LIBERALIZATION AND DEVELOPMENT OF ASIAN FINANCIAL MARKETS

by

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Over the past twenty years, the growing integration and deepening of world financial markets has produced large gains in the efficiency of resource allocation. At the same time, however, growing financial market integration has exposed individual economies to external shocks. This has concerned policy-makers because the last two decades have been a period of very large shocks in the world economy, both monetary and real, that have led to sharp increases in the volatility of asset prices. A recent IMF study estimates that nominal and real exchange rate volatility in the 1980s was over five times greater than it was in the late 1960s. Real interest rate volatility increased even more over the same period.

These developments pose a dilemma for policy-makers in the Asian Pacific Basin. On the one hand, Asian Pacific Basin economies need to develop their domestic financial sectors further and integrate them closely with world financial markets in order to achieve economic maturity. On the other hand, financial development and integration will make Asian economies more vulnerable to volatility in asset markets. While financial instruments are available to manage such volatility, these instruments are very complex and present special challenges to policy-makers.

My talk today will focus on the effects of asset volatility and financial innovation on Asian financial markets. I will begin by highlighting the main features of the development of financial markets in the Asian Pacific Basin. I will then discuss how Asian economies have developed markets for managing the risks associated with volatility

in asset prices, particularly in interest rates and exchange rates. I will conclude by listing the challenges confronting Asian policy-makers as they pursue the further development of Asian financial markets.

Developments in Asian financial markets

Up to well into the 1980s, policy-makers in the Asian Pacific Basin were less concerned about asset market volatility and financial innovation than their counterparts in Western economies. One reason was that government controls tended to insulate Asian financial markets from the effects of growing volatility in interest rates and exchange rates abroad.

Controls that limited entry and fixed interest rates tended to reduce the exposure to interest rate risk in domestic financial markets. Furthermore, restrictions on international capital movements that were prevalent up to the late 1970s, even in Japan, reduced the exposure of Asian financial institutions to exchange rate risk.

Over time, however, the attractiveness of protected and restricted Asian financial markets declined. In some countries, financial controls hampered the development of new financial instruments called for by changes in domestic macroeconomic policy. For example, in Japan, the 1973 oil shock and the subsequent decline in potential output contributed to government deficits in the 1970s. (Japan's general government financial

balances shifted from a surplus of 0.4 percent of GNP in 1974 to a peak deficit of 5.5 percent of GNP in 1978.) Efforts to finance these deficits through the issuance of government bonds in turn contributed to pressures for interest rate liberalization.

In other countries - such as Korea and Taiwan in the 1970s - interest rate controls and credit restrictions encouraged the growth of vigorous curb markets that weakened the effectiveness of these controls and placed the formal financial sector at a competitive disadvantage.

Moreover, policy-makers became aware that government intervention in financial markets could be costly. In one of the newly-industrialized Asian economies, the government directed credit to priority sectors at preferential interest rates, which contributed to over a billion dollars in losses to banks in the 1980s. In another newly-industrialized economy, controls on private capital outflows apparently contributed to strong upward pressure on the currency and to volatility in the stock market and the real estate market.

These developments prompted the gradual liberalization of Asian financial markets. Since the late 1970s, governments in Asia have relaxed or eliminated a wide variety of regulations, such as aggregate or selective credit targets, restrictions on asset holdings, and interest rate controls.

Furthermore, foreign exchange controls in Asia are now less restrictive than in some other regions of the world, with regard to current as well as capital account transactions. In 1989, a number of Asian economies, such as Hong Kong, Singapore, Japan and Taiwan, did not require exporters to surrender their foreign exchange to the government, and placed no restrictions on payments for invisibles. Restrictions on capital transactions were absent or relatively moderate in Hong Kong, Singapore, Japan, Indonesia, Malaysia and Taiwan.[1]

Financial liberalization has increased the exposure of Asian financial markets to asset price volatility. However, as a result of the gradual pace of change in Asian financial markets, Asian financial institutions probably are still less vulnerable to domestic interest rate risk than are their counterparts in Western industrial economies. For example, in Japan, banks are less exposed to interest rate risk because deposits and loans, as opposed to marketable securities, are dominant in bank balance sheets. The interest rates on certain types of deposits and on loans have fluctuated less than market rates because they are traditionally linked to the Bank of Japan's discount rate.[2]

While the details vary, similar forces have limited the vulnerability of domestic institutions to interest rate fluctuations in other Asian economies. For example, because of entry barriers to banking and relatively undeveloped financial markets, banks in some Asian economies in the 1980s could significantly influence interest rates, or the spread between lending rates and the cost of funds, even as interest rates were liberalized. This

is in contrast to the U.S. market, where competitive pressures and the opportunities for arbitrage offered by deep financial markets limit the ability of financial institutions to influence interest rates.

Having talked about financial liberalization and the effects on the exposure of Asian financial institutions to interest rate and exchange rate risk, let me briefly discuss the markets that have developed for managing such risks.

Interest rate risk

Financial institutions have developed a wide variety of methods for managing interest rate risk. I will focus on the use of standardized futures and options instruments that are traded in exchanges.

In the case of Japan, the use of such instruments to manage domestic interest rate risk appears to be quite recent, although growth has been rapid. A futures market in 10-year Japanese government bonds was introduced by the Tokyo Stock Exchange in October 1985. By 1988, the Japanese government bonds futures market was the largest futures market of a single instrument in the world, and trading volume exceeded trading in the corresponding cash market.[3] Trading in government bond futures options began in May 1990.

Facilities are also available for hedging exposure to volatility in the stock market. Between 1987 and 1989, three stock price index futures instruments were inaugurated[4], and options on these indices were made available in 1989. The rapid rate of growth in these markets is indicated by the sharp rise in the monthly value of trades in Nikkei 225 futures, which rose from 12 trillion yen in January 1989, to 42 trillion yen in July 1990.

In striking contrast to the development of hedging instruments for the long-term government bond market and the stock market, there is still no interest rate futures market based on a domestic short-term Japanese money market instrument. Short-term interest rate fluctuations in yen portfolios are hedged by using interest rate swaps denominated in yen ("yen/yen" swaps) or the Euroyen futures contract launched by the Tokyo International Financial Futures Exchange in June 1989.[5] The absence of futures and options markets in short-term financial instruments in Japan apparently reflects the uneven development of short-term money markets. In particular, the development of a market in short-term government securities has been very slow.

Another innovation that can contribute to lowering interest rate risk, securitization, is also of recent vintage in Japan and is developing slowly. Japanese city banks have been allowed to sell their commercial loans since March 1990. However, the proportion of these loans sold appears to be very small, partly because loans may only be sold with the borrower's consent, to other financial institutions who may not resell them. Furthermore, loan sales tend to weaken the relationship between the originating lender

and the borrower. As a result, Japanese banks, which traditionally have close relationships with their borrowers, may be particularly reluctant to sell their loans.

Markets and instruments for managing domestic interest rate risk are seldom found in Asian financial markets outside of Japan. One of the few examples is offered by Hong Kong, which introduced a futures contract in the 3-month Hong Kong Interbank Offer Rate in February 1990. This contract was apparently introduced in response to the large swings in the Hong Kong Interbank Offer Rate, which rose from a low of three-quarters of a percent in January 1988 to a high of over 12 percent in 1989.

Although instruments to hedge domestic interest rate risk are rare outside Japan, the management of such risk will emerge as a major consideration for financial institutions in these other Asian economies as their domestic financial markets develop. For example, interest rate risk is likely to emerge as an important issue in Indonesia. In that country, interest rate volatility increased in the 1980s, and the government encouraged the development of marketable securities and significantly liberalized entry into the banking sector.

Exchange rate risk

Turning now to exchange rate risk, facilities for hedging against such risk vary widely among Asian economies. Not surprisingly, Japan, Singapore and Hong Kong,

being international financial centers, have developed deep foreign exchange markets. According to a survey by the Bank for International Settlements (BIS), the daily turnover in Japan's foreign exchange markets averaged 115 billion dollars in April 1989, compared to 187 billion dollars in the U.K. and 129 billion dollars in the U.S. While smaller than Japan's, Singapore's and Hong Kong's foreign exchange markets are large by world standards, ranking fifth and sixth in terms of size. (Switzerland is fourth.) In April 1989, daily foreign exchange transactions volume in Singapore and Hong Kong averaged 55 and 49 billion dollars respectively, compared to 57 billion dollars in Switzerland.[6]

These foreign exchange markets are actively used for managing exchange rate risk. For example, in the mid-1980s, over 60 percent of the transactions in Japan's foreign exchange market involved currency swaps. Furthermore, since 1984, a rapidly-growing over-the-counter foreign currency options market has operated in Tokyo.

Although Japanese exchange markets are deeper, Singapore has taken the lead in Asia in offering exchange-traded instruments for hedging foreign exchange risk. In 1989, the Singapore International Monetary Exchange (SIMEX), offered five foreign currency futures contracts (Deutsche mark, Eurodollar, Euroyen, Japanese yen and Pound Sterling) and three foreign currency options (Deutsche mark, Eurodollar and Japanese Yen). The Singapore market began trading in financial futures in 1984, which predates the launching of the Tokyo International Financial Futures Exchange (TIFFE) by five years. Singapore offers a wider range of contracts than does TIFFE,[7] and

has proven to be a formidable competitor to Tokyo in the market for Eurodollar contracts.

In contrast, the share of futures and options contracts is negligible in Hong Kong's foreign exchange market. This is not to say that Hong Kong has no facilities for managing exchange rate risk. In April 1989, forward exchange market transactions, including swaps, accounted for 38 percent of total transactions in Hong Kong's foreign exchange market.

In the other Asian economies, markets for hedging exchange rate risk are much smaller, and relatively less developed. For example, in spite of rapid growth, daily forward exchange transactions in South Korea averaged well under 500 million dollars in the later part of the 1980s, compared to 18 billion dollars in Hong Kong in 1989.

In some cases, the lack of depth in the market for domestic currency makes it difficult for traders or investors to hedge their positions in forward exchange markets. Governments have found it necessary to step in to make a market and provide forward cover to the private sector, generally through banks. Unfortunately, by insulating participants in forward exchange markets from risk, such government involvement has hampered the development of private forward markets.

The development of forward exchange markets has in some cases also been

hampered by restrictions governments have imposed on the operation of these markets, partly to reduce government exposure to risk. For instance, external borrowing and lending are restricted in order to discourage speculative capital flows. For the same reason, forward cover is restricted to commercial transactions and the servicing of external debt. Governments have also set forward exchange rates.

In spite of efforts to control their risk exposure, governments offering forward cover have on occasion experienced large losses, while effectively subsidizing their trade sectors or domestic firms that have borrowed abroad. For example, in the first half of the 1980s, a country in Southeast Asia experienced losses reportedly exceeding 6 percent of GNP in the foreign currency swaps market, when that country's currency depreciated sharply. In another Asian economy, government losses related to foreign exchange transactions reportedly totalled close to 6 billion dollars over a one-and-a-half year period in the second half of the 1980s.

Losses in foreign exchange markets have not been confined to Asian governments. In some Asian economies, domestic financial institutions or producers have experienced significant losses as a result of foreign exchange transactions. These losses in some cases may reflect speculation or lack of expertise in the use of hedging instruments in foreign exchange markets. For example, in the second half of the 1980s, exporters in an Asian newly-industrialized economy experienced net losses from domestic currency appreciation estimated at nearly 10 million dollars over a two-year period.

Challenges to policy-makers

To sum up, outside of Japan, Singapore and Hong Kong, Asian financial markets are still relatively underdeveloped. Further financial development will require the introduction of a wide range of financial instruments, and the deepening of secondary financial markets. Furthermore, instruments and markets for managing interest rate risk and exchange rate risk need to be developed further.

Asian policy-makers will face three major challenges in promoting the further development of their financial markets.

First, barriers to entry in Asian financial markets need to be liberalized further. At present, such barriers discourage competition and innovation, as well as the development of greater depth and breadth in Asian financial markets.

Second, certain obstacles to the further development of forward markets, such as restrictions on capital movements, or government cover in forward exchange markets, will need to be removed to enable the private sector to manage foreign exchange rate risk effectively.

Third, prudential issues will arise as new financial instruments are developed. These instruments have the potential of increasing, as well as lowering risk. To address

this issue, Asian financial institutions and regulators will have to acquire the expertise needed to assess the characteristics of complex and continually-changing financial instruments. Furthermore, a regulatory framework will need to be developed to encourage the effective use of these financial innovations and at the same time limit financial institutions' risk exposure.

As you know, many of these issues have not been fully resolved in the Western economies. However, Asian economies are generally in a good position to meet the challenges confronting them. Given Asia's success in economic management, I am confident that we will observe significant progress in the development of Asian financial markets in the 1990s.

NOTES

1. Thailand eased foreign exchange controls in May 1990. Note that liberalization has in some cases been uneven. For example, in 1987 Taiwan liberalized capital outflows while imposing restrictions on capital inflows.

2. The exposure of Japanese banks to fluctuations in interest rates has increased, however. One reason is that the share of unregulated interest rate deposits at city banks in Japan increased from 12 percent in 1985 to 45 percent in 1989 (a similar trend applies to nationwide banks). On the lending side, a new short-term prime rate was introduced in January 1989, which was based on market rates (a weighted average of the rates for ordinary deposits, time deposits, CDs and promissory notes) rather than on the Bank of Japan discount rate. The weights are based on the average financial structure of thirteen city banks.

3. Trading in 20-year government bond futures in the Tokyo Stock Exchange was inaugurated in July 1988.

4. Osaka 50 in June 1987, Tokyo Price Index (TOPIX) and Nikkei 225 in September 1988. The Nikkei 225 futures contract had been offered in the Singapore Monetary Exchange since September 1986.

5. The Euroyen contract is also available in the Singapore International Monetary Exchange since October 1989. There is also a small market in interest rate caps in Japan, offered mainly by U.S. banks.

6. In interpreting rankings, note that the BIS survey of March 1989 did not include data for Germany.

7. TIFFE offers Euroyen, Eurodollar and yen-dollar exchange rate futures contracts.