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The Economics and Politics of Monetary Regionalism in Asia

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The Economics and Politics of Monetary Regionalism in Asia

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ABSTRACT

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This paper discusses the political economy context surrounding the Japanese proposal for an Asian Monetary Fund as well as highlights other recent initiatives towards enhanced monetary regionalism. The discussion reveals the keenness that the region has shown towards intensified cooperation in these areas. Nevertheless, the economic/political economy rationale for such cooperation does not appear to have been fully articulated, a void that this paper attempts to fill. Insofar as "regional contagion" is seen as providing the analytical basis for monetary regionalism, a large part of the discussion is devoted to defining and highlighting the various transmission channels through which currency and financial crises may spread contagiously and drawing out policy implications thereof.

Key words: Asia, contagion, cooperation, crisis, IMF, multilateralism, regionalism

JEL Classification: F30, F32, F34

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1. Introduction

In the interest of sharpening the issues, but cognizant that this may be an over-generalization, we observe that to critics of the Japanese development model, Japan transferred the worst features of corporate governance to the rest of East Asia. The financial crisis was viewed by them as stark evidence of the unsustainability of the Japanese development model (Hughes, 2000, Reich, 2000 and Rhodes and Higgott, 2000). The IMF conditionality imposed on crisis-hit East Asian ecomomies was correspondingly considered imperative in bringing about a "convergence" of the region's development strategies to the Anglo-American model, which in turn was thought to be a prerequisite for sustained robust growth in the future.

Not surprisingly, the Japanese and many others in East Asia have viewed things quite differently. The essence of their argument has been that the IMF conditionality, which was "structural" in nature, was overly intrusive and unwarranted in view of what they considered as being a "liquidity" crisis attributable to a financial market panic and macro policy errors such as the maintenance of the US dollar peg (Ito et al., 1998). Accordingly, in an effort to sustain the East Asian development model and remain supportive of the countries that adopted it, the Japanese government first proposed an "Asian Monetary Fund" (AMF) in September 1997 in Bangkok, Thailand[1].

The original aim of the AMF was to make available a pool of funds to be quickly disbursed as a means of emergency balance of payments support for the crisis-hit economies. The proposal was enthusiastically welcomed by many regional economies that were eager to see Japan taking on a bigger leadership role in the region (in the economics and financial spheres) and promote closer monetary cooperation. In addition,

[1] Japan's financial aid packages to the region may be seen in similar light (Chang and Rajan, 1999).

there was an anticipation by some that the conditionality attached with the AMF would not be nearly as strict as those required by the IMF. While the bulk of financing of the AMF would have been from Japan, it reportedly received pledges of contribution from Hong Kong, Taiwan and Singapore. Potential mobilization capacity of an AMF was estimated to have been in the order of about US$100 billion (ADB, 1999).

The IMF was however unreceptive to the proposal. Stanley Fischer, Deputy Managing Director of the IMF, warned that Japan's AMF proposal was in essence "a threat to the authority and effectiveness of the IMF itself".[2] The US administration was even more vehemently opposed to the idea, perceiving it as an attempt to challenge its regional hegemony[3]. A counter-proposal, which included a US component was hastily prepared and announced (a US$ 10 billion US-Japan initiative), though never acted upon (Montagnon and McNulty, 1998). In the end, as Wade and Veneroso (1998) noted, "(t)he United States Treasury pulled out all the stops to kill the proposal, and it died" (p.19). The US administration's reaction to the AMF proposal was in sharp contrast to its policy response to Mexico during the peso crisis of 1994-95, in which the Treasury tried to "strong-arm" the IMF, Europe and Japan into contributing to the Exchange Stablization Fund (ESF) (Altbach, 1997). Bergsten (1998) has reminded us that China's opposition to the AMF proposal was also instrumental in its failure to get off the ground[4].

While the AMF proposal has entered policy debates intermittently since it was first mooted, it made headlines recently when the Malaysian Prime Minister, Mahathir

[2] Cited in Hamada (1998).

[3] Also see Hamada (1998). Eisuke Sakakibara ("Mr. Yen") details the formulation of the AMF proposal in his memoirs, where he chronicles the opposition he faced from the US administration (Kojima, 2000).

[4] However, China did continue to participate in the ensuing discussions and were more supportive of the reformulated regional monetary mechanism (Kirton, 1999).

Mohamad, tabled it again at an *Asian Summit* organized by the *World Economic Forum* (WEF) in Singapore. He reportedly stated that the AMF should be:

> a small compact wholly regional funding organization which would be deeply and constantly engaged in East Asian monetary cooperation and problems on a daily basis[5].

ASEAN ministers mooted a version of the AMF proposal in their recent "informal" summit in Manila; the Philippines president, Joseph Estrada, made specific reference to the AMF proposal in his opening remarks to the summit[6]. A report linked to the Japanese Prime Minister's office concluded that:

> (i)f the IMF can be likened to a major hospital caring for the world as a whole, then we should consider supplementing it with the establishment of an Asian Monetary Fund to serve as a "family physician" to provide care at a more intimate level[7].

Having briefly noted the political economy context surrounding the initial AMF proposal and its rejection, the next section highlights recent initiatives towards enhanced monetary regionalism. The discussion reveals the keenness that the region has shown towards intensified cooperation in these areas. Nevertheless, the economic/political economy rationale for such cooperation does not appear to have been fully articulated, a void that section 3 attempts to fill[8]. Insofar as "regional contagion" is seen as providing the analytical basis for monetary regionalism, section 4 is devoted to defining and highlighting the various transmission channels through which currency and financial

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[5] See the **WEF Press Release** (October 19, 1999).

[6] See the "Welcome Remarks" of the chairman of the Third ASEAN Informal Summit at the Summit Opening Ceremonies PECC (November 1999). Available at: http://www.aseansec.org.

[7] See "Japan's Goal in the 21st Century: The Report of the Prime Minister's Commission on Japan's Goals in the 21st Century" (January 2000). The Report explains Japan's challenges and policies from the medium to long-term as it moves into the next century. Available at: http://www.kantei.go.jp/jp/21century/report/htmls/7chap6.html.

[8] Rose (1999) is an exception.

crises may spread contagiously and drawing out policy implications thereof. The final section offers a few concluding remarks.

2. Recent Developments in Monetary Regionalism in Asia

While recent financial crises have spurred a revival in Asian regionalism as a means of complementing multilateralism (The Economist, 2000 and Katzenstein et al., 2000), the Asia and Pacific region in fact already has an existing cooperative scheme in place in the form of the EMEAP or the Executives' Meeting of East Asia-Pacific Central Banks[9].

2.1 The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)

The EMEAP is a cooperative organization comprising central banks and monetary authorities of eleven economies: Australia, China, Hong Kong, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore and Thailand. Its primary objective is to strengthen the cooperative relationship among its members. The EMEAP's activities broadly encompass three levels: (a) annual meetings of the EMEAP governors; (b) semi-annual ones involving the deputy governor; and (c) three Working Groups on *Banking Supervision*, *Financial Markets* and *Payments and Settlement Systems*. Specifically, while the deputy governors have been meeting regularly since 1991, the governor's started doing so only since 1996, there having been four meetings since then: the first and third in Tokyo (July 19, 1996 and July 14, 1998), the second in Shanghai (July 25, 1997), and the fourth in Hong Kong (July 9, 1999). Each one of these meetings has had a broad theme: the first was on the *means of strengthening central bank cooperation to enhance financial stability and market development in the region*; the second was on *asset prices and (their) impact on* *monetary policy*; the third on the *relationship between international investment and financial stability*; and the fourth on the *International Financial Architecture*.

It was only after the governors initiated their regular meetings since 1996 that the EMEAP became fairly active (and certainly took on a higher profile), with the establishment of the various Working Groups noted above. In addition to the Working Groups, following the Tequila crisis, EMEAP took substantive steps towards monetary cooperation. For instance, a number of member economies signed a series of bilateral repurchase (repo) agreements in 1995 and 1996. Hong Kong and Singapore also reached an agreement to intervene in foreign currency markets on behalf of the Bank of Japan (Moreno, 1997). These creditor regional economies also attempted to help defend the Thai baht for some period before the Bank of Thailand succumbed to the speculative pressures in mid 1997. EMEAP seems to have become fairly dormant since then.

2.2 Recent Developments

Although the initial AMF proposal has been a non-starter (primarily because of the timing and manner of the initial announcements), Japanese policy makers have maintained strong interest in moving forward monetary regionalism in Asia in some form or the other. Among the ASEAN countries, Malaysia, Philippines and Thailand have remained most sympathetic to and supportive of the AMF proposal. Even after the objection from the US and IMF, these countries together with Japan continued to explore regional options.

Of course, the bailout packages in Asia have, by and large, been regional in any event. To be sure, half of the total US$ 42 billion financial assistance committed to Indonesia through the IMF was bilateral aid, most of which was by regional economies in the Asia and Pacific region. In the case of commitments to Thailand, over one fifth of the

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[9] Information on the EMEAP is available at: http://www.emeap.org:8084/

US$ 47 billion package was bilateral, all of which was from the regional economies. The US contributed US$ 5 billion to South Korea, US$ 3 billion to Indonesia and none to Thailand (Table 1). Additionally, the Asian economies such as Japan provided other forms of bilateral assistance to the crisis-hit regional economies through the New Miyazawa and related initiatives detailed in Chang and Rajan (1999). Nonetheless, these have been ad hoc measures as opposed to systematic efforts at promoting monetary regionalism. Two important systematic cooperative initiatives in this regard are the Manila Framework and the Chiang Mai (CMI) Initiative.

Manila Framework

The Asian Pacific Economic Cooperation (APEC) forum agreed to establish a *Manila Framework for Enhanced Asian Regional Cooperation to Promote Financial Stability* at the fifth APEC summit in Vancouver in November 1997. The Framework included the following initiatives: a) a cooperative financing arrangement that would supplement IMF resources; b) enhanced economic and technical cooperation, particularly in strengthening domestic financial systems and regulatory capacities; and c) a mechanism for regional surveillance to complement the IMF's global surveillance[10]. The bilateral financing packages for the crisis-hit economies were arranged in the Manila Framework as a second line of defense. Nevertheless, the framework is highly limited as it has "no formal status, secretariat or other institutional foundation…(S)upplementary funding has not been implemented on a permanent and assured basis" (Wang, 2000, p.208). As such, at a practical level, the Manila Framework appears to basically be a high level regional forum which allows a candid sharing of views and opinions in regional and financial matters and concerns.

[10] See the **APEC Economic Leaders' Declaration**, "Strengthening the Foundations for Growth", November 18, 1998.

Chiang Mai Initiative (CMI)

Arguably, of more significance is the Chiang Mai Initiative (CMI). This initiative came under serious discussion at the sidelines of the 33rd Annual Meeting of the Board of Governors of the ADB, where it was agreed that selected East Asian economies would create a network of bilateral currency swaps and repurchase agreements as a "firewall" against future financial crises (Bello, 2000). The CMI is aimed at providing countries under pressure with short-term hard currency liquidity to bolster reserves through bilateral swaps (Wheatley, 2000)[11]. The CMI extends and expands upon the little known ASEAN Swap Arrangement (ASA) to encompass all ASEAN countries as well as China, Japan and Korea (i.e. ASEAN Plus Three or APT).

The ASA was established in the 1970s to provide short-term swap facilities to members facing temporary liquidity or balance of payments problems. In 1977, there were only five ASEAN signatories - Indonesia, Malaysia, Philippines, Singapore and Thailand - each contributing about US$ 40 million and able to withdraw twice its contribution. This facility was increased to US$200 million in 1978. At the Fourth ASEAN Finance Ministers Meeting in Brunei Darussalam (March 24-45, 2000), the Ministers agreed to expand the ASA to include the remaining ASEAN members, Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Vietnam. At the time of writing, the ASA had reached US$ 1 billion. The ASA is to be made available for two years and is renewable upon mutual agreement of the members[12].

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[11] See "The Chiang Mai Initiative", A Discussion Paper for the Special ASEAN Finance Deputies Meeting (AFDM) + 3 (May 6, 2000).
Available at: http://www.mfa.go.th/dea/chiangmai%20initiative.htm.

[12] See *Bangkok Post*, Thailand (May 9, 2000), *The Straits Times*, Singapore (December 30, 2000) and McNulty (2000).

This buttressing of the ASA is the first step in a three-step process towards creation of the CMI. The three ASEAN Dialogue partners (China, Japan and Korea) are simultaneously in discussions to establish bilateral swap arrangement among themselves. This will be followed by setting up of a fifteen bilateral pacts between the APT economies (Wheatley, 2000). Details remain to be worked out.

Despite some scepticism[13], the creation of the CMI has been viewed as historic insofar as it is an important first step towards the creation of a full-fledged monetary facility. In his op-ed piece entitled "Asian Monetary Fund Reborn", Goad (2000) notes that the CMI "does give Southeast Asia and Northeast Asia a structure and an excuse to keep talking about pan regional economic issues in concrete terms" (p.54). The CMI appears to have been well received, even by the IMF and the US administration (Startfor, 2000 and Taniguchi, 2000). At a press conference by Horst Kohler in Prague (September 20, 2000), the new IMF Managing Director expressed support for the AMF and other regional initiatives as long as they are complementary and not competitive with the IMF approach[14]. China too has expressed open support for and an intention to actively participate in the CMI (Goad, 2000 and Rowley, 2000).

3. Rationale for Monetary Regionalism

[13] The criticism is primarily aimed at the size of the funds available in the scheme. As reported by Bello (2000), Sakakibara is of the view that without funds ranging from US$ 20 to US$ 40 billion, the arrangements would not make a difference. Others have suggested that the ideal credit line is more in the range of US$ 50 to US$ 100 billion (*The Straits Times*, Singapore, December 30, 2000) Private bankers have indicated that the swap-and-repurchase arrangements were "outdated, stop-gap" measures (Crompton, 2000).

[14] See http://www.imf.org/external/np/tr/2000/tr000920.htm for the transcript of the press conference. Sources close to Kohler have reported that he believes that opposition towards the original AMF scheme was "mistaken" (Rowley, 2000). Bello (2000) has however observed that:

> (t)he studious avoidance of the word "Fund" by Japanese officials underlines the fact that Japan and the Asian countries continue to be prevented from making really bold steps by the desire not to ignite the open opposition of the United

While monetary regionalism in East Asia has taken important steps forward, its rationale has not always been made clear. What exactly is the underlying economic rationale for such a self-standing regional monetary facility? Certainly the answer depends on the precise form of regionalism, which varies across the specific proposals. However, at a general level, and beyond the obvious and important benefits of closer economic dialogue, there are two main reasons for monetary regionalism in Asia which we discuss in some length below.

3.1 Regionalism as a Complement and Supplement to Multilateralism

The US has provided the necessary economic and financial leadership in the Americas and is seen as the region's *de facto* regional lender of last resort; while monetary integration has been successfully attained in Europe with centralized financial and monetary institution (i.e. the European Central Bank). Asia in contrast, possesses neither a strong regional hegemon nor a regional monetary institution. The financial crisis of 1997-98 has made it appear disjointed and unable to respond in an effective and coordinated manner. This may provide a case for establishing some sort of geographically concentrated facility which allows the regional economies in Asia to work in concert to gain a larger voice in international monetary affairs, as has been quite successfully achieved in the case of global trade. This point may be of particular relevance to the smaller open economies in Asia. For instance, apart from the three Asian giants of China, India and Indonesia, no other emerging economy in the region has been included in the G-20 finance ministers forum recently formed to look into issues regarding the shaping of the international financial architecture, as they were considered to be "systematically unimportant countries" (Rowley, 1999)[15].

States.

[15] Other members of the G-20 forum are Argentina, Australia, Brazil, Mexico, Russia, Saudi

It is sometimes charged that the IMF's decision to bailout of economies in trouble, the speed with which it does so (actual disbursement of aid rather than initial negotiations), and the type and degree of austerity of the conditionality imposed are largely political, based on the strategic/security objectives of the most important member, the US, which holds a disproportionate influence over the institution (and has a *de facto* veto power) (Bird and Rowlands, 1999 and Pieper and Taylor, 1998). Thaker (1999) does in fact provide important empirical support for the propositions that the political interests of the US influence IMF behavior. In this light, an argument may be made that the countries in the Americas (Mexico, Brazil etc) and "strategically significant" extra-regional countries such as Russia will always be given "preference" over other small emerging economies in Asia, for instance[16].

Even abstracting from these "strategic" issues, the regional financial crisis and the inadequacies of the International Monetary Fund's (IMF's) response to it, initially motivated a multitude of proposals for institutional reform at an international level. However, efforts towards the reform of the international financial architecture have "lost steam" following the sharp "V-shaped" recovery in East Asia. Moreover, a multilateral institution like the IMF is only likely to be reformed if there is a global crisis, and if there is a reasonable consensus about the lessons that may be learned from it. While the East Asian crisis did threaten to turn global, in actuality it did not. The domination of the Washington-based multilateral institutions by industrial countries seems to suggest that such reforms - to the IMF in particular or the international financial architecture more generally - are unlikely to occur any time soon (Eichengreen, 2000). As such, the

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Arabia, South Africa, Turkey; the G-7 group of industrialized economies (Britain, Canada, France, Germany, Italy, Japan and the US). The EU and IMF are also participants.

[16] In order to minimize the possibility of such bias, Eichengreen (2000) argues for giving the IMF's executive directors more independence from governments by amending the Article of Agreement. He recognizes the possibility that, as long as the IMF is dependent on financial supplementation

creation of a regional monetary facility may be an effective "do it yourself" (DIY) self-insurance mechanism for emerging economies in Asia against future crises (King, 1999).

At the very least, serious discussion of the issue may help reinvigorate interests in strengthening the international financial architecture. Regional monetary facilities could complement the IMF in similar ways that regional development banks (such as the ADB) complement the World Bank's operations[17]. The ADB (1999) has weighed in on the AMF proposal, noting that:

> (The) AMF could play a potentially important role as a complement to the IMF in providing funds to crisis-affected countries and developing an early warning system. The implementation of such regional institutions as the AMF as part of the newly emerging financial architecture will help both to enhance the efficiency of global financial markets and to minimize systematic risk (p.44).

Radelet and Sachs (1998b) have suggested that the "arrival of the IMF gives all the confidence of seeing an ambulance outside one's door". If so, from a "credibility" perspective, there would seem to be a need for the IMF to work in tandem with strong regional bodies during future crises if and when they occur. This is particularly so, given that restoration of "market confidence" has been among the stated goals of IMF conditionality in Asia[18]. Unlike other regions, resource constraints are not as much of an issue in Asia (Dieter, 2000). In addition, as noted, where the IMF has been able to orchestrate large financial packages of financial support, these have drawn largely on non-IMF money and have relied on contributions from other sources which have a specific regional interest. Moreover, as noted, it is not simply a question of the *quantity* of

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from national governments for assistance programs to crisis-hit economies, such independence will be illusory. This seems to provide additional rationale for a well-funded regional facility.

[17] Of course, the flip side of this would be that the ADB and other regional development banks are largely redundant and ought themselves to be shut down, leaving only international institutions like the World Bank, IMF and BIS as part of the new financial architecture (Dornbusch, 1999).

[18] Krugman (1998), Mussa (1999) and Rodrik (1999) provide general and interesting discussions of the issue of market confidence and the IMF-mandated reform programs in crisis-hit economies. See Mukand (1999) for a pioneering attempt at providing the analytical underpinnings of these issues.

aggregate financial flows, but also a question of their *quality*. Financing that is available more rapidly and that comes with conditions that are generally perceived as appropriate, will be worth more to their recipients than flows that, while equivalent in volume, come after a delay and are surrounded by uncertainty (such as the IMF's support which was phased and conditional rather than disbursed upfront). As the ADB (1999) notes:

> (o)nce a problem has been identified in a country, the government of that country needs to address it speedily. Given the damage that contagion can produce, regional peer pressure through the AMF could be an effective method of ensuring that this is done. Given its informational advantage and regional location, an AMF would likely be more receptive - hence geared to early action - to a regional crisis than a global institution..The resources the IMF initially made available were insufficient to head off the Asian crisis and additional packages had to be hastily assembled as the crisis unfolded. The AMF could provide such a line of defense on a permanent basis (p.44).

3.2 Regional Contagion

The preceding discussion has alluded to the issue of "contagion". This term broadly refers to the simultaneous occurrence of currency crises in two or more economies. It may be more formally defined as a situation where a currency crisis in one economy leads to a jump to a "bad" equilibrium in a neighboring economy (Masson, 1998)[19]. While there is a need to be very precise in defining the term "currency crisis" in empirical analyses, we take it here to broadly involve an actual break of an exchange rate peg and concomitant currency depreciation, or speculative pressure which may not lead to an exchange rate depreciation, but does lead to an international reserve depletion or an interest rate hike.

The currency crises of the 1990s stress the importance of contagion or negative spillover effects that are largely *regional* in scope (consequently they are also referred to as "neighborhood effects"). We restate that while the East Asian crisis did threaten to

[19] Some have referred to contagion as an increase in asset price volatility across countries.

turn global, it did not. Similarly, while the currencies of Thailand, Hong Kong and the Philippines underwent brief periods of speculative attacks during the Tequila crisis, the crisis predominantly affected Mexico's neighboring economies (such as Argentina). In a recent study using a sample of 20 countries covering the periods of the 1982 Mexican debt crisis, the 1994-95 Tequila crisis and the 1997-98 Asian crisis, De Gregario and Valdes (1999) found contagion to be directly dependent on *geographical horizon*. Using a panel of annual data for 19 developing economies for the period 1977-93, Krueger et al (1998) concluded that a currency crisis in a *regional economy* raises the probability of a speculative attack on the domestic currency by about 8.5 percent points[20].

A high-profile Independent Task Force on the Future of the International Financial Architecture sponsored by the Council on Foreign Relations (1999) recently recognized the existence of contagion and the need for some sort of facility to deal with the problem. According to them, such a facility should work in association with the IMF but not actually be part of the IMF's lending facility. They further argued that only countries affected by "systematic crises" or episodes of contagion ought to be provided the funding, which should be disbursed quickly and be heavily front-loaded. Advocates of monetary regionalism emphasize "contagion" effects as providing the analytical basis for some broader form of economic cooperation regionally. The next section reviews the channels via the currency crises are transmitted regionally and the policy implications thereof.

4. The Economics of Contagion

In the case of Asia, while the crisis spread initially from Thailand (following the devaluation of the baht in July 2, 1997) to Indonesia, Malaysia and the Philippines by the

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[20] Other recent empirical studies confirming this regional dimension of currency crises include Calvo and Reinhart (1996), Frankel and Schmukler (1996), Glick and Rose (1999) and Kaminsky

end of August that year, the South Korean won depreciated in November. In turn, this had reverberations back to the rest of Southeast Asia. Singapore and Taiwan also experienced "modest" currency depreciations during September-October 1997, while Hong Kong's currency board came under severe pressures, resulting in a sharp interest rate hike to maintain the currency peg[21]. What are the channels which cause the contagious spread of crises? Five possible modes of transmission may be deciphered.

4.1 Transmission Channels

The first, and most direct, is the need to remain "cost competitive" vis-à-vis other economies with similar areas of comparative advantage, as a real devaluation in one economy enhances its export competitiveness at the expense of a trading partner (regional competitor). Gerlach and Smets (1995), Huh and Kasa (1997) and Corsetti, et al. (1999) formalize the logic of this attack-induced competitive devaluation (i.e., regional economies' competitiveness vis-à-vis third markets as a result of currency depreciations)[22].

Second, in contrast to contagion due to the "competition" noted above, there may be extensive and growing trade, investment and other intraregional interdependencies, leading to contagion due to economic "complementarities" (including price and income effects due to a currency devaluation and recession in a neighboring, importing economy). Hence, for instance, it is commonly noted that Japanese foreign direct investment (FDI) has developed an intricate division of labor based on both horizontal

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and Reinhart (2000a).

[21] Empirical work by Park and Song (1999) suggests that contagion spread from Taiwan (following the preemptive devaluation of the New Taiwan dollar in October) to Hong Kong and South Korea, which then reverberated back to Southeast Asia.

[22] The broad similarity of comparative advantages of the Asian economies has been shown to hold, at least *ex-post* (as measured by the index of revealed comparative advantage) (Kellman and Chow 1993).

and vertical differentiation in East Asia[23]. This in turn has stimulated intraregional trade, with intra-East Asian trade constituting roughly one half of the respective regions' total trade (based on IMF data).

Third, losses in one economy may lead open-end mutual funds or banks to liquidate positions in other regional economies in which they have exposures. This so-called "forced portfolio adjustment/rebalance" behavior may occur for a number of reasons. These include, an anticipation of increased redemptions; the need to cover losses in other crisis-hit markets ("cash-in" effects), and in order to reduce portfolio risks and improve the liquidity position ("flight to safety" effects)[24]. Of particular significance is the contagious transmission of crises through the interbank lending channel (Eichengreen, 1999 and Van Ricjkegham and Weder, 1999)[25].

Fourth, many extra-regional investors, such as mutual funds and even foreign banks, tend to lump economies in the non-industrialized world into sub-regions, rather than make country-specific evaluations and investments[26]. Insofar as the entire geographical region is looked upon as a single investment class (i.e. "risk clusters")

[23] Ng and Yeats (1999) provide new statistics detailing the extent of such intraregional production and trade in component manufacturing parts in Asia. Intraregional investment has also been spurred by Singapore's drive in recent years to build the external dimension of its economy to complement and supplement the domestic economy.

[24] See Calvo (1999) for a model involving two sets of agents (informed and uninformed), in which margin calls necessitate asset sales in one economy following price declines in another. Folkerts-Landau and Garber (1998) stress risk control systems as a possible reason for region-wide asset sell-offs and resultant contagion; while Van Rijckeghem and Weder (1999) emphasize the value at risk (VAR) technique in particular. However, Schinasi and Todd Smith (1999) show such financial contagion could result from normal/textbook portfolio diversification rules, with risk management techniques and rules not having any significantly different consequences on optimal sell-off periods/strategies. Baig and Goldfajn (1998) test for evidence of contagion in the exchange rates, interest rates, equity, and sovereign debt markets of Thailand, Malaysia, Indonesia, South Korea, and the Philippines. They find that while sovereign spreads show clear evidence of contagion (of the weak form), the same cannot be said of the regional equity markets.

[25] This may also be referred to as the "credit crunch" or "liquidity" channel, as it entails a general reduction in the availability of funds.

[26] In other words, there are region-specific or dedicated funds such as the Asia Pacific Fund, the Asian Tigers Fund and others. See Frankel and Schlumker (1996) for a list of such Asia-devoted

rather than as individual markets, a weakness or attack on one currency could lead to a reassessment of the region's "fundamentals" and the probability of a similar fate befalling regional economies with broadly similar macroeconomic stances (whether *actual* or *perceived*). This is popularly termed the "wake-up call" effect.

This phenomenon could also refer to the sudden realization of how little market participants truly understood about the regional economies, leading to a region-wide downgrading/sell-off (Radelet and Sachs, 1998a). Drazen (1998) develops a contagion model which is based on economies being in an implicit or explicit currency/monetary union. Thus, devaluation by one economy acts as a wake up call to investors in the sense that it leads them to question the commitment of other regional economies to maintain "club membership" by not devaluing. Dooley (2000) suggests that the "bunching together" of crises may be due to revisions in the effective size of official lines of credit available to the regional governments to defend the currency (either from international agencies or ad hoc bilateral, multilateral agreements). The important point here is that unlike the mechanistic portfolio-rebalancing behavior noted previously, in this case, actual linkages between the emerging markets do not have to exist (discussed further below).

Fifth, there is also the possibility of "panic herding" ("bandwagon" effects), either in the form of an international bank run ("race to the exits") leading to illiquidity *a la* Diamond and Dybvig (1983) or the Calvo (1999) capital-crisis model. The Calvo model may be best interpreted as an open economy extension of the models of information-friction that have been recently developed to explain herding behavior in domestic financial markets[27]. Of importance is that fact that there are a wide variety of models and

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funds.

[27] See, for instance, Banerjee (1992) and Scharfstein and Stein (1990). See Chang and Velasco (1998, 1999) and Goldfajn and Valdes (1997) for open economy extensions of the Diamond-

cases that could potentially lead to rational herding. In other words, one does not have to appeal to investor irrationality to motivate panic withdrawals, acute market volatility and busts[28].

An important agenda for empirical research in this field is to determine how relevant the various causes of contagion were in the case of the Asian crisis. In a recent study using a comprehensive data set of financial statistics, product information, geographic data, and stock returns involving 14,000 companies in 46 economies, Forbes (1999) found that all the above transmission mechanisms were important in the case of the Asian crisis, particularly the product competitiveness channel[29]. *A priori*, it is surprising that the common creditor/credit crunch effect (through banks) was not found to be as important. However, this may be explained by the fact that Forbes focused on *international* rather than *regional* propagation and did not explicitly test for the herding channel. Kaminsky and Reinhart (2000b) and Van Rijckeghem and Weder (1999) have concluded that the bank lender channel was particularly important in the Asian crisis, though the inclusion of a trade competition variable tends to dilute the significance, due possibly to the high correlation between competition for funds and trade. This is not inconsistent with Glick and Rose (1999), who have suggested that trade is an important channel for regional contagion.

4.2 Economic Fundamentals and Pure Contagion

A distinction should be made between transmission channels that are related to investor sentiment or psychology (termed "pure contagion") and linkages between

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Dybvig framework of payoff externalities.

[28] In a key paper, Pritsker (1999) has underscored that investor's behavior per se, regardless of whether they are rational or irrational, could cause financial contagion across countries.

[29] Liu et al. (1998) also provides empirical support for this product competitiveness channel in the

countries that are measurable/observable *ex-ante* (referred to as “spillovers” or “inter-relatedness”). Masson (1998) shows how it is conceptually possible for “pure contagion” to make an economy relatively more susceptible to a currency crisis. To be sure, he notes that:

> pure contagion is only possible if changes in expectations are self-fulfilling, and this requires that financial markets be subject to multiple equilibra..(and)…(e)ven if each country separately is not subject to multiple equilibra, together they may be, since the fear of crisis in one will increase the devaluation probability in the other, making a crisis more likely in both.

Shifts in market sentiments could lead to jumps between one equilibra and the other, consequently introducing sharp volatility in financial markets. Theoretically, anything could act as the coordinating device leading to a jump from a “good” to “bad” equilibra. For instance, a devaluation in one country could lead to a major downward spiralling of the currency and the domestic economy (given high interest rate policy and/or unhedged foreign currency liabilities of the country), or precipitate depreciations in regional countries.

Against this analytical background, it is revealing to note that, in almost all crises experiences, the economies initially and worst affected by the crises were also the ones with the worst fundamentals to begin with. On the other hand, even the strongest regional economies can be and have been affected by weaknesses in neighboring economies because of trade and financial interdependencies. Thus, the term contagion is quite apt, because, like a spreading virus, agents with the weakest immune system to begin with are the ones most severely impacted. This point is nicely illustrated in the case of Asia using Table 2, which is borrowed from Goldstein and Hawkins (1998).

It is fairy clear that, by most counts, Thailand had the worst “fundamentals” (Rajan, 2001). It was followed by Indonesia, which was the most severely impacted by

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case of the Southeast Asian economies.

the crisis. Hong Kong and Singapore, which seem to have had the best fundamentals, were the least affected (Rajan and Sen, 2000). Malaysia and the Philippines were somewhere "in between". On the other hand, even the strongest regional economies can be and have been affected by weaknesses in neighboring economies mainly because of trade and financial interdependencies[30].

The fact that stronger, though much more open and regionally integrated economies were much less affected, underscores the need for the primary focus to be placed squarely on the domestic policy arena. In the Asian context, this broadly involves strengthening the financial systems and corporate and industrial structures (Balino et al., 2000). However, given the fact that regional *spillovers* or *interdependencies* are fairly high and growing in Asia, even relatively strong regional economies can be and have been affected by crises in the weaker neighboring economies. These policy externalities suggest the need for some form of regional cooperation in the financial and macroeconomic spheres. The emphasis on sound domestic economic policies and a regional approach to crisis prevention is fully consistent with the spirit of "subsidiarity" which is being increasingly emphasised by the IMF (also see Manzano, 2001).

Some might argue that *pure contagion* will be far less important in the future, as investors seem to have differentiated between the regional economies following the crisis (Van Rijckeghem and Weder, 1999). This view is debatable. In any case, indications are that countries in the region will be more susceptible to the fundamentals of the neighboring ones, as the stronger economies like Singapore have sharply escalated their investments in the crisis-hit economies such as Thailand, where asset prices remain depreciated[31]. In other words, regional *interdependencies* can be expected

[30] Similarly, in the case of the Tequila crisis, Chile, which was acknowledged to be by far the strongest regional economy in Latin America, was relatively unaffected.

[31] Thus, figures from the Thai central bank show Singapore's direct investment in Thailand to

to rise significantly in the future, suggesting the need for a regional monetary facility more than ever.

5. Concluding Remarks

The East Asian economies have, since the 1990s, taken small but important steps towards enhanced monetary regionalism as a means of promoting regional economic stability in an age of global capital markets. The creation of the EMEAP (Executives' Meeting of East Asia and Pacific Central Banks), the introduction of a web of bilateral swap and repurchase arrangements which were recently expanded to a regional East Asian level to include ASEAN plus China, Japan and Korea (the "Chiang Mai Initiative"), the Manila Framework and the ASEAN-ADB surveillance mechanism, are all steps in the right direction[32]. The creation of a regional monetary facility would be a natural evolution of this process and recognition of the region's commonality of interests. The time seems ripe to take the next step and explore the modalities and detailed mechanisms necessary to make such a facility operational, but always keeping in mind the region's commitment to "open regionalism" (particularly with regard to membership)[33]. There are pre-existing channels and organizations in Asia and elsewhere which promote regional economic cooperation in international trade and related spheres, with a regional monetary facility being a "natural" intensification of such efforts. As in the case of trading arrangements in Asia, monetary regionalism can be designed to complement and be consistent with existing multilateral arrangements.

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have jumped to 31.7 billion baht in 1998, up from 9.9 billion baht in 1997, making Singapore the third largest investor in the country after the US and Japan (**Far Eastern Economic Review**, October 21, 1999, p.68).

[32] Manzano (2001) and Rajan (2000b) discuss the ASEAN-ADB surveillance initiative in some detail.

[33] For instance, while initial membership presumably would involve the APT economies (ASEAN plus 3), Australia, New Zealand, Taiwan, India (which is a member of G-20) are some of the

Even if one is convinced about the potential benefits of monetary regionalism, there nevertheless remain a number of outstanding questions that need to be sorted out with regard to a regional facility like the AMF (Bird and Rajan, 2000). An immediate concern is invariably one of how such a regional facility would co-exist with the IMF. Would their roles be *complementary* or *competitiv*e? Some analysts have argued for the need to break the "monopoly" of the IMF in the realm of *conditionality* and *crisis managemen*t. Others have gone on to argue that a regional facility may be able to design "better" or "more appropriate" conditionality than the IMF, because of the former's supposed superior regional knowledge and its closer geographical proximity to its member countries (ADB, 1999).

Indeed, opinions on these issues even among ASEAN members vary. For instance, when asked about the AMF, Singapore's Senior Minister, Lee Kuan Yew felt that, for AMF to be effective, "it has to play a subsidiary role, subsidiary to the main fund"[34]. He noted that no Asian group of governments is able to tell another that they will not be supported if they do not comply, suggesting the need for an external body such as the IMF to ensure enforcement. On the other hand, the President of the Thailand Development Research Institute, Chalongphob Sussangkarn is of the view that if the AMF is to replicate IMF albeit regionally, then there is no need for it. Instead, the regional agency should be defined mainly in relation to the promotion of monetary cooperation and regional financial and capital market developments (Chalongphob, 2000).

Space limitations preclude a detailed and systematic discussion of these issues. Suffice it to note that, while any suggestion that a regional monetary facility would have a comparative advantage in diagnosing regional economic problems is debatable, a

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possible future entrants.

[34] See transcript of discussion at:
http://www.nni.nikkei.co.jp/FR/NIKKEI/inasia/future/2000discussion.html

regional monetary facility might be better able than the IMF to reach a genuine consensus on policy reform to ensure greater ownership of a program of reform.

Bibliography

Altbach, E. (1997). "The Asian Monetary Fund Proposal: A Case Study of Japanese Regional Leadership", **Japan Economic Institute Report No.47A** (December).

Asian Development Bank (ADB) (1999). **Asian Development Outlook 1999**, Manila: Oxford University Press.

Baig, T. and I. Goldfajn (1998). "Financial Market Contagion in the Asian Crisis", **Working Paper No.98/155**, IMF.

Balino, T., C. Enoch, A. Gulde, C. Lindgren, M. Quintyn and L. Teo (2000). "Financial Sector Crisis and Restructuring: Lessons from Asia", **Occasional Paper No.188**, IMF.

Banerjee, A. (1992). "A Simple Model of Herd Behavior", **Quarterly Journal of Economics**, 107, pp.796-817.

Bello, W. (2000). "Regional Currency Swap Arrangement: A Step Towards Asian Monetary Fund?", **Focus on Trade No.50**, Transnational Institute. (http://www.tni.org/archives/bello/swap.htm).

Bergsten, F. (1998). "Reviving the 'Asian Monetary Fund'", **Policy Briefs No.98-8**, Institute for International Economics (November).

Bird, G. and R. Rajan (2000). "Is there a Case for an Asian Monetary Fund?", **World Economics**, 1, pp.135-43.

Bird, G. and D. Rowlands (1999). "IMF Lending: How is it Affected by Economic, Political and Institutional Factors?", **Working Paper No.99/6**, Surrey Centre for International Economic Studies.

Calvo, G. (1999). "Contagion in Emerging Markets: When Wall Street is a Carrier", mimeo (May).

Calvo, S. and C. Reinhart (1996). "Is there Evidence of Contagion Effect", in G. Calvo, M. Goldstein and E. Hochreiter (eds.), **Private Capital Flows to Emerging Economies After the Mexican Crisis**, Washington, DC: Institute for International Economics.

Chalongphob, S. (2000). Paper presented at the 10th GISPRI Symposium on "Beyond the Crisis - Rethinking Japan's Role in Asia." Global Industrial and Social Progress Research Institute, Tokyo, Japan (March 22).

Chang, L.L. and R. Rajan (1999). "East Asian Cooperation in Light of the Regional Crises: A Case of Self-Help or No-Help?", **Australian Journal of International Affairs**, 53, pp.261-81.

Chang, R and A. Velasco (1998). "Financial Crises in Emerging Markets: A Canonical Model", **Working Paper No.6606**, NBER.

Chang, R and A. Velasco (1999). "Liquidity Crises in Emerging Markets: Theory and Policy", in B. Bernanke and J. Rotemberg (eds.), **NBER Macroeconomics Annual 1999**, Chicago: The MIT Press.

Corsetti, G., P. Pesenti and N. Roubini (1999). "Paper Tigers?: A Model of the Asian Crisis", **European Economic Review**, 43, pp.1211-1236.

Council on Foreign Relations (1999). **Safeguarding Prosperity in a Global Financial System: The Future International Financial Architecture**, Washington, DC: Institute for International Economics.

Crompton, T. (2000). "East Asia Unites to Fight Speculators", **International Herald Tribune** (August 5). (http://www.iht.com/IHT/TC/00/tc050800.html).

De Gregario, J. and R. Valdes (1999). "Crisis Transmission: Evidence from the Debt, Tequila, and Asian Flu Crises", mimeo (October).

Diamond, P. and P. Dybvig (1983). "Bank Runs, Deposit Insurance, and Liquidity", **Journal of Political Economy**, 91, pp.401-19.

Dieter, H. (2000). "Asia's Monetary Regionalism", **Far Eastern Economic Review** (July 6).

Dooley, M. (2000). "A Model of Crises in Emerging Markets", **Economic Journal**, 110, pp.256-72.

Dornbusch, R. (1999). "What Future for International Financial Institutions", mimeo (May).

Drazen, A. (1998). "Political Contagion in Currency Crises", mimeo (April).

Economist (2000). "Towards a Tripartite World" (July 13).

Eichengreen, B. (1999). **Toward a New International Financial Architecture: A Practical Post-Asia Agenda**, Washington, DC: Institute for International Economics.

Eichengreen, B. (2000). "Strengthening the International Financial Architecture: Where do we Stand"?, **ASEAN Economic Bulletin**, 17, pp.175-92.

Folkerts-Landau, D. and P. Garber (1998). "Capital Flows from Emerging Markets in a Closing Environment", **Global Emerging Markets**, 1, Deutsche Bank (London).

Forbes, K. (1999). "How are Shocks Propagated Internationally?: Firm-Level Evidence from the Russian and East Asian Crisis", mimeo (September).

Frankel, J. and S. Schmukler (1996). "Crisis, Contagion, and Country Funds: Effects on East Asia and Latin America", **Working Paper No.96-04**, Center for Pacific Basin Monetary and Economics Studies, Federal Reserve of San Francisco.

Gerlach, S. and F. Smets (1995). "Contagious Speculative Attacks", **European Journal of Political Economy**, 11, pp.5-63.

Glick, R. and A. Rose (1999). "Contagion and Trade: Why are Currency Crises Regional?", **Journal of International Money and Finance**, 18, pp.603-17.

Goad, P. (2000). "Asian Monetary Fund Reborn". **Far Eastern Economic Review**, May 18, p.54

Goldfajn, I. and R. Valdes (1997). "Capital Flows and the Twin Crises: The Role of Liquidity", **Working Paper No.97/87**, IMF.

Goldstein, M. and J. Hawkins (1998). "The Role of Contagion in the Asian Financial Crisis", mimeo, Reserve Bank of Australia.

Hamada, K. (1998). "IMF Special: Keeping Alive the Asian Monetary Fund", **Capital Trends**, 3 (September). (http://www.gwjapan.com/ftp/pub/nrca/ctv3n10f.html).

Hughes, C. (2000). "Japanese Policy and the East Asian Currency Crisis: Abject Defeat or Quiet Victory?", **Review of International Political Economy**, 7, pp.219-53.

Huh, C. and K. Kasa (1997). "A Dynamic Model of Export Competition, Policy Coordination, and Simultaneous Currency Collapse", **Working Paper PB 97-08**, Center for Pacific Basin Monetary and Economics Studies, Federal Reserve of San Francisco.

Ito, T., E. Ogawa and Y. Sasaki (1998). "How did the Dollar Peg Fail in Asia?", **Journal of the Japanese and International Economies**, 12, pp.256-304.

Kaminisky, G. and C. Reinhart (2000a). "On Crises, Contagion, and Confusion", **Journal of International Economics**, 51, pp.145-68.

Kaminsky, G. and C. Reinhart (2000b). "Bank Lending and Contagion: Evidence from the Asian Crisis", T. Ito and A. Krueger (eds.), **Regional and Global Capital Flows: Macroeconomic Causes and Consequences**, Chicago: University of Chicago Press.

Katzenstein, P., N. Hamilton-Hart, K. Kato and Ming, Y. (2000). "Asian Regionalism", **East Asia Series No.107**, Cornell University East Asia Program, USA.

Kellman, M. and Chow, P. (1993). **Trade - The Engine of Growth in East Asia**, New York: Oxford University Press.

King, M. (1999). "Reforming the International Financial System: The Middle Way", speech delivered to a session of the Money Marketeers at the Federal Reserve Bank of New York (September 9).

Kirton, J. (1999). "The G7 and China in the Management of the International Financial System", **University of Toronto G8 Information Centre**. (http://www.library.utoronto.ca/g7/scholar/kirton199903/china4.htm)

Kojima, A. (2000) "Lessons from the Asian Economic Crisis", **Journal of Japanese Trade and Industry** (November). (http://www.jef.or.jp/en/jti/200011_015.html).

Krueger, M., P. Osakwe and J. Page (1998). "Fundamentals, Contagion and Currency Crises: An Empirical Analysis", **Working Paper No.98-10**, Bank of Canada.

Krugman, P. (1998). “The Confidence Game”, **New Republic** (October 5).

Liu, L, M. Noland and S. Robinson (1998). “Asian Competitive Devaluations”, **Working Paper 98-2**, Institute for International Economics.

Masson, P. (1998). “Contagion: Monsoonal Effects, Spillovers, and Jumps between Multiple Equilibria”, **Working Paper No.98/142**, IMF.

Manzano, G. (2001). “Is there Any Value-added in the ASEAN Surveillance Process?”, **ASEAN Economic Bulletin**, this issue.

McNulty, S. (2000). “Boost for Asean support system”, **Financial Times**, December 29

Montagnon, P. and S. McNulty (1998). “Asia: US, Japan Launch $10bn Crisis Fund”, **Financial Times** (November 17).

Moreno, R. (1997). “Dealing with Currency Speculation in the Asian Pacific Basin”, **Economic Letter No. 97-10**, Center for Pacific Basin Monetary and Economics Studies, Federal Reserve of San Francisco.

Mukand, S. (1999). “Globalization and the ‘Confidence Game’”, **Discussion Paper No.99-24**, Economics Department, Tufts University.

Mussa, M. (1999). “Reforming the International Financial Architecture: Limiting Moral Hazard and Containing Real Hazard”, mimeo (August).

Ng, F. and A. Yeats (1999). “Production Sharing in East Asia: Who Does What for Whom, and Why?”, **Policy Research Working Paper No.2197**, World Bank.

Park, Y. and C. Song (1999). “Financial Contagion in the East Asian Crisis: With Special Reference to the Republic of Korea”, mimeo (November).

Pieper, U. and L. Taylor (1998). “The Revival of the Liberal Creed: The IMF, the World Bank, and Inequality in a Globalized Economy”, **Working Paper No.4**, Centre for Economic Policy Analysis, New School for Social Research.

Pritsker, M. (1999). “The Channels for Financial Contagion”, mimeo (October).

Radelet, S. and J. Sachs (1998a). “The Onset of the East Asian Financial Crisis”, in P. Krugman (ed.), **Currency Crises**, Chicago: University of Chicago Press.

Radelet, S. and J. Sachs (1998b). “The East Asian Financial Crisis: Diagnosis, Remedies, Prospects”, **Brookings Papers on Economic Activity**, 1, pp.1-74.

Rajan, R. (2000a). “Examining the Case for an Asian Monetary Fund”, **Discussion Paper No.0002**, Centre for International Economic Studies, University of Adelaide.

Rajan, R. (2000b). “Financial and Macroeconomic Cooperation in ASEAN: Issues and Policy Initiatives”, in M. Than (ed.), **ASEAN Beyond the Regional Crisis: Challenges and Initiatives**, Institute of Southeast Asian Studies: Singapore.

Rajan, R. (2001). "(Ir)relevance of Currency Crises Theory to the *Devaluation* and *Collapse* of the Thai Baht", **Princeton Studies in International Economics No.88**, International Economics Section, Princeton University, forthcoming.

Rajan, R. and R. Sen (2000). "Hong Kong, Singapore and the East Asian Crisis: How Important were Trade Spillovers?" **Discussion Paper No.0043**, Centre for International Economic Studies, University of Adelaide.

Rajan, R. and I. Sugema (1999) "Capital Flows and the Credit Transmission Channel in Southeast Asia", **Discussion Paper No.99/25**, Centre for International Economic Studies, University of Adelaide.

Reich, S. (2000). "Miraculous or Mired?: Contrasting Japanese and American Perspectives on Japan's Economic Problems", **Pacific Review**, 13, pp.163-93.

Rhodes, M. and R. Higgott (2000). "Introduction: Asian Crises And The Myth Of Capitalist 'Convergence'", **The Pacific Review**, 13, pp.1-19.

Rodrik, D. (1999). "Governing the Global economy: Does One Architectural Style Fit All?", mimeo (July).

Rose, A. (1999). "Is there a Case for an Asian Monetary Fund?", **Economic Letter No.99-37**, Center for Pacific Basin Monetary and Economics Studies, Federal Reserve of San Francisco.

Rowley, A. (1999). "ASEAN Lobbies Japan to be Included in G-20", **Business Times**, Singapore (October 10).

Rowley, A. (2000). "IMF Policy Shift May Revive AMF Idea", **Business Times**, Singapore (October 2).

Scharfstein, D. and J. Stein (1990). "Herd Behavior and Investment", **American Economic Review**, 80, pp.465-79.

Schinasi, G. and R. Todd Smith (1999). "Portfolio Diversification, Leverage, and Financial Contagion", **Working Paper No.99/136**, IMF.

Stratfor (2000) " An Asian Monetary Fund – More Harm Than Good?" (September 21). (http://www.stratfor.com/SERVICES/giu2000/092100.asp).

Taniguichi, T. (2000). "Introducing the Idea of Creating "Asian Monetary Fund" at the Fukuoka Meeting, **Nikkei Business Publications, Inc.** (July 17). (http://www.nikkeibp.com/business/20000717.html).

Thaker, S. (1999). "The High Politics of IMF Lending", **World Politics**, 52.

Valdes, R. (1996). "Emerging Market Contagion: Evidence and Theory", mimeo,

Van Rijckeghem, C. and B. Weder (1999). "Financial Contagion: Spillovers Through Banking Centres", mimeo (September).

Wade, R., and Veneroso, F. (1998). “The Resources Lie Within”, **The Economist**, (November 7), pp.19-21.

Wang, Y. (2000). “The Asian Financial Crisis and its Aftermath: Do we Need a Regional Financial Arrangement”?, **ASEAN Economic Bulletin**, 17, pp.205-17.

Wheatley, A. (2000). “Closer Asian Monetary Ties may Become Reality”, **Bangkok Post**, Thailand, August 10.

Zhang, X., M. Fan and W. Yi (1998). “Is Devaluation of the Chinese Yuan Inevitable”? – The Impact of East Asia’s Crisis on China”, **Research Paper No.621**, Department of Economics, University of Melbourne.

World Bank (1999). **Global Economic Prospects and the Developing Countries**, New York: Oxford University Press.

Table 1
IMF-led International Financial Assistance *Committed* to Thailand and Indonesia, (US$ billions)

Country and Source of Assistance	Amount ($ billions)
Indonesia:	
IMF	11.2
World Bank	5.5
ADB	4.5
Countries	21.1
USA	3.0
Japan	5.0
Australia	1.0
China, P.R.C.	1.0
Hong Kong	1.0
Malaysia	1.0
Singapore	5.0
Others	4.1
Total	**42.3**
IMF *disbursements* as of January 17, 1999	8.8
Thailand:	
IMF	34.0
World Bank	1.5
ADB	1.2
Countries	10.5
Japan	4.0
Australia	1.0
Brunei	0.5
China, P.R.C.	1.0
Hong Kong	1.0
Indonesia	0.5
Korea	0.5
Malaysia	1.0
Singapore	1.0
Total	**47.2**
IMF *disbursements* as of January 17, 1999	3.1
Mexico:	
IMF	17.8
World Bank and Inter-American Bank	2.8
BIS/G10	10.0
USA	20.0
Total	**50.6**

Source: Chang and Rajan (1999)

Table 2
Summary of Economic Fundamentals of Selected Asian Economies

Fundamentals	Country Rankings[a]						
	1	2	3	4	5	6	7
External							
International Reserves[b]	P	I	M	T	K	H	S
Current Account/GDP[c]	T	K	M	P	I	H	S
Debt/GDP[d]	T	P	I	M	S	H	S
Export Slowdown[e]	T	S	M	K	H	P	I
Real Exchange Rate: deviation from PPP[f]	S	K	H	M	T	I	P
Banking Strength							
Capital Adequacy[g]	K	T	I	M	P	H	S
Nonperforming Loans[h]	M	T	K	I	P	S	H
Bank Ratings[i]	I	K	T	P	H	M	S
Liquidity Mismatches							
Excess Credit Growth[j]	P	M	T	I	S	K	H
Short-term external debt/Reserves[k]	K	I	T	P	M	H	S
Broad Money/Reserves[l]	T	I	P	K	M	S	H
Overall Average[m]	T	I	K	P	M	S	H
Overall based on Thailand Weights[n]	T	I	K	P	M	S	H

Notes: a) I - Indonesia, H - Hong Kong, K – South Korea, M - Malaysia, P - Philippines, S - Singapore, T - Thailand. Ordinal ranking in descending order of "bad" fundamentals; b) in SDRs, June 1997; c) 1996; d) 1997; e) change (%) in 1996 less the average change (%) previous three years; f) June 1997; g) unclear from source, but probably average of 1996 and 1997; h) 1997 estimates; i) May 1996; j) growth of credit to private sector relative to nominal GDP, 1996; k) June 1997; i) June 1997; m) equal weights to all fundamentals (including two others included in original sources); n) greater weights given to fundamentals in which Thailand is weakest

Source: Goldstein and Hawkins (1998)

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0104 Anderson, Kym, "Globalization, WTO and ASEAN", February 2001. (Forthcoming in *ASEAN Economic Bulletin*, 2001).

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0049 Anderson, Kym, "Australia in the International Economy", December 2000. (Forthcoming as Ch. 11 in *Creating an Environment for Australia's Growth*, edited by P.J. Lloyd, J. Nieuwenhuysen and M. Mead, Cambridge and Sydney: Cambridge University Press, 2001.)

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0039 Ramkishen S. Rajan and Reza Siregar, "Private Capital Flows in East Asia: Boom, Bust and Beyond", September 2000. (Forthcoming in *Financial Markets and Policies in East Asia*, edited by G. de Brouwer, Routledge Press)

0038 Yao, Shunli, "US Permanent Normal Trade Relations with China: What is at Stake? A Global CGE Analysis", September 2000.

0037 Yao, Shunli, "US Trade Sanctions and Global Outsourcing to China", September 2000.

0036 Barnes, Michelle L., "Threshold Relationships among Inflation, Financial Market Development and Growth", August 2000.

0035 Anderson, Kym, Chantal Pohl Nielsen and Sherman Robinson, "Estimating the Economic Effects of GMOs: the Importance of Policy Choices and Preferences", August 2000. (Forthcoming in abridged form in *Market Developments for Genetically Modified Agricultural Products*, edited by V. Santariello, R.E. Everson and D. Zilberman, London: CABI, 2001.)

0034 Anderson, Kym and Chantal Pohl Nielsen, "GMOs, Food Safety and the Environment: What Role for Trade Policy and the WTO?", September 2000. (Forthcoming in *Tomorrow's Agriculture: Incentives, Institutions, Infrastructure and Innovations*, edited by G.H. Peters and P. Pingali, Aldershot: Ashgate for the IAAE, 2001.)

0033 Nguyen, Tin, "Foreign Exchange Market Efficiency, Speculators, Arbitrageurs and International Capital Flows", July 2000.

0032 Nielsen, Chantal Pohl and Kym Anderson, "Global Market Effects of Alternative European Responses to GMOs", July 2000.

0031 Rajan, Ramkishen S., and Reza Siregar, "The Vanishing Intermediate Regime and the Tale of Two Cities: Hong Kong versus Singapore", July 2000.

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