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### **Comment** Mahani Zainal-Abidin

This paper is another contribution to the growing literature on contagion from economic and financial crises. Previous studies on the East Asian crisis have examined the causes of the crisis, but this paper has opened a new horizon—namely, a vulnerability index. This identifies the links that give rise to vulnerability and thus contagion. Exposure to a common bank is one of the channels in which the disturbances arising from a crisis are transmitted; other channels of transmission are trade and financial links. The role of a common bank lender was painfully clear in the Latin American crises, where U.S. banks' presence was almost omnipotent. Subsequent stabilization hinged on rescheduling these loans. The presence of a common lender in East Asian economies is a more recent phenomenon and this paper defines how much or how little foreign banks have to do with contagion. Another aspect of contagion that the paper examines is the interdependence or pattern of causality among the affected countries. It refers to the daily pattern of interest and exchange rates among the affected East Asian countries and confirms that there was a strong interdependence among most of these countries in the full post-crisis period.

The vulnerability index developed by this paper shows that (in descending probability) Malaysia, South Korea, Indonesia, and the Philippines are exposed to Thailand, the "initiator" of the crisis. This index is an improvement on earlier indicators of linkages, which were based mainly on trade and financial relationships, because it captures the third transmission channel and ranks each country's vulnerability. However, as acknowledged by the authors, this index is unable to predict the severity of the contagion effects. Moreover, the vulnerability ranking does not follow the actual sequence in which the countries were affected last time. For example, although Malaysia's ranking is higher than Indonesia's (meaning that Malaysia is more vulnerable to a crisis in Thailand), in actuality, Malaysia experienced a deep economic contraction much later than did Indonesia, namely in the first quarter of 1998.

The efficacy of the vulnerability index in explaining the transmission outcome and the role of a common bank lender can perhaps be improved by taking into account the following.

## Ratio of Foreign Borrowing to Total Loan Exposure

In identifying whether a country belongs to a common bank cluster, the paper classifies the foreign liability of Indonesia, Malaysia, the Philippines, South Korea, and Thailand according to its source—Japan, Europe, or the United States. However, the impact of recall of loans by foreign

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banks depends in the first instance on the relative exposure of each country to foreign bank loans. Among the affected East Asian countries, Malaysia has the smallest percentage of foreign borrowings. For example, as at end of June 1997, Malaysia's short-term external debt was 11.2 percent of its total borrowing, while for South Korea it was 67.5 percent, for Thailand, 45.7 percent, and for Indonesia, 34.2 percent (Raghavan 1998). This was because of the Malaysian policy that only companies with foreign income capability can borrow overseas. Thus, the recall of funds by foreign banks in Malaysia had relatively little effect.

# The Role of Foreign Bank Withdrawals in Transmitting the Effects of the Crisis

Bank loan recalls are arguably less damaging than the other two effects in finance and trade because banks are unlikely to trigger a massive capital outflow from borrowing countries. The crisis usually unfolds in stages. During the first stage, there is interaction among portfolio investment, local equity market, and domestic banks. An event triggers portfolio outflows and causes a sharp decline in the equity market. Then local banks become vulnerable either because they have extended financing to purchase overvalued shares or because shares have been used as collateral for loans. Interest rates are raised to support the exchange rate and banks begin to trim their loans. In the second stage, the domestic financial system faces a liquidity crunch and this massively hits all other parts of the national economy. Foreign banks reduce their exposure to such a troubled economy, which exacerbates the matter.

Foreign banks are not leaders in contagion because, as shown above, they are not in the first stage. Furthermore, they may not be able to liquidate their positions easily. To recall a loan is more difficult than to repatriate short-term capital or trade flows. Bank loans are very frequently invested in tangible assets such as buildings, machinery, and equipment. In East Asian countries, the proceeds from foreign loans during their high growth period (1990–97) were directed mainly to roads, energy plants, and property development. The only immediately available action is to revoke those few loans not yet disbursed. Thus, in view of these different sequences and speeds of transmission among the three channels, the index would be useful as a predicative tool, provided that appropriate weights were assigned to the three channels.

# Exposure to European Banks as a Common Lender

The paper has shown that East Asian economies borrowed heavily from both Japanese and European banks. In Indonesia, Malaysia, the Philippines, and South Korea, the exposure to European banks in June 1998 was much larger than for Japanese banks. Thailand was the exception. The withdrawal pattern of the two bank blocs was also different—the Japanese

withdrew first, from the middle of 1997, whereas Europeans did not begin until the first half of 1998 and their percentage of withdrawal was larger. Thus, Europe should be considered a separate cluster.

## **Investment Component of the Index**

The index consists of trade and financial links and exposure to a common lender. Perhaps the analysis on regional economic links can be extended to investment relationships as a channel for contagion. The development experience of the Southeast Asian region demonstrates the role of foreign direct investment (FDI) in linking these economies through an integrated production chain. For example Japanese multinational companies have strings of production units in different countries of the Association of Southeast Asian Nations (ASEAN), each producing one part of the production chain. Nonmultinational regional investment is also substantial; for example, Singapore has significant investments in Malaysia and Indonesia. With close investment links, a crisis in one country may quickly affect production in another, the most obvious reasons being shortage of fresh capital and lower demand. In an integrated FDI production network, an external factor, say, low demand as a result of any unrelated event outside the region, can reduce the production of the entire network. Since the early 1990s, South Korea has been a major investor in ASEAN, and when the latter's economy contracted, a number of Korean companies in the region scaled down their operations.

## **Interdependence Test Results**

The results of the interdependence test prompt a question: Why was the interdependence, as instanced by similarities in trends in interest rates and exchange rates, seen during the crisis and not before? An explanation is that the crisis forced the affected countries to adopt similar monetary and exchange rate policies. Countries floated their exchange rates and since their economies were already closely linked, a similar impact across the border was not unexpected. A more convincing explanation is that Thailand, South Korea, and Indonesia followed closely a set of conditionalities when they received assistance from the International Monetary Fund (IMF). Another explanation is that investors viewed the affected region as a single entity. Delay in times of crisis can be costly and investors used information about one country as a surrogate for all countries in the region.

The finding from the interdependence test that causality extended from Thailand to Indonesia and South Korea but not to the Philippines or Malaysia (during the period 2 July 1997 to 16 November 1997) should be compared with earlier estimates of the vulnerability index. According to that index, Malaysia is the most vulnerable to a crisis originating from Thailand, followed by South Korea, Indonesia, and the Philippines. Thus a

relationship defined solely on financial channels (the causality result using interest and exchange rates) can give a different picture from one constructed using broader criteria (the vulnerability index estimated from trade and financial links and exposure to a common bank lender). This supports the earlier assertion that it is essential to understand the order of events in the transmission channel. As shown by these two indicators, the financial and trade channels depict the immediate impact while the banking perspective takes place at a later stage. Nevertheless, the impact of all channels can be equally strong.

Another finding of the interdependence test is that Malaysia's interest rate was not significantly affected in the full post-crisis period, and the paper speculates that this insulation came from the introduction of selective exchange control in September 1998. Malaysia, like other affected countries, adopted a restrictive monetary policy in order to support the exchange rate during the early period of the crisis (2 July–16 November 1997). However, this was reversed to a looser monetary stance in the first quarter of 1998, and the other affected countries took a similar approach (albeit a bit later). The lowering of the interest rate did not have much effect at first, as there was still a big liquidity crunch. Thus, the policy to lower the interest rate was introduced much earlier than the selective capital control initiative.

To sum up, this paper notes that many emerging economies are moving toward greater financial sector liberalization and that foreign banks have an increasing presence. This had serious implications, as seen during the East Asian crisis. Financial liberalization has woven regional economies together irrevocably. No member of the group or cluster can be fully immune from the afflictions of its neighbors. The financial sector liberalization has increased the emerging economies' capability to attract capital to finance growth. During the crisis, the two most obvious clusters were those based on equity markets (portfolio flows) and monetary policy (interest rates). Another indicator of the existence of a cluster is the interest rate spread of bonds, which are the closest surrogate for a state's sovereign risk. As shown by this paper, a country is more vulnerable to the problems of other members of the same cluster and is less exposed to crises in other clusters. Financial liberalization may well encourage the widening of a cluster as more economies become integrated. Eventually, will all clusters combine to form a single global group? If so, does financial liberalization lead to frequent crises and less immunity from contagious events?

As they recover from their respective crises, the affected East Asian countries are under pressure to open their doors to foreign banks. Among the reasons given are that domestic banks are too close to some selected customers, that they are not prudently managed, and that they need fresh injections of funds to replenish their depleted capital. These criticisms are not totally incorrect, but foreign banks are not blameless, either. They lent

aggressively during the boom, especially in overinvested sectors such as property and infrastructure. There have been calls to "bail-in" (that is, to share the burden of the crisis) foreign banks to encourage them to be more prudent in the future. Another concern about a large presence of foreign banks is that in times of a crisis, a government or central bank is likely to have more persuasive power over domestic banks than foreign banks. The evidence provided by this paper on the role of foreign banks in a crisis is a vital lesson for emerging economies to bear in mind when facing the challenges posed by financial liberalization.

### Reference

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