Limiting Currency Crises and Contagion: Is There a Case for an Asian Monetary Fund? Andrew K. Rose*

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Three Waves of Currency Crises during the 1990s

Currency crises are among the most dramatic of all economic events. Interest rates rise to exorbitant levels and billions change hands on the markets while central bank governors and finance ministers work their cell phones to head off the panic. At the time, speculative attacks – I use the expression synonymously with currency crises – seem an irrational phenomena. What appeared to be a healthy economy is suddenly attacked without warning or mercy by speculators who are inevitably portrayed as evil and foreign.

But currency crises turn out to be understandable (at least in part) with standard economic models. They usually occur when agents in financial markets suspect that the policy authorities will not stick to their promises to maintain a fixed exchange rate. In an effort to profit from the anticipated devaluation, investors sell short the currency of the country being attacked. If the authorities (usually the government and the central bank acting together) decide to try to beat off the speculators with a vigorous defense of their currency, they respond by selling off their foreign exchange reserves or raising interest rates. Usually the first option – selling international reserves to defend the currency – is only effective for a very short period of time. So countries that are serious about defending their currency are forced to raise interest rates to attract capital and raise the cost of short-selling.

The problem with this "interest rate defense" is that the high interest rates lead to pressure on domestic activity, slowing economic growth while raising unemployment and bankruptcy rates. As a consequence, a rigorous defense bears economic and political costs, which a government wants to avoid.

Of course, there is a way to avoid the costs that an interest rate defense brings; a quick surrender. If the authorities do not try to defend their currency, clearly the speculators win.

But is the country better off? Unfortunately it is far from clear. Countries which devalue, whether deliberately or because they are forced to, tend to suffer sharp recessions

immediately afterwards.

Understanding how to deal with currency crises is an issue of great importance, since we seem to have so many of them. The last decade has witnessed three important currency crises. In the autumn of 1992, a wave of speculative attacks hit the European Monetary System (EMS) and its periphery. Speculators sold short the currencies of a number of countries, in an attempt to profit if the government changed the exchange rate regime, a classic "speculative attack". Before the end of the year, five countries (Finland, the U.K., Italy, Sweden, and Norway) had in fact floated their currencies. Despite attempts by a number of other countries to remain in the EMS by devaluing their currencies (Spain, Portugal and Ireland), the system was ultimately unsalvageable. The bands of the EMS were widened from $\pm 2.25\%$ to $\pm 15\%$ in August 1993, and prospects for European monetary integration were set back severely .

The Mexican peso was attacked in late 1994 and floated shortly after an unsuccessful devaluation. A rash of speculative attacks broke out immediately. The most prominent targets of the "Tequila Hangover" were Latin American countries, especially Argentina and Brazil, but also including Peru and Venezuela. Not all Latin countries were attacked — Chile was the most visible exception — and not all the economies attacked were in Latin America (Thailand, Hong Kong, the Philippines and Hungary suffered brief speculative attacks). While few countries actually devalued, the Tequila attacks were not without effect. For instance, Argentine macroeconomic policy in particular tightened dramatically as a result of their interest rate defense. This precipitated a sharp recession in Argentina in 1995, though it paled in comparison with Mexico's terrible contraction.

The "Asian Flu" began with the flotation of the Thai baht in July 1997. Within days of the Thai flotation, currency speculators had attacked Malaysia, the Philippines, and Indonesia. Hong Kong and Korea were attacked somewhat later, following the Taiwanese

devaluation of mid-October; the crisis then spread across the Pacific to Chile and Brazil. The effects of the Asian crisis linger on, as we speak. The people of Indonesia, Korea, and Thailand in particular are suffering the effects of an economic slump which is simply staggering. Few countries in the region have escaped the Asian crisis altogether. Of course this includes New Zealand which is (hopefully) now at the trough of a recession caused in part by the Asian slowdown.

What Causes Currency Crises?

Clearly it is important to understand the causes of these important phenomena. The good news (at least for the public) is that there has been a great deal of research on the topic. (The good news for my profession is that there is much more to be done!)

Economists tend to think about currency crises using one of two theoretical models of speculative attacks. The First model directs attention to inconsistencies between an external commitment (like the exchange rate) and internal economic fundamentals. For instance, a government that is running a large fiscal deficit might put pressure on the central bank to help finance the budget deficit by printing money. The inflationary consequences of this loose money policy are an over-valued and therefore uncompetitive exchange rate, a current account deficit, and the loss of international reserves. When the reserves fall enough, the government is faced with a choice: should it break its external promise (to keep the exchange rate fixed), or keep its internal political constituents happy (by not raising taxes or cutting spending)? Since governments usually choose internal objectives over external constraints, a currency crisis results. These models work particularly well in helping us to understand the breakdown of highly inflationary economies, like the Latin American countries in the 1980s, or Russia more recently. But, with some important exceptions, they don't work particularly well in helping us to understand the most recent crises. Most Asian countries had admirable

monetary and fiscal policies that were widely viewed as being sustainable and fully compatible with other policies.

The second model views currency crises as shifts between different monetary policy equilibria; this model views speculative attacks as *self-fulfilling*. The idea is quite simple: the government benefits from exchange rate stability, but suffers if defending the regime becomes too costly. If a ferocious attack can only be warded off by raising interest rates to unacceptable levels, the attack will in and of itself force the government to change its exchange rate policy. This is the sort of framework that economists use to understand the Latin and Mexican crises.

Of course, not all countries are vulnerable to such attacks. A stable government presiding over a strong economy is impervious to such pressures, as is a country like New Zealand which lets the exchange rate float freely. But experience shows that even moderate levels of financial and macroeconomic weakness leave a country exposed to this sort of self-fulfilling attack. These countries are, in some sense, healthy economies with sustainable growth and reasonable fundamentals. But while they were mostly healthy *before* the attack, they usually do *not* stay healthy afterwards, since attacks do more than make money for savvy financial investors. If the financial sector of the economy has large un-hedged foreign liabilities (as seems to be the norm), it is bankrupted. Unless the country receives external assistance quickly, this usually results in a credit crunch which in turn causes a recession. And of late, the external assistance – in the form of an IMF-lead bailout package – *has* not arrived quickly and massively enough to prevent the credit crunches and the recessions.

Understanding Contagion

One striking feature of recent waves of currency crises is that *they have all been* regional. Once a country had suffered a speculative attack – Thailand in 1997, Mexico in

1994, Finland in 1992 – its neighbors were disproportionately likely to be attacked. Using a medical metaphor, once a country had succumbed to the virus, it spread the infection to countries close by. That is, *currency crises seem to be contagious*.

Why? In my research, I have shown that currency crises tend to spread "contagiously" between countries linked by international trade. Trade tends to be regional. Once Thailand had floated the baht, its main trade competitors (Malaysia and Indonesia) were suddenly at a competitive disadvantage, and so were themselves likely to be attacked. That is, *currency crises are regional because of international trade patterns*. Since trade is regional, currency crises tend to be regional.

One has to be careful in making this argument. Suppose that a number of us become sick tonight, me first. One explanation for this might be that I had contracted a contagious illness, and spread it to some members of the audience (for instance by shaking hands or breathing). But another explanation might be that we had *all* been exposed to an agent in this room, and that I was merely the most susceptible. In exactly the same way, the Asian countries might all have had the same weakness in 1997. But this apparently reasonable view has a simple problem: there is no evidence of such common features. Korea, Indonesia and Thailand were very dissimilar economies. More precisely, *macroeconomic and financial phenomena do not tend to be regional*. So it is hard to understand why currency crises are regional from a strictly macroeconomic perspective.

One does not want to carry this argument too far. Macroeconomic and financial influences were certainly not irrelevant. Currency crises may also be regional because international investors have regional perceptions, or because of regional cross-holdings of financial and real assets. While such arguments *seem* reasonable enough, there is remarkably little direct evidence which supports it. The trade channel is simply the easiest and most plausible way of understanding why speculative pressures are transmitted across international

borders. In any case, it does not really matter which theory one accepts. The brute fact is that *currency crises are regional*.

The Consequences of Currency Crises

Why should we care? Currency crises tend to be regional because trade is regional. But suppose we consider the *consequences* of currency crises, rather than their causes. Currency crises are usually associated with massive disturbances to international trade, for a number of reasons. A sudden devaluation represents an increase in competitiveness, since the devaluing country's exports become suddenly much cheaper. More importantly, don't forget that countries which devalue tend to suffer recessions, for the reasons I mentioned above. And recessions cause spending to dry up – both domestic spending and spending on foreign goods. Indeed, the contractions which are associated with currency crises tend to lead to sharp falls in imports, which are the most important reasons why the payments imbalances are reversed. For instance, during the three months immediately after the Korean crisis in late 1997, Korean exports fell very slightly while Korean imports collapsed by a more than a third. The same story explains the reversals in the Thai and Indonesia current account deficits.

But a fall in one country's imports is a fall in another country's exports. In the year through September 1998 (the most recent trade statistics available), New Zealand exports to South-East Asia fell by 16% (even while they rose to the rest of the world). Succinctly, currency crises tend to disrupt trade flows.

These disruptions are extremely worrying. They tend to engender protectionism, and to slow the pace of trade liberalization. It is easy to think of examples. Following the EMS crisis, the French authorities accused the UK of reducing their unemployment by "job poaching" through their competitive devaluation; European Monetary Integration was delayed

for years. During the Tequila Hangover of 1995, Brazil stemmed its current account imbalance by raising tariffs on automobiles and other goods. More recently, the Asian crisis has caused Malaysia to impose capital controls, and Hong Kong to intervene in its stock market. While there has been little overt protectionism as yet, the pace of liberalization at APEC has slowed dramatically.

If there is one thing that we economists are agreed on, it is that free trade is good. But currency crises tend to disrupt trade and foster politically dangerous trade imbalances, thereby creating the environment for protectionist measures which distort and stifle trade. Since trade tends to be regional, efforts to support trade by reducing currency crises are warranted at the regional level. This is the core of the case for a regional monetary fund.

<u>Is There a Case for an Asian Monetary Fund?</u>

In the remainder of this talk, I would like to present the case for an Asian Monetary Fund (AMF). I believe that there is a strong case for an AMF. And New Zealand has a special role to play in promoting the AMF in capacity as the next chair of APEC.

To restate the main argument: since trade is regional, the region loses disproportionately from trade disruptions which are caused by currency crises. Therefore the region should try to prevent the spread of these crises. To put it alternately, an AMF should be considered another APEC initiative to promote freer trade.

These issues are important now, and especially visible now because of the current Asian economic crisis. But they are likely to grow, rather than shrink in importance, for a number of reasons.

First, it is possible that trade will continue to grow more and more liberalized. After all, trade has grown freer and freer during the post war period. With luck, this trend will continue, especially with further efforts to liberalize trade. And the fast track to trade

liberalization of late has tended to be regional. Since regional efforts to liberalize trade are likely to continue, the regional nature of trade is likely only to grow in importance. This makes efforts to *protect* trade even more important.

Perhaps more importantly, the mobility of international financial *capital* is likely to continue growing dramatically. Clearly the IMF has withdrawn from its short-lived policy to encourage capital liberalization. But the influence of private capital markets should not be ignored; most of the initiatives to enhance capital mobility have come from the private sector. The incentives these actors have to free capital flows are not going to disappear. Indeed, they are likely to grow since the agents have tasted the fruits of free markets.

Of course while capital mobility does have advantages, it carries dangers with it. For one thing it is likely to make future crises that much more disruptive. Increasingly serious financial crises have been the trend; one obvious way to see this is through the rising size of IMF-led bailout packages.

Only the naïve believe that there will not be financial crises in the future. There have always been currency crises, and there is every reason to believe that they will continue. In recognition of this fact, we have created institutions to alleviate the costs of currency crises. One of the chief goals of the International Monetary Fund is to provide assistance to countries experiencing short-term international payments imbalances. By smoothing out these fluctuations, the IMF tries to reduce protectionist tendencies.

Perhaps currency crises are likely to be less prevalent in the future? Unlikely.

Economists and policymakers do not currently have a very precise knowledge of the causes of currency crises. Indeed, one of the disconcerting phenomena is that the international community continues to be surprised by each new round of crises. There always seems to be unanimity after the fact on the causes that anyone could see in advance, despite the fact that

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¹ Article I (ii) of the Articles of Agreement of the IMF states that the purpose of the IMF is "To facilitate the

few people actually did seem them in advance. This is not that surprising. The systematic study of currency crises is less than twenty years old, and most of the analysis was purely theoretical until perhaps five years ago. Our knowledge of currency crises is likely to grow with time. In the mean time, it seems best to gird our loins for the future by raising our defenses further, with regional monetary funds.

As the next chair of APEC, New Zealand can claim to have a special role to play in promoting an Asian Monetary Fund. New Zealand has an especially advantageous position to promote this initiative as a relatively disinterested member of APEC which has not been very seriously affected by the current distress. As well as being of direct value, such an endeavor could breathe the life back into APEC's activities; countries are more willing to liberalize with a stronger safety net.

Is a Regional Monetary Fund Realistic?

The world does not currently possess a regional monetary fund. This might be for good and practical reasons. So it is a good idea to think hard about the problems involved in this enterprise.

To begin with, I stress that the idea of an AMF is not outrageous at all. The potentially most important problem – raising the initial capital – is basically a non-issue. Last year, Japan found it easy to organize a group of Asian countries which volunteered to head up an AMF and offered \$100 billion as initial capital. This is unsurprising, given that the Asian countries currently hold in excess of three quarters of a trillion dollars in international reserves already. The reason why the AMF proposal did not proceed further is not economic but political. The West – especially my friends in the US Department of Treasury – killed the idea on the grounds that any challenge to the IMF's leadership would be undesirable.

expansion and balanced growth of international trade, ..."

But American opposition to a regional monetary facility is odd. The United States frequently participates in regionally-financed bailout packages. The Mexican package of 1995 is perhaps the most prominent example; the most recent is the Brazilian rescue package. The Americans bailed out Mexico for a variety of reasons; to reduce illegal immigration; to assist its own border states; and on purely humanitarian grounds. But one of the key reasons for the Mexican deal was to underwrite the recently signed North American Free Trade Agreement. Large changes in the exchange rate were viewed as dangerous, since they would result in calls for protectionism, contrary to the objective of maintaining free trade flows.

Regional financial support is not only the norm in North America. The European Union is currently engaged in a historic endeavor of monetary unification, "EMU". Many believe that EMU is primarily a politically-motivated activity, and I agree with that assessment. However there are clear economic benefits to EMU (as well as some costs). One of the biggest payoffs to EMU – and one of its officially stated objectives – is defending the single market by eliminating the risk of "competitive devaluations." Currently, goods, services, capital, and labor are supposed to flow freely within the borders of the European Union. But the single market is threatened by the tensions associated with massive devaluations such as the British and Italian departures from the Exchange Rate Mechanism of 1992. While it is hard to believe that "one market requires one money" (using the words of the European Commission), it is certainly true that one market is supported by a single money. Indeed, the whole long history of European monetary integration should be viewed as a series of increasingly important regional monetary support mechanisms, along the lines that I am suggesting.

Indeed, most bailout packages in Asia of late *have* been regional, primarily because the IMF does not possess sufficient resources to put together an appropriately fund unilaterally. In each of the big recent Asian packages, bilateral components were larger than

the direct IMF contribution.² While putting together packages on an *ad hoc* basis has worked of late, it is fundamentally ... *ad hoc*. In other facets of public policy, we would consider this sort of "seat of the pants" approach to policy making to be problematic, since policy-makers operating without a formal framework can be capricious and arbitrary. A more regular, methodical way to mobilize large packages with less bilateral coordination is warranted.

Even if *ad hoc* agreements have worked in the past elsewhere in the world, they have clearly *not* worked that well in Asia. This is not for lack of trying. There *have* been efforts to promote regional monetary coordination in Asia. In 1995, the HKMA and the central banks of Malaysia, Indonesia and Thailand agreed to repurchase agreements designed to support each other with exchange market support. Australia is now allied with this group, as are Japan, Singapore and the Philippines. In 1996, HK and Singapore helped Japan intervene to manage the dollar/yen rate. The defense of the Thai baht in the Spring of 1997 was supported by a number of monetary authorities in the region, and the rescue packages since then have involved large regional contributions. And the Manila Agreement of late 1997 increases regional surveillance between ASEAN central banks with the support of the Japanese IMF office.

But these efforts have been small. Part of the reason is historic. Asia is generally under-represented in international affairs, and this is certainly true in the international monetary sphere. Europe has created multilateral institutions to promote European integration, and the United States is the undisputed financial leader in the Americas. But Japanese aggression in the early part of the twentieth century combined with severe domestic economic problems has made it more difficult for Japan to play a comparable role in Asia. Even if these tensions eventually dissipate, there is the growing issue of an appropriate role for China.

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² In the case of Thailand, the IMF contributed 4 \$US bn while bilateral contributions totaled 10.5; in Indonesia

One of the simplest and most direct ways around such politically charged issues would be to delegate regional financial affairs to an AMF. Indeed, the very creation of an AMF could play an important role in promoting regional cooperation and trust. There are remarkably few issues on which China, Taiwan, and Japan all agree; the AMF is one. This fact in and of itself should make us pause.

Continuing along the same lines, one should not ignore the arguments for regional monetary co-operation which are not directly economic. It is normal practice in international monetary affairs to make economic decisions for political reasons. One cannot understand the IMF's policy towards Russia in any other way; the American-lead Mexican bailout was also clearly non-economic at least in part. This is quite understandable. Currency crises have costs above and beyond those associated with disruptions to international commerce. I have already mentioned the massive recessions which typically follow crises. Crises also make for regional political insecurity. Tensions are current extremely high in Asia, especially in Indonesia, Malaysia, and the Korean peninsula. Most of these grew directly out of the economic crisis. And many of these problems affect countries who have not directly suffered from the Asian economic crisis themselves.

In some sense, the fact that the world does not currently possess regional monetary funds is odd. In other spheres of international relations we have both global and regional institutions. We have both regional security arrangements and global ones organized through the UN. In the economic sphere, consider official development assistance. The World Bank is charged with assisting developing countries by funding projects with long-term benefit. But there are also a host of regional counterparts to the World Bank, including: the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, and the Inter-American Development Bank. Few raise objections to the

the split was 11.2 and 21.1, while for Korea it was 20.9 and 23.3.

overlapping roles of the development banks. Why not then in the monetary sphere? Which brings us to the all-important relationship between and AMF and the IMF.

Can an Asian Monetary Fund co-exist with the IMF?

The AMF clearly poses a threat to the IMF; this is the reason why Washington vetoed the idea when it was first presented a year ago. Would the existence of an AMF constitute a real threat to the IMF?

In essence the IMF performs two roles: 1) surveillance of the international community and 2) lending with conditionality. Let us consider how an AMF would impinge on both those roles.

Surveillance is the less important function of the IMF. For one thing, the IMF does not have a monopoly in surveillance. Many other institutions, both private (like credit rating agencies) and public (such as the OECD) engage in surveillance. The AMF may also do a better job of surveillance than the IMF because of a more focused regional mandate and greater regional expertise. Personally I am somewhat skeptical of this argument, since the IMF possesses enormous Asian expertise. And Asian financial arrangements are changing quickly as a result of reforms forced by the crisis, so historical expertise is becoming increasingly less important. And self-fulfilling speculative attacks are intrinsically unpredictable. Still, it is hard to argue that another healthy competitor in the guise of an AMF could do anything but improve the IMF's surveillance activities.

It is also probably true that most countries which are extremely vulnerable to speculative attacks are well aware of this fact. Historically the IMF has chosen to use their information discretely, warning countries of potential problems quietly. The IMF has also has a singular lack of success. Since IMF surveillance has been both disregarded and private, a change in the status quo is highly desirable. If the introduction of an AMF changes current

practice, so much the better.

The real power of the IMF stems not from its surveillance activities but from its monopoly on conditional lending. An IMF-endorsed program brings a good housekeeping seal of approval, opening the way for private lending. But it is far from clear that the IMF has used its conditionality wisely. In retrospect, it is clear that the IMF demands for fiscal austerity in the Asian countries were inappropriate. Perhaps more importantly, many observers in Asian countries and elsewhere made precisely these arguments at the time.

This is not the forum for a discussion of the IMF's demands on Asia in 1997. There is an enormous dispute concerning the IMF's demands for rapid and wide-ranging structural reforms in the heart of the crisis. Personally I am persuaded that the IMF should be in the business of disbursing large amounts of cash quickly when it is genuinely convinced that its clients are illiquid but solvent. Suffice it to say that if an AMF had been in existence, offering packages with looser restrictions, the Asian situation would undoubtedly look much better than it currently does. And if an AMF had followed the IMF's lead on the terms of conditionality, things would not be worse.

Clearly, an Asian Monetary Fund would have to follow the IMF practice of lending with conditionality. If it consistently gave inappropriately weak conditionality, it would soon run out of funds. But in the mean time, it could compromise the IMF's authority considerably. Economists call this the problem of "moral hazard"; countries might be more tempted to engage in dangerous practices in the expectation of larger bailouts with looser conditions.

The risk of increased moral hazard is certainly a danger. But it is an argument for a high quality AMF, not an argument which destroys the case for an AMF. And one can easily overstate the probable degree of conflict between the AMF and the IMF. Regional banks operate smoothly with the World Bank, and the IMF has not had fundamental problems with

either the American-lead Latin rescue packages, or European monetary integration. One would expect that an AMF would usually act simply to replace the *ad hoc* groupings of countries which currently support IMF packages with bilateral aid. Further, having a regional monetary fund could also *reduce* moral hazard, since an additional monitor would bring more pressure to bear on the country to correct policy imbalances. Finally and most importantly, it is easy to overstate the importance of the moral hazard problem. No country chooses to embarrass itself and suffer the enormous indignity and pain of any IMF program voluntarily.

There are many changes that are being considered to improve the international monetary system; an Asian Monetary Fund is only a piece of the picture.³ If the IMF imposed inappropriate conditionality during the Asian crisis, that is an argument for improving IMF practice, not for creating yet another international institution. But as I hope I have shown, the fundamental question is not whether the IMF made mistakes in 1997. It is whether regional trade and security should be supported with a regional monetary fund in Asia.

Conclusion

Let me summarize my argument before I conclude. Currency crises tend to be regional. They tend to spread along the lines of trade linkages. It is easy to understand why. A country which devalues (Thailand in 1997, Mexico in 1994, Finland in 1992) gains export competitiveness. And since its major competitors tend to be its neighbors, these neighbors are likely to suffer. Their exports fall, and since their levels of competitiveness decline, they are less likely to resist speculative attacks and therefore more likely to be attacked. Since trade is regional, currency crises tend to be regional as a result.

Currency crises have a number of harmful consequences. Many of these are domestic.

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³ There are many suggestions for the "new international financial architecture" which include: a) restrictions to capital mobility; b) monitoring of external subordinated debt; c) new institutions for orderly debt workouts; and d) *ex ante* IMF conditionality, among many others.

Most importantly, countries which devalue after a speculative attack tend to have sharp recessions. But many of the costs of crises spill abroad and are borne by their neighbors. Currency crises are associated with disruptions to international trade, and a host of other malignant consequences. Most of these ills are intrinsically regional phenomena.

This is the essence of the case for a regional monetary fund. Since currency crises create regional costs, the region has an incentive to create institutions to mitigate these costs by providing a financial safety net. Towards precisely this end, Europe is currently engaged in a historic experiment of monetary integration. The United States has provided strong leadership for the Americas. Only in Asia is there a vacuum, one that could and should be filled with an Asian Monetary Fund.