been an insistence on comprehensive capital account liberalization (cf. IMF 1997).

The following passages will survey the national and international aspects of crisis management discussing the measures taken to remedy the existing crisis as well as possible measures of crisis prevention.

#### 3.1 The National Policy Dimension of Currency Crises

#### 3.1.1 Remedial measures for the currency crisis – the domestic policy context

When the Czech Koruna came under pressure in the early stages of the Asian financial crisis it was attempted to defend the prevailing peg through a sharp increase in interest rates. Although the peg had to be abandoned subsequently, this signal for a commitment to macroeconomic stability as well as the fact that the measure was taken at an early stage helped to support confidence in the Koruna. The devaluation that

ensued was markedly more moderate than the corresponding events in South East Asia. In the case of Brazil, the Real continued its steady decline but a sharp devaluation was prevented by a temporary interest rate increase to levels of over 40% at the onset of the crisis (IMF 1997). These examples give some indication that contractionary monetary moves can have beneficial effects on an economy's external position when undertaken early enough and in a decisive manner.

The remedial measures proposed by the IMF, however, have been criticised on several grounds. One problem is that the currency crises in East Asia are not driven by fiscal deficits which is after all what the IMF was designed to deal with. Radelet and Sachs (1998) argue that emphasis on further fiscal discipline is unwarranted as government profligacy was not an issue to start with and hence can be no structural problem in the affected economies. Moreover, the automatic contraction brought about by the currency crisis would be sufficient to stabilise the current account (Radelet and Sachs 1998). They further criticise institutional reforms in the financial sector: bank closures were enforced in a rather precipitated, ad hoc manner, failing to take due care of issues such as deposit insurance and leading to further panic reactions and withdrawals of funds rather than improving investor confidence (Radelet and Sachs 1998, Sachs 1997b). Hastened recapitalization also was mainly realised by cutting back on credit provision even further, thus exacerbating the credit squeeze (Radelet and Sachs 1998). Radelet and Sachs further argue that a contraction of the domestic monetary base would limit a central bank's ability to act as lender of last resort, further undermining confidence in the banking system and increasing the economy's vulnerability.

Sachs (1997b) and Radelet and Sachs (1998) also state that interest rate rises are an inadequate policy response. The IMF has insisted that high interest rates are necessary to avoid further devaluations which in turn would exacerbate the foreign denominated debt burden. Although devaluations would have this effect it is not clear *a priori* that the repercussions of higher interest rates are less severe; after all they affect all domestic agents, not only those with a high foreign denominated debt exposure. Radelet and Sachs (1998) in particular maintain that high interest rates fail to stabilise the exchange rate during a currency crisis since investors' expectations are different in a crisis and a non crisis situation: if a currency crisis is under way, a rise in interest rates will lead to expectations of further contraction and hence to further withdrawals of funds. Even if interest rate rises are not expected to be counter productive, there can still be reasons to doubt their efficiency. It should be borne in mind that not all portfolio assets are equally interest sensitive. A significant proportion of South East Asian short term liabilities are foreign denominated bank loans and tend to have

interest rates fixed with respect to the LIBOR<sup>3</sup> rather than to domestic rates in the debtor economy (Radelet and Sachs 1998).

The central element of IMF reform packages in the case of East Asia have been structural adjustment measures and reform of the banking sector. Fischer (1998) justifies demands for a fiscal surplus with the assumption that this would free resources to cover the cost of restructuring. Similarly, he argues that bank closures are necessary to accelerate the restructuring process of the financial sector.

One should bear in mind that the adequacy of policy prescriptions to deal with the current impact of the crisis depends on more than their impact on economic fundamentals. Even though the current crisis does have strong deflationary elements, the impact of remedial measures on the exchange rate will to a large extent depend on whether investors view them as positive policy signals<sup>4</sup>. If low interest rates are seen as an indicator of reluctance to tackle the crisis this may well lead to further outflows. How investors will react in response to interest rate rises or measures such as bank closures is thus largely an empirical question.

#### 3.1.2 Domestic policy measures for crisis prevention

The South East Asian crisis seems to have shown once more that the simultaneous presence of a large current account deficit and a predominantly short term foreign debt exposure imply a high degree of vulnerability —even if foreign currency debt is concentrated in the private sector and used to finance investment. One approach to a high degree of vulnerability has been to try and reduce uncertainty about debtor countries' financial conditions.

Within the context of financial sector reform the IMF has emphasised the importance of adopting international accounting and prudential standards as well as increasing transparency in general (Claessens and Glaessner 1997). Increased transparency, it seems to be assumed, gives investors more certainty about risk and thus should make panic reactions less justified and less likely. Wade and Veneroso (1998) question this

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<sup>&</sup>lt;sup>3</sup> London Inter Bank Offered Rate

<sup>&</sup>lt;sup>4</sup>Akyüz' (1998) contention that interest rate rises so far have failed to stabilize exchange rates should be seen against this background. The argument immediately raises the question of the likely counterfactual situation: how far would currencies have depreciated in the absence of interest rate rises? How would investors interpret such a move?

notion suggesting that the fundamental fact of high debt exposure in South East Asia was known to investors long before the onset of the crisis but did not seem to cause any major disquiet so long as growth remained high and no risk materialised. The main problem, it would thus appear, was one of selective perception rather than imperfect information.

Few commentators go as far as this in their evaluation of greater transparency but degrees of enthusiasm in its advocacy vary substantially. Stiglitz (1998) recognises the need for greater transparency as a necessary, though not sufficient, condition for financial stability. This opinion is shared by Akyüz (1998) who points out that the investment process in South East Asia prior to the crisis left national governments with little scope for intervention: the inflow of funds from abroad was bound to lead to a substantial domestic credit expansion which would eventually spill over into high risk investment and lead to asset price inflation and a current account deficit. If, in such a situation, the government raises interest rates to prevent overheating, this will lead to a further inflow of funds from abroad. The asset price bubble is thus likely to continue until a reversal is triggered by a significant incidence in non-performing loans.

Domestic prudential banking regulation and adequate accounting standards alone will not be sufficient to avoid the problem outlined above (Akyüz 1998, Stiglitz 1998b). It may be argued that abandoning the exchange rate peg to the US\$ would have been sufficient to provide the needed room for manoeuvre for domestic monetary policy measures, yet it is far from evident that this would have prevented further speculative inflows if the ensuing appreciation of the currency would have been expected to continue for some time.

Dornbusch (1998) argues that attempts to defend an existing peg against speculative attacks are bound to be futile. South East Asian countries' endeavors to defend the peg to the US\$ against speculative pressure merely led to foreign currency reserves being wasted and it would therefore have been preferable to let the domestic currency float from the onset (Dornbusch op. cit.).

There is plenty of evidence that foreign direct investment flows have remained relatively stable in markets that have seen rather erratic developments of portfolio flows (Wolf 1998a, Dornbusch 1998, Radelet and Sachs 1998). (The evolution of capital flows to Asian emerging markets is detailed in table 1). Wolf (1998a) states that portfolio flows are simply not stable enough to provide reliable resources for

investment. The obvious solution then, seems to be based on some kind of control on external capital flows (Akyüz 1998, Wolf 1998a). Stiglitz (1998a)<sup>5</sup> advocates measures to discourage short term, speculative portfolio transactions. This includes of course the initial removal of artificial measures designed to encourage the inflow of short term debt and portfolio capital at a national level. Stiglitz goes further, however, when he advocates imposing compulsory interest free medium term deposits of the kind in operation in Chile which in this case have 'significantly lengthened the maturity composition of capital inflows' (Stiglitz 1998b).

Table 1 <sup>1</sup> : Five Asian Economies <sup>2</sup> : External Financing (billions of dollars)					
	1994	1995	1996	1997e	1998f
Current account balance	<u>-24.6</u>	<u>-41.3</u>	<u>-54.9</u>	<u>-26.0</u>	<u>17.6</u>
External financing, net	<u>47.4</u>	<u>80.9</u>	92.8	<u>15.2</u>	<u>15.2</u>
Private flows, net	40.5	77.4	93.0	-12.1	-9.4
Equity investment	12.2	15.5	19.1	-4.5	7.9
Direct equity	4.7	4.9	7.0	7.2	9.8
Portfolio equity	7.6	10.6	12.1	-11.6	-1.9
Private creditors	28.2	61.8	74.0	-7.6	-17.3
Commercial Banks	24.0	49.5	55.5	-21.3	-14.1
Non-bank private creditors	4.2	12.4	18.4	13.7	-3.2
Official flows, net	7.0	3.6	-0.2	27.2	24.6
int'l financial institutions	-0.4	-0.6	-1.0	23.0	18.5
Bilateral creditors	7.4	4.2	0.7	4.3	6.1
Resident lending/other, net <sup>3</sup>	<u>-17.5</u>	<u>-25.9</u>	<u>-19.6</u>	<u>-11.9</u>	<u>-5.7</u>
Reserves excl. gold ( - = increase)	<u>-5.4</u>	<u>-13.7</u>	<u>-18.3</u>	<u>22.7</u>	<u>-27.1</u>

e=estimate, f=IIF forecast

<sup>1</sup>Source: table taken from IIF (1998)

<sup>&</sup>lt;sup>2</sup>South Korea, Indonesia, Malaysia, Thailand and the Philippines.

<sup>&</sup>lt;sup>3</sup>Including resident net lending, monetary gold, and errors and omissions.

<sup>&</sup>lt;sup>5</sup> Other advocates of this kind of restriction are Akyüz (1998), Montes (1998), Strauss-Kahn (1998) and Wolf (1998a).

So far, there has been some scope for conflict between this line of reasoning and the IMF's traditional preference for capital account liberalisation (IMF 1997). The benefits of further capital account liberalisation are not too obvious in the case of East Asia where savings rates have been exceptionally high by international standards (Stiglitz 1998c, et. al. (1998) provide data documenting high savings rates but argue that these are biased upwards). Recently, however, there have been tendencies from within the IMF to consider the possible positive impact of at least some controls on short term capital flows. Fischer (1997) argues that although capital account liberalisation remains desirable in general, there may be some cases of desirable capital controls. Countries with fragile financial systems may find it useful to impose controls on short term capital *inflows* or to impose prudential regulation limiting domestic financial intermediaries' foreign denominated liability exposure.

The likely results of increased capital account liberalisation, aside from likely increases in exchange rate volatility from short term currency flows, would have been further increases in liquidity –hardly desirable in a situation of overheating. (Rodrik (1998) elaborates on the point at length, providing empirical evidence in support of his proposition that capital account liberalisation –as opposed to trade liberalisation- has not been shown to have had consistently beneficial effects in the past; this view is also supported by Bhagwati (1998).)

Alternative reform proposals in the field of portfolio investment were made by Claessens and Glaessner (1997) who suggest that South East Asian financial systems might be stabilised by strengthening the role of domestic institutional investors such as pension funds. Pension reform may well be desirable in its own right and for demographic reasons, yet its capacity to stabilise financial systems seems to be limited. A stronger role for domestic securities markets could be stabilising in so far as it strengthens the equity component of domestic corporate financing and hence tends to lower debt equity ratios. This could have an impact on corporations' perceived vulnerability, but a shift from domestic creditors to domestic equity finance should not be expected to have immediate balance of payments repercussions. Where domestic stock markets are dominated by foreign investors, increased domestic participation through institutional investors may well have a stabilising impact. Yet how crucial this factor is can depend not only on the relative importance of domestic and foreign stock market holdings but also on the overall importance of stock market flows in the balance of payments. It was mentioned above, that the advent of the Asian financial

crisis was linked more to short term bank loans then to portfolio flows into stock markets. The stabilising link between enhanced securities markets and short term foreign denominated loans may therefore be merely indirect in so far as domestic securities holdings alter the perception of corporate risk by foreign creditors.

#### 3.2 The International Policy Dimension of Currency Crises

#### 3.2.1 Remedial measures in an international policy context

A number of international economic policy issues have become the focus of attention in the wake of the currency crisis at least in so far as they are relevant to crisis containment. If there is consensus on one matter, it is the role of international trade: it has been recognised, that one reason for the overall severity of the Asian financial crisis is the fact that the East Asian countries conducted a large proportion of their international trade within the region so that reduced demand in response to a regionally contagious financial crisis turned out to be reinforcing the original financial contraction (Noland 1998, IMF 1997, Corsetti et. al. 1998, cf. table 2).

Table 2: Exports to East Asia
(selected countries, 1995)

Country	Exports to Asia (%) <sup>1</sup>	Exports to Japan (%)	
Hong Kong	29.8	21.8	
Indonesia	50.4	27.1	
Japan	30.6	n.a.	
Korea	40.5	19.9	
Malaysia	47.3	12.7	
Philippines	36.0	15.9	
Singapore	45.6	7.8	
Thailand	42.4	16.8	

Data source: UNCTAD International Trade Statistics Yearbook 1995

There is, correspondingly, a broad consensus that stable or increasing import demand in Europe and the United States of America can be expected to have a stabilising impact on the affected East Asian countries (IMF 1997, Wolf 1998b). Dornbusch (1998) argues in favour of supply side measures to end the current Japanese recession while Wolf (1998b) warns of the possible deflationary impact which insufficient

<sup>&</sup>lt;sup>1</sup> i.e. exports to the selected Asian countries (Hong Kong, Indonesia, Japan, South Korea, Malaysia, Philippines, Singapore and Thailand). Percentages are of the country's total exports.

absorption of South East Asian exports in Europe and Japan could have on the South East Asian economies. Bergsten (1998) points to the danger of possible protectionist moves on the part of the USA and draws attention to protectionist measures taken by Mercosur (cf. also Wolf 1998b).

More generally, the repeated occurrence of currency crises suggests a need for institutionalised procedures for cases of bankruptcy of sovereign debtors. Wyplosz (1998) advocates orderly work out procedures based on IMF sanctioned moratoria in cases of national insolvency. Eichengreen and Portes (1995) also support this approach arguing that signalling by the IMF as to whether a moratorium is justified as an emergency policy measure would prevent panic reactions in cases where approval is given. They also hold that the risk of not obtaining approval for a one sided moratorium would constitute a sufficient deterrent against strategic use of this measure. It can be argued that the possibility of sanctioned moratoria would nevertheless imply a residual risk of moral hazard but, as Sachs (1997a) pointed out, a moral hazard risk is similarly present if bail-outs are designed to the benefit of creditors: it is scarcely possible to undertake any kind of emergency intervention to remedy currency crises without producing a moral hazard risk of one kind or the other.

#### 3.2.2 Crisis prevention and international economic policy

Of course there is a general consensus that crises should be prevented from happening in the first place -yet it should come to nobody's surprise that this consensus ends as soon as it comes to specific policy measures.

The case has been made that prudential regulation of investment in emerging markets should extend to creditor institutions in the source countries (Griffith-Jones 1997, Montes 1998, Stiglitz 1997). A proposal put forward by Griffith-Jones (1997) would base such regulation on a risk weighted capital charge: Institutional investors in source countries would be required to place a specified amount of cash in interest bearing deposits. The precise amount would be determined according to a number of key variables which are taken to be indicative of the target country's risk. Griffith-Jones (1997) points out that macroeconomic risk factors should preferably be taken into account. Investment in target countries would then become relatively less profitable as economic fundamentals deteriorate and the cash requirement for the risk weighted capital charge increases. In so far as capital charges are linked to a comprehensive set of risk factors this should lead to a gradual reduction in investment prior to any build

up of speculative pressure. Sudden, disruptive exchange rate adjustments should then become less common. This stabilising impact is likely to be beneficial to developed (source) and developing (recipient) countries alike: in the economies of the US and the UK in particular, institutional investors have been gaining in importance thus making these economies potentially more vulnerable to increased volatility in international capital markets.

With a view to international institutional arrangements, most attention has naturally focused on the role of the IMF. Feldstein (1998) emphasises the IMF's paramount importance in providing liquidity in cases of impending crisis to enable continued servicing of external payment obligations. This case is also made by Eichengreen and Portes (1995). Feldstein further points out that currency crises in a number of the South East Asian countries now affected could have been avoided had sufficient emergency finance been made available rapidly enough. In this context, it has been proposed that the IMF could run 'shadow programmes' with crisis prone economies and maintain 'softer' conditionality requirements in a non-crisis situation. In a situation of impending financial crisis the country could then have immediate access to IMF credit, thus avoiding liquidity problems and giving a reassuring policy signal to international markets (cf. also Griffith-Jones 1998b).

The spread of the crisis to Korea has been seen as a case of transient, avoidable liquidity problems. It can be argued that the problems Korea was facing were essentially of a temporary, cyclical nature and that early provision of liquidity could have had beneficial effects. The country's economy was already recovering from a temporary fall in semiconductor prices when it was affected by adverse exogenous changes (Feldstein 1998). This policy aspect is clearly of importance against the background of possible multiple equilibria and self fulfilling speculative crises: rapid but conditional provision of emergency finance would not only enable affected countries to service increased external obligations without interruption but would also entail a signalling component which could decisively alter the final outcome in a multiple equilibrium setting (cf. also Eichengreen and Portes 1995). The importance of the signalling component of this approach can not be overstated. If the effect of multilateral liquidity assistance were limited to the amount of funds provided it could hardly achieve any more than a strengthened reserve position in attempts to defend an exchange rate peg against a speculative attack: sooner or later, speculative flows would exhaust official reserves. In as much as official multilateral backing is capable of securing a 'credibility bonus' however, there might be a genuine possibility to fend off speculative attacks while providing the liquidity required to cover short term financial obligations.

Feldstein (1998) criticises the IMF which initially imposed structural adjustment measures on Korea. These -he argues- were tantamount to a negative capital market signal and promptly led to a fall in business confidence. The measures imposed simply overstated the true extent of the problems Korea was facing. After a temporary slowdown in export performance all the Korean economy needed was temporary assistance providing sufficient foreign reserves to meet current obligations until the trade balance recovered. After the failure of the initial policy approach had become apparent, the IMF did provide precisely this kind of help (Feldstein 1998). Wyplosz (1998) further elaborates on the possible counterproductive effects of excessively restrictive adjustment measures. Faced with the severity of the adjustment programmes usually imposed by the IMF, affected economies tend to avoid requests for multilateral assistance until their situation deteriorates to a point where far reaching adjustment measures are actually needed.

The situation is further complicated by other rather novel aspects of recent crises. There are as yet few antecedents on how to conduct sound macroeconomic management of a debt situation with mainly private sector deficits. Anticyclical stabilisation measures may seem like an obvious option here, yet the general problem persists: this particular area of macroeconomic financial policy is largely an unknown field.

A different proposal for new international institutional arrangements has been made by Soros (1997), who argues in favour of a multilateral SDR<sup>6</sup> funded 'International Credit Insurance Corporation' to provide guarantees on international credit up to a given maximum amount. It would thus effectively lead to credit rationing by stipulating the maximum amount of credit considered adequate for a given country and therefore the maximum amount at which it could borrow at prime rates (Soros 1997). This proposal has also been taken up by Noland (1998), who argues that it could be privately funded. As in the case of conditional multilateral liquidity provision, such an international guarantee mechanism would have an impact not only through the insurance service as such but also by signalling the extend to which credit provision to certain economies is deemed sustainable. For all its benefits, it would be vital that such an insurance service is adequately priced. (Given the risk involved this would be likely

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<sup>&</sup>lt;sup>6</sup> Special Drawing Rights

to mean that it would have to be expensive.) An underpriced insurance service would obviously create a moral hazard problem with respect to international investors. Furthermore, this danger is likely to be more pronounced than in the case of anticipated bail-outs by the IMF: where investors rely on multilateral bailouts in crises they have to base their decisions on implicit guarantees which in themselves contain a certain element of risk. This residual risk would be removed from the guarantees given by an International Credit Insurance Corporation, implying that the resulting moral hazard risk would be more serious.

Montes (1998) argues that regional contagion of currency crises provides a rational for regional co-operation in crisis prevention. While prudential regulation and supervision of the financial sector would clearly be located within the area of national government competence, Montes (1998) argues that governments should co-operate by confidentially exchanging information on their respective financial sectors. This would enable governments to anticipate future problems in the region and adapt their policy responses as far as possible. Montes (1998) further argues that common standards could be established to prevent governments from competitively relaxing regulatory standards in order to attract investment.

#### 4. Concluding Remarks

Though the causes of the Asian financial crisis are many, there appears to be at least some agreement on the important role of overindebted and fragile banking systems in most of the affected countries. The desirability of increased transparency and improved prudential legislation are also almost a matter of consensus. The importance of capital flow volatility and capital market imperfections as causes of currency crises is also becoming increasingly recognised.

#### established positions...

Disagreement exists with respect to the likely impact of domestic financial sector reform and even more on detailed questions of crisis management and prevention. With respect to crisis management, disagreement exists as to whether interest rates should be raised or, on the contrary, more liquidity should be provided to keep the affected countries' financial systems afloat. It is also disputed whether overindebted banks should be closed down or be subject to mergers with better endowed financial institutions.

In the long term and with a view to future crisis prevention, there has been some pressure for further capital account liberalization. The IMF has been one of the main proponents of this objective and is also preparing for greater involvement in the liberalisation process (cf. Fischer 1997). This contrasts with a variety of proposals to introduce measures to discourage surges in short term capital inflows and international prudential regulation at least for short term, portfolio investment.

There appears to be agreement though, that what desirable regulation there is should target short term inflows. Restrictions in this area should preferably be introduced when conditions for short term capital inflows are favourable. One should avoid to try and restrict capital outflows in a crisis, since this could lead to further panic reactions and actually exacerbate the crisis. Furthermore, it is increasingly accepted that there is need for international regulation of capital flows, though the debate in this area is quite recent.

#### gaps in knowledge...

While in some areas there appears to be a reasonable understanding of the recent events in East Asia as well as a well defined set of opinions on it, one can not overlook the fact that significant gaps in the general understanding of the currency crises remain.

The issue of contagion is as yet insufficiently investigated. While the onset of the crisis is in general terms ascribed to financial sector weaknesses, it is also acknowledged that substantial differences between the affected countries remain. It is not clear how the crisis spread in all cases and it is clearly desirable to differentiate mechanisms like contagion through self fulfilling speculation in multiple equilibrium settings from cases of simultaneously present inconsistencies in countries' macro-economic developments. Comparatively little work has been done on this issue so far.

Surprisingly, there is substantial disagreement on the desirability and efficiency of interest rate rises in currency crisis situations. Policy preferences aside, more knowledge is required on investors' reactions to interest rate changes in different situations.

Little has as yet been written about the best way to deal with the increased importance of institutional investors as recipients of national savings and as important agents in international finance. In particular, it would be important to look into the criteria that institutional investors use in their decision making. Another question that appears to be both highly relevant and insufficiently investigated is the possibility of different degrees of volatility associated with capital flows from different types of sources (banks,

mutual funds, pension funds, etc.). Information on this kind of issues can be expected to have important policy implications in the area of international capital flow regulation as well as with respect to desirable mechanisms of self regulation by institutional investors.

More generally there has until recently been little debate on the desirable improvements in international institutional arrangements with a view to crisis prevention. This may be so since in past crises attention had mainly focused on internal policy issues and in this case one should expect further contributions and improvements in the nascent discourse on the topic.

#### final conclusions

In spite of all the uncertainty surrounding the topic there are some general conclusions one can draw from events so far. The long and lengthening history of currency crises occurring for constantly increasing numbers of reasons makes one suspect that an exclusive focus on domestic policy mistakes may be insufficient. Increased transparency and improved macroeconomic management may well increase economic stability, yet one should doubt that the same is true for further capital account liberalisation. On the contrary, given rapidly adjusting and highly imperfect, though increasingly integrated, international capital markets, there is a case for prudential regulation of at least short run capital flows.

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25 October 1998

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