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STRATEGIES FOR ASIAN EXCHANGE RATE POLICY COOPERATION

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STRATEGIES FOR ASIAN EXCHANGE RATE POLICY COOPERATION

Huang Yiping

(Preliminary Draft)

Introduction

Asian economies have undergone significant transformation since 1997/98 financial crisis. In order to reduce risks of balance of payment crisis, Asian policymakers introduced a number of policy reforms, including promotion of current account surpluses, accumulation of foreign reserves and some regional cooperation initiatives. These changes strengthened Asia's external sector fundamentals and helped Asia's ability weathering external shocks.

However, Asia is not immune from the current global financial crisis. Performance of Asian currencies since the onset of the U.S. subprime crisis has shown significant variation. Some currencies, such as Korean won and Indonesian rupiah, have collapsed by more than 20 percent against the U.S. dollar since mid-2008, while others, such as Chinese yuan and Japanese yen, have either been stable or managed some gains.

Different currency performance across the region was attributable to a combination of several factors, including exchange rate policy, economic openness and external sector resilience. Generally more flexible exchange rate regimes after the 1997/98 crisis imply greater currency volatility given the region's very open economy. But perceived higher external sector weakness also increased vulnerability of some regional currencies, especially Korean won, Indonesian rupiah and Indian rupee.

This was unfortunate given Asia's tremendous policy efforts during the past ten years. Merely two years ago, many regional central bankers believed that they had accumulated too much foreign exchange reserves. This assessment led to creation of Korean Investment Corporation (KIC) and China Investment Corporation (CIC) and proposals for setting up similar sovereign wealth funds (SWFs) in the other economies. Capital market investors, however, did not agree to the above assessment, evidenced by currency market experiences during the current financial crisis.

This raises a critical question about future options for Asia's exchange rate system. Should Asia pursue closer monetary integration? If the answer is positive, then what should be the next step, creating a regional currency or strengthening policy coordination? At the center of this policy deliberation, policymakers must carefully weigh benefits and costs of exchange rate flexibility versus stability, taking into account current economic conditions of the region.

In this paper, I argue that currency integration should be the long-term goal for Asia. However, it is best to leave to the market to decide whether the future currency system will be dominated by an "Asian dollar", Japanese yen, Chinese yuan, India rupee or a dynamic basket of currencies. While currency stability is valuable for emerging economies in Asia, some flexibility across regional currencies may still be necessary given different levels of development, different stages of macroeconomic cycles and different macroeconomic fundamentals. Premature

implementation of currency integration could make macroeconomic management exceedingly difficult.

Monetary integration in Asia may follow a three-stage approach. The first stage involves expansion of the foreign reserve fund and creation of Asian central bank forum (or expansion of the Asian Financial Stability Dialogue) for both reserve administration and policy dialogue. The second stage focuses on improvement and standardization of macroeconomic policymaking across the region. And the final stage integrates the regional currencies. Depending on economic and political development, the last stage of monetary integration may or may not happen.

A more urgent task is, however, for Asia to play a greater role in reform of the global monetary system. Asian economies should coordinate better among themselves to project a clearer voices in G20, including in discussions of IMF reform. As the rising power of the world economy, Asia has a strong vested interest in facilitating smooth transition of the global currency system. In the meantime, Asian economies should also supplement regional integration with policy reforms at the national level. Internationalization of Chinese yuan, for instance, will be a critical step enhancing regional exchange rate policy coordination in the near term.

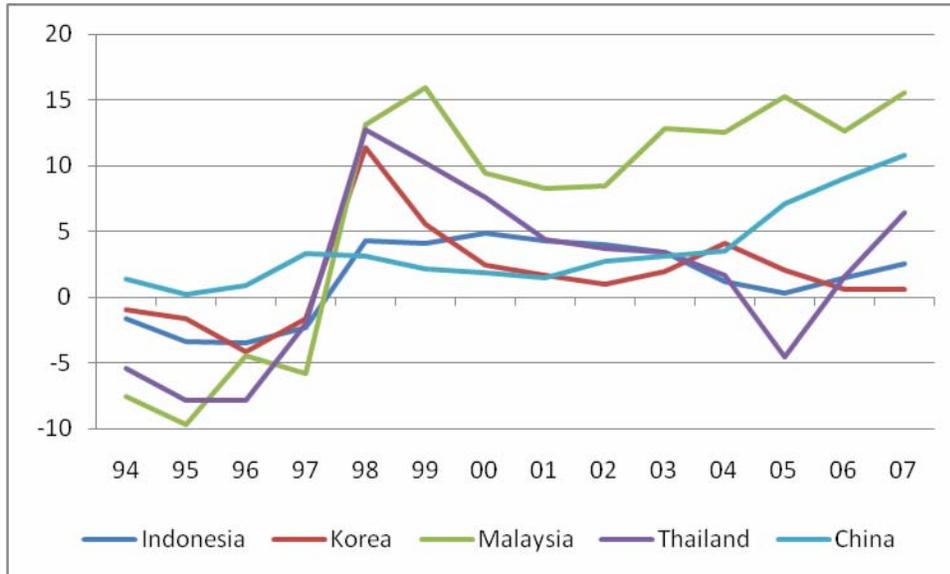
This paper is organized as follows. The next section reviews key reforms and macroeconomic changes after the 1997/98 financial crisis. Section three discusses impacts of the U.S. subprime crisis on Asia, with a special focus on regional currency market. Section four assesses the question about how much foreign reserves are sufficient to support capital and currency market stability. Section five discusses the three-stage strategy toward monetary integration in Asia proposed in this study. And the final section concludes the paper by offering thoughts on key directions for policy cooperation in the near term.

Responses to 1997/98 Asian financial crisis

In retrospect, the Asian financial crisis was essentially a balance of payment crisis, although in some economies like Korea it started from a domestic financial crisis. In the years preceding the crisis, most Asian economies experienced strong economic growth, supported by extraordinary investment booms. In 1996, investment shares of GDP reached 44.6 percent in Malaysia, 41.8 percent in Thailand, 39.0 percent in Korea and 30.7 percent in Indonesia.

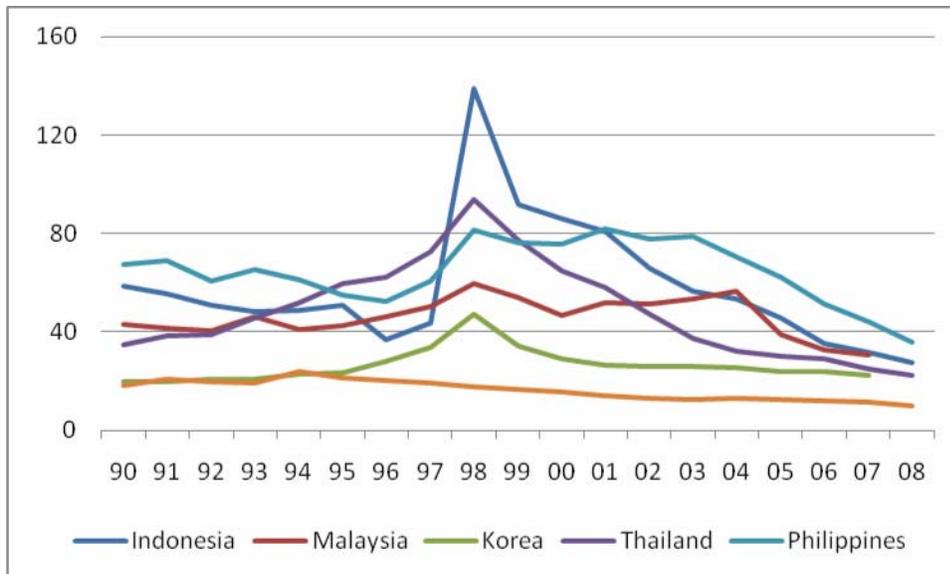
As a result, the external account positions deteriorated sharply. All four crisis-affected economies, Indonesia, Korea, Malaysia and Thailand, suffered steady current account deficits before the crisis (see Chart 1). External debts also stayed at relatively high levels. In particular, short-term debts accounted for more than a third of their total external debts (see Chart 2).

Chart 1. Current Account Balances in Indonesia, Korea, Malaysia, Thailand and China, 1994-2007 (% of GDP)



Source: Citigroup estimation.

Chart 2. External Debts in Indonesia, Malaysia, Korea, Thailand and Philippines, 1990-2008 (% of GDP)

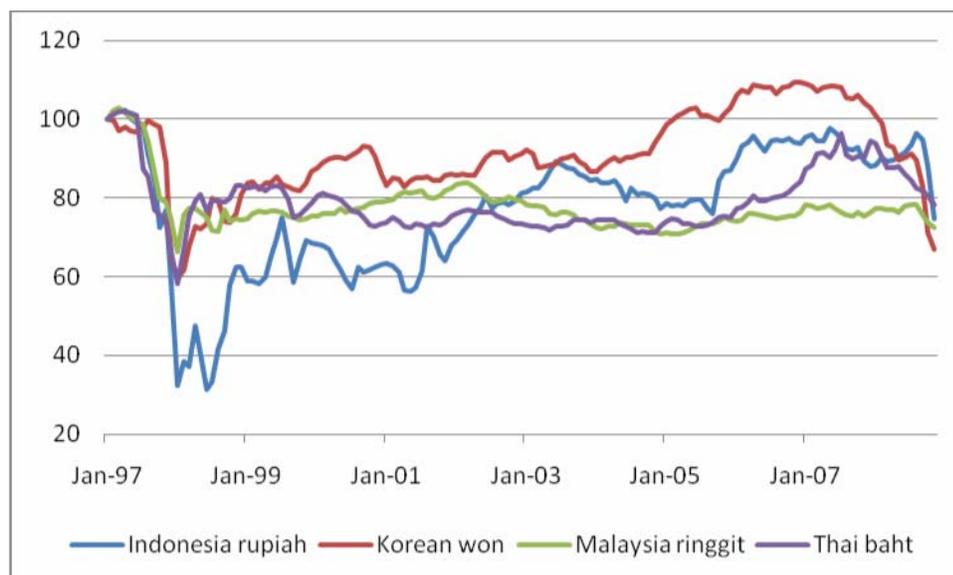


Source: Citigroup estimation.

In July 1997, Thailand was forced to abandon its currency peg to the US dollar. This signaled the beginning of Asian financial crisis. In the following months, Asian central banks were forced to accept exchange rate shocks one after another. Within the following year, the real effective exchange rate of Indonesia rupiah crashed by almost 70 percent, while those of Malaysia

ringgit, Korea won and Thai baht declined by about 40 percent at their troughs (see Chart 3). Philippine peso and Taiwan dollar also weakened during the crisis but the changes were somewhat smaller (see Chart 4).

Chart 3. Real Effective Exchange Rates of Indonesia Rupiah, Korea Won, Malaysia Ringgit and Thai Baht, January 1997 – December 2008 (January 1997=100)

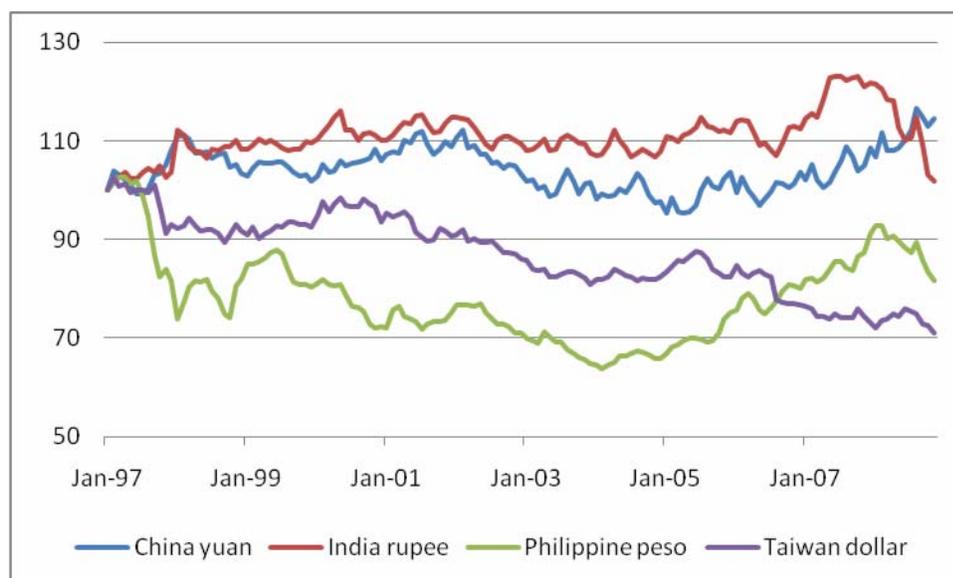


Source: Citigroup estimation.

The only major currencies that did not show significant weakening during the Asian financial crisis were Chinese yuan and Indian rupee. Indian rupee's exceptional performance was mainly because of its distance from the epicenter. Its degree of economic openness was much lower than that of East Asian economies. In particular, its economic linkage with East Asian economies was quite weak at that time.

Chinese yuan, however, was under significant pressure to devalue in the wake of the crisis. China first unified the official and swap market CNY/USD rates to 8.7 at the beginning of 1994. The currency then experienced a period of slow but steady appreciation. The CNY/USD rate reached 8.27 at the end of 1997. Amidst the height of the Asian financial crisis, the authorities decided to peg the CNY/USD rate at 8.27 in order to avoid competitive devaluation in the region. Malaysian authorities also pegged the MYR/USD at 3.8 around the same time.

Chart 4. Real Effective Exchange Rates of Chinese Yuan, India Rupee, Philippine Peso and Taiwan Dollar, January 1997 - December 2008 (January 1997=100)



Source: Citigroup estimation.

In the following years, Asian economies undertook a series of policy actions, which may be termed as “Asian Consensus” policies, in order to significantly lower risks of balance of payment crisis. The essence of that policy strategy is to build the defense lines through gradualism approach. And the key measures include:

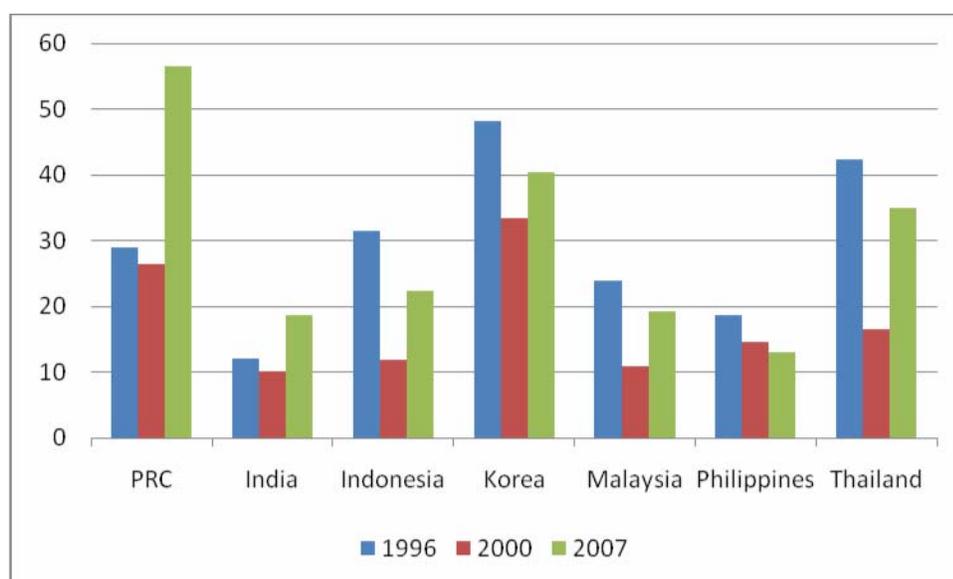
- Adopting more flexible but still conservative exchange rate policies;
- Promoting exports and achieving current account surpluses;
- Accumulating foreign exchange reserves;
- Reducing reliance on external borrowing, especially short-term borrowing;
- Cautiously liberalizing the capital account; and
- Introducing initiatives for regional policy cooperation.

These policies have been largely effective, at least for a while. With exceptions of Chinese yuan and India rupee, however, the real effective exchange rates of most Asian currencies stayed weaker than their respective levels at the beginning of 1997. Korea won strengthened temporarily, exceeding the January 1997-level between early 2005 and early 2007.

Except Thailand in 2005, the crisis-affected economies all have successfully maintained current account surpluses since the Asian crisis. China’s current account surplus reached 10.8 percent of GDP in 2007, an extraordinary level for a large economy. India and Vietnam continued to suffer from current account deficits due to strong domestic demand.

After the initial spikes during the crisis years, Asia's external debts also came down steadily during the past decade. The initial increases in external debts were largely a result of financing provided by multinational and national organizations to resolve the crisis. But Indonesia, Korea and Thailand all repaid debts from the IMF ahead of the schedule, while Malaysia didn't borrow from the IMF. More importantly, governments of Asian economies quickly lowered the proportion of short-term borrowing. The average share of short-term debts in total external borrowing fell from 32.9 percent in 1996 to 17.5 percent in 2000 (see Chart 5).

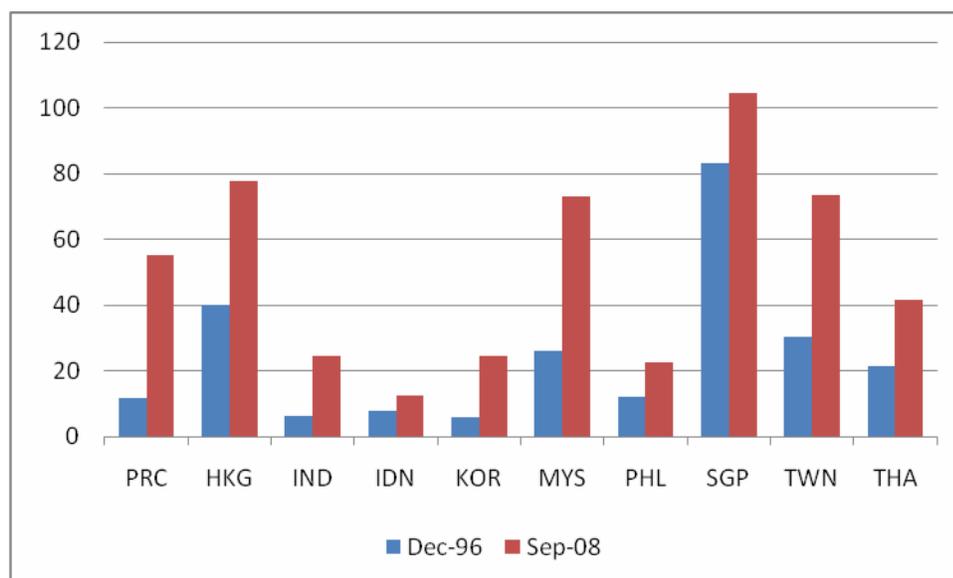
Chart 5. Shares of Short-Term Debts in Total External Debts in Selected Asian Economies, 1996, 2000 and 2007 (%)



Source: Institute of International Finance and Citigroup.

The most visible progress is, perhaps, rapid accumulation of foreign exchange reserve. In 1996, emerging Asia as a whole only owned US\$485 billion reserves. The total reserves reached \$3.5 trillion at the end of 2008 (see Chart 6). Fastest accumulation occurred in China, Indonesia, Korea and Malaysia during that period. Rapid accumulation of foreign exchange reserves can be attributable to increasing current account surpluses and growing capital inflows. But the fundamental contributing factor was really conservative exchange rate policies across the region.

Chart 6. Shares of Short-Term Debts in Total External Debts in Selected Asian Economies, 1996, 2000 and 2007 (%)



Source: Institute of International Finance and Citigroup.

Weathering the Global Financial Crisis

Development of the U.S. subprime crisis smashed the hope that Asia could remain unscathed. The once very popular decoupling thesis quickly lost credibility. The decoupling argument suggests that since Asian economies became highly interdependent, they could maintain strong performance regardless of conditions of the industrial economies. Such argument, while tempting, overlooks deep economic interactions between Asia and rest of the world.

One of the evidences often cited to support the decoupling thesis is the development of intra-regional trade in Asia. This trade grew rapidly in recent years, especially after China joined the WTO. Intermediate goods, however, accounted for more than 70 percent of total intra-regional trade in Asia in recent years. The tech industry provides a good example. In the years immediately following China's WTO entry, many tech factories moved to China to take advantages of its open markets and cheap production costs. However, these factories still imported intermediate goods from other Asian economies such as Singapore, the Philippines, Malaysia, Korea and Taiwan.

But since majority of the end users are still in developed economies, the growing intra-regional trade in intermediate goods did not mean Asia has become decoupled from the U.S. or Europe. In fact, intra-regional trade could disappear quickly should demand by end users of these products collapse. This was exactly what happened during the past year.

The global financial crisis affects Asian economies through at least the following three inter-related channels:

- Collapse of exports;

- Reversal of capital flows; and
- Loss of investor confidence.

As the financial crisis depressed consumption in the developed economies, Asian exports declined sharply. During the second half of 2008, Asian export growth fell from around 20 percent to about -20 percent. Even Chinese exports dropped by a similar margin. Traditional tech producers such as Korea and Taiwan suffered even more damages. Their exports dropped by around 40 percent year-on-year at the end of 2008.

Changes in trade balances have been uneven. This was mainly because imports also collapsed as domestic demand weakened. Compounding to this, sharp decline in commodity prices significantly improved terms of trade for many Asian economies, most of which are commodity importers. Taking China as an example, its average trade surplus actually rose from about \$20 billion a month during the third quarter to about US\$40 toward the end of the year. China's trade balance, however, deteriorated sharply at the beginning of 2009 as export decline worsened rapidly. But this may not be the end of the story. Its trade balance could worsen even more later in 2009 when domestic demand picks up as a result of domestic stimulation policies.

Impacts of global financial crisis on regional capital markets came probably even faster. During the whole 2008, Asian equity prices fell by an average of 50 percent. This was even greater than changes in many industrial economies. The debt markets also underwent similar changes. The average spread of Asian sovereign bonds went up by more than 660 basis points, or increase by 500 percent, between mid-2007 and end-2008.

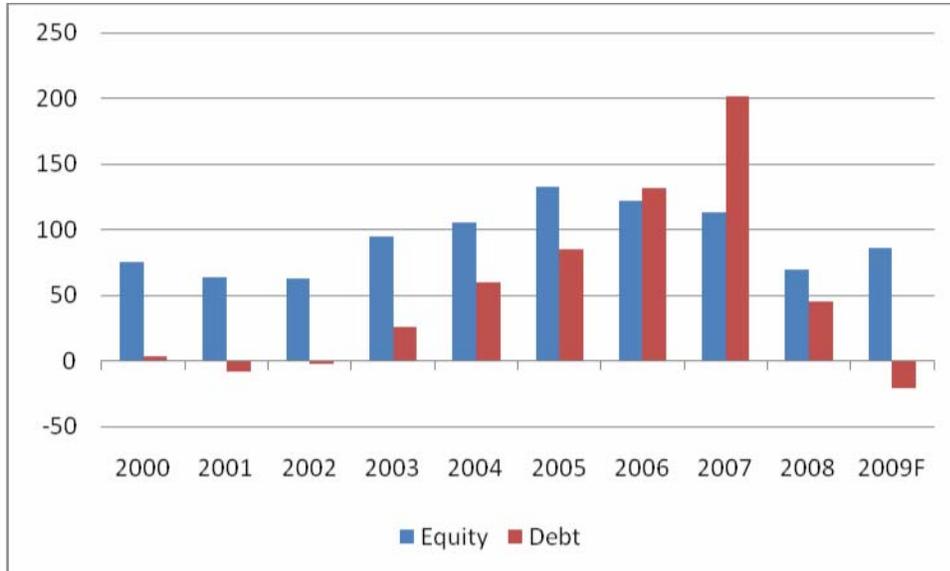
There were probably several reasons behind sharp adjustments of asset prices in Asia. First, global financial institutions previously invested in Asian markets were forced to deleverage, by selling their assets overseas, in order to repair their domestic balance sheets. Second, as part of the emerging markets, Asian assets are perceived as with high risk, especially at times when global risk appetite recedes rapidly. And, finally, despite the popular decoupling thesis, investors probably still saw strong economic and market linkages between the U.S. and Asia and, therefore, significant downside risks for Asian economies.

As a result of combination of the above factors, capital left the region. During the whole 2008, there was a net outflow of about \$20 billion of global institutional funds from Asian equity markets, which completely offset the net inflows of the previous two years. These flows, however, are highly volatile (see Chart 7). In early 2009, for instances, we saw strong capital inflows, especially to the China markets. The confidence was boosted by the massive stimulus packages announced by the government.

Asian exchange rates have experienced rocky period since risks of financial crisis emerged in early 2008. U.S. dollar strengthened significantly during the crisis, despite the fact that the U.S. is the epicenter of the crisis (see Chart 8). This was mainly attributable to the fact that U.S. is the world currency. And risk was probably the lowest to hold the U.S. dollar assets, especially the U.S. Treasuries. U.S. institutions hit by the crisis were also forced to withdraw investment from overseas to repair their balance sheets. Ironically, these led to capital inflows into, not outflow from, the U.S. How long this strength lasts depends in part on economic policies in the U.S. and in part on evolution of the global financial risks. Recent decision by the Fed to purchase long-

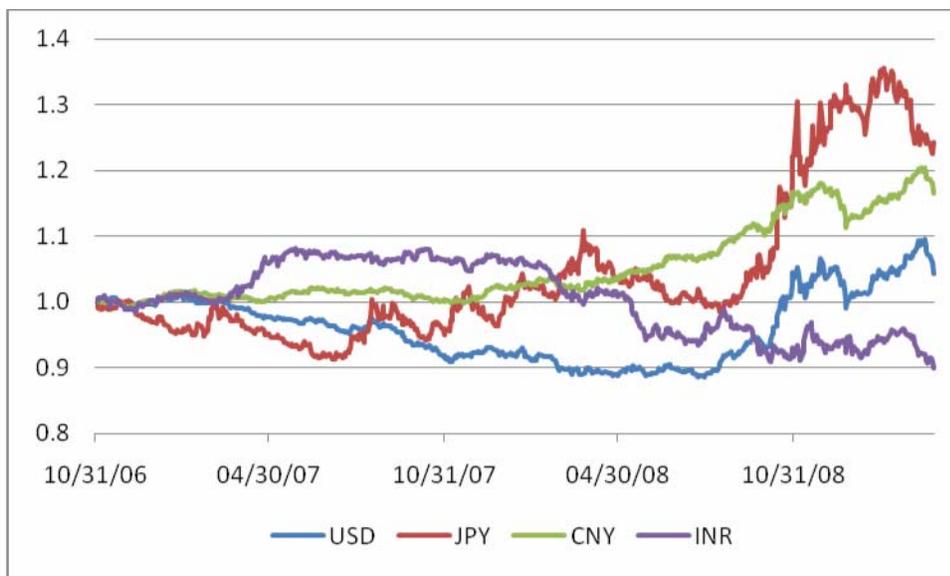
term Treasury bonds, for instance, caused dips in U.S. dollar as investors began to worry about inflation effects of money printing.

Chart 7. Net Private Capital Flows to Emerging Asia, 2000 – 2009F (US\$ Billion)



Source: Institute of International Finance.

Chart 8. Nominal Effective Exchange Rates of U.S. Dollar, Japanese Yen, Chinese Yuan and Indian Rupee, October 2006 – March 2009 (October 31, 2006=1.0)



Source: Citigroup.

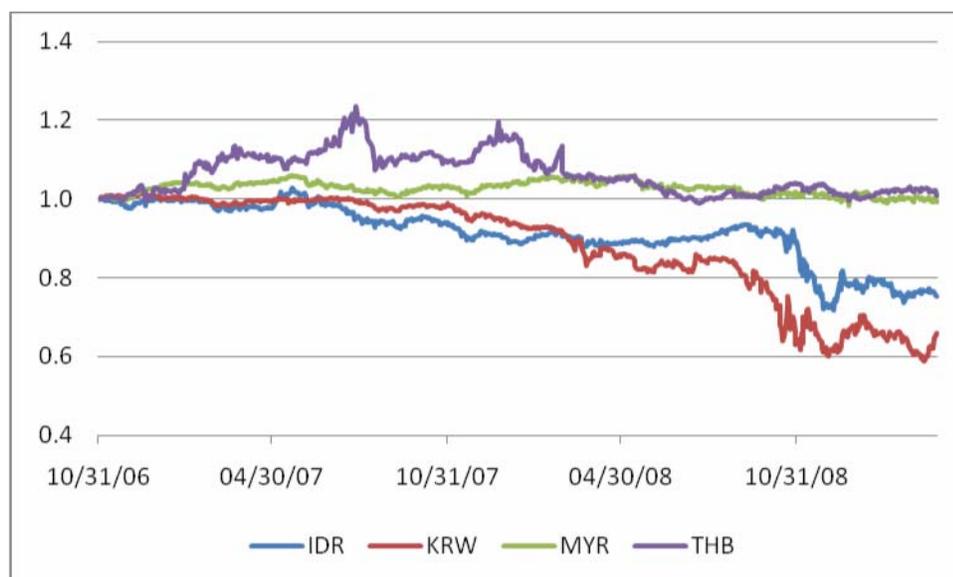
Japanese yen surged as a result of unwinding of carry trade, which refers to investors' previous practice of borrowing low-interest yen and investing in high-yield currencies such as New Zealand dollar and Indonesia rupiah. Therefore, recent strengthening of yen, in no way, reflected investors' perception about macroeconomic fundamentals of the Japanese economy.

Chinese yuan also moved up. Investors are probably less worried about defensibility of the yuan exchange rate given China's close to \$2 trillion foreign reserves. Decisive stimulus policies also played an important role in supporting investor confidence in Chinese economy and its currency. But most importantly, PBC appeared to have returned to an implicit currency peg to the U.S. dollar, with CNY/USD rate fluctuating within a narrow range of 6.8-6.9. In fact, in recent months, movements in effective exchange rates of Chinese yuan and U.S. dollar looked a lot more synchronized than before.

Indian rupee weakened steadily after the crisis began. India is the only major Asian economy that constantly suffers from current account deficit. Potential reversal of large portfolio investment in the Indian equity markets also made the currency vulnerable to external shocks. India's foreign exchange reserves, at about 25 percent of GDP at the end of 2008, were also among the lowest in relative terms in Asia.

The sharpest declines, however, occurred to Korean won and Indonesian rupiah. Korea built short-term debt quite rapidly in recent years, despite earlier efforts of lowering it after the financial crisis (see Chart 9). Much of the commercial borrowing was related to hedging of foreign exchange risks of the ship-building industry. China is the only economy with higher proportion of short-term debt in total external debts than Korea. But a large portion of China's short-term debt is trade credit and, therefore, is less vulnerable than commercial borrowing. Significant foreign portfolio investment in domestic capital markets also added pressures on Indonesia rupiah.

Chart 9. Nominal Effective Exchange Rates of Indonesian Rupiah, Korean Won, Malaysia Ringgit and Thai Baht, October 2006 – March 2009 (October 31, 2006=1.0)

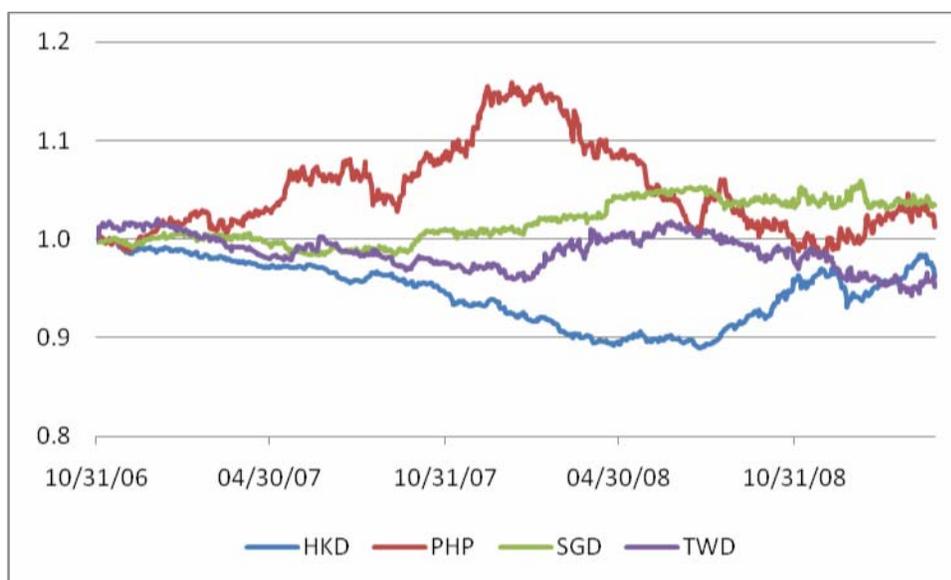


Source: Citigroup.

The effective exchange rates of both Malaysian ringgit and Thai baht remained surprisingly stable during the current crisis. In Malaysia, BNM probably intervened in the foreign exchange markets, stabilizing the MYR/USD rate at around 3.6. In Thailand, BOT previously imposed restrictions on capital inflows, out of serious concerns about unwanted currency strength and possible reversal of capital flows. This probably reduced shocks of capital outflows during the current crisis. Thailand also entered the crisis with stronger macroeconomic conditions, with current account surplus at around 5 percent of GDP.

Singapore dollar has been largely stable in the past year, a result of the city state's managed float regime with reference to a basket of currencies (see Chart 10). Hong Kong dollar showed a trend of strengthening, given its currency board arrangement. Taiwan dollar weakened over time, largely due to its large exposure to the global markets. Surprisingly, however, the Philippines peso managed some gains from the end of 2008, although it weakened quickly during much of 2008. The recent gains probably reflected relatively more resilient worker remittances and improved fiscal conditions.

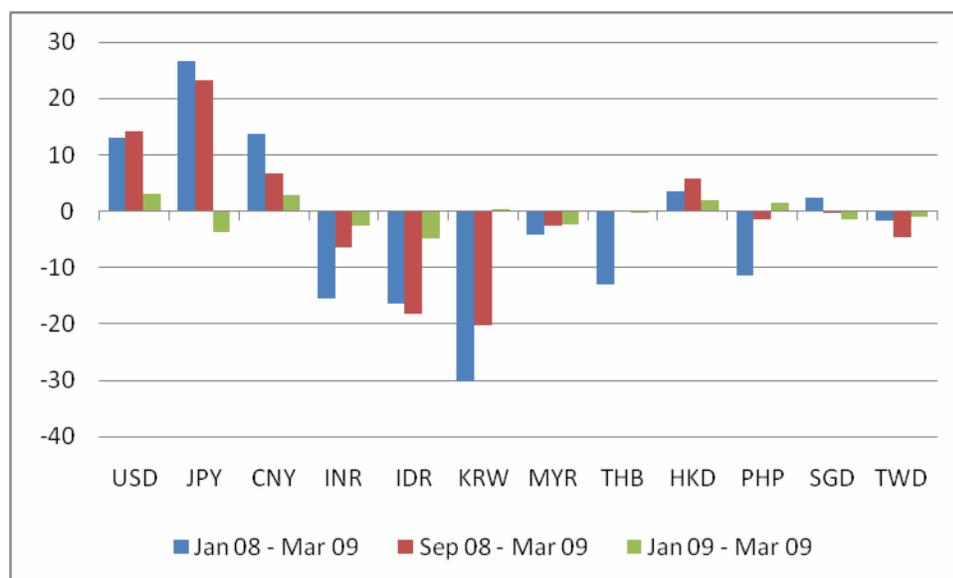
Chart 10. Nominal Effective Exchange Rates of Hong Kong Dollar, Philippine Peso, Singapore Dollar and Taiwan Dollar, October 2006 – March 2009 (October 31, 2006=1.0)



Source: Citigroup.

Taking together, Asian currencies moved significantly during the current global financial crisis. But their changes were by no means synchronized. The sharpest declines occurred in cases of Korean won, Indonesian rupiah, Indian rupee, Thai baht and Philippine peso (see Chart 11).

Chart 11. Changes in Nominal Effective Exchange Rates of U.S. Dollar and Selected Asian Currencies, Jan 2008 – Mar 2009, Sep 2008 – Mar 2009 and Jan 2009 – Mar 2009 (%)



Source: Citigroup.

How Much Foreign Reserves Are Enough?

Significant differences in performance of Asian currencies during the current financial crisis are an important phenomenon deserving close attention. In the past, there was an expectation among investors that Asian currencies might begin to move together even without explicit currency arrangements.

A number of related mechanisms could contribute to this expected synchronization of Asian exchange rates. First, economic integration, particularly trade integration, deepened significantly among Asian economies in recent years. This could lead to synchronization of macroeconomic cycles across the region. Second, increasing adoption of inflation targeting by regional central banks could lead to more synchronized monetary policies in Asia. And, finally, while the U.S. dollar is still the most important reference currency, CNY exchange rate is gradually becoming an important indicator for currency flexibility around the region.

This market-based synchronization mechanism of Asian exchange rates is, however, yet to materialize for several reasons. Asian currency regimes still show significant differences in terms of exchange rate flexibility. At the one end, exchange rates of Korean won, Indian rupee and Philippine peso are relatively free to move, although the central banks also intervene from time to time. At the other extreme, exchange rates of Hong Kong dollar, Singapore dollar and Vietnamese dong are tightly controlled. Chinese yuan and Malaysian ringgit sit somewhere in between.

Asian economies also differ significantly in terms of their openness. Export shares of GDP, for instances, are greater than 100 percent in Hong Kong and Singapore. It is only around 20 percent in India. Economies of Korea and Taiwan are more deeply integrated into the

international supply chain of the tech industry, while economies of Indonesia, Malaysia and Vietnam are relatively more exposed to the commodity markets. Capital accounts are tightly controlled in some countries, such as China, but relatively open in others, such as Korea.

The most important difference, however, probably lies in strength of the external sector. Most Asian economies maintained current account surpluses in recent years, but India and Vietnam suffered from persistent deficits. One important factor that determined currency performance during the past year was foreign exchange reserves.

In most Asian economies, foreign exchange reserves look already peaked, at least in the near term. In some smaller economies such as Pakistan and Sri Lanka, foreign reserves have been down 50 percent from their peaks (see Table 1). In other Asian economies such as Malaysia, Korea and India, foreign exchange reserves also declined, either because of investment losses or policy interventions. The only economies that maintained relatively stable foreign reserves are China, Philippines, Thailand and Taiwan. Even in these economies, future development could become less certain if global recession continue to deepen.

Table 1. Latest Levels of Foreign Exchange Reserves in Selected Asian Economies and Changes from Their Peaks (US\$ Billion, %)

	Foreign Reserves (US\$bn)	Forward Book (US\$bn)	Changes from Peak (%)	Peak time
China	1946.0	n.a.	0.00%	Dec-08
India	251.5	-0.5	-17.30%	May-08
Indonesia	50.9	n.a.	-16.10%	Jul-08
Korea	201.7	-6.9	-23.70%	Mar-08
Malaysia	91.3	0	-39.00%	May-08
Pakistan	6.9	-1.9	-51.40%	Feb-08
Philippines	39.2	2.3	0.00%	Jan-09
Singapore	167.1	37.1	-5.80%	Mar-08
Sri Lanka	1.8	n.a.	-50.70%	Jul-08
Taiwan	292.7	n.a.	0.00%	Jan-09
Thailand	112.3	5.5	0.00%	Jan-09

Note: Latest data are for end of March wherever possible.

Source: CEIC Data Company and Citigroup.

Before the current crisis, many Asian central bankers and even investors felt that Asia probably had accumulated too much foreign exchange reserves. Some economies, such as Korea and China, started to set up new vehicles for more commercial investment. Others, such as Taiwan, Indonesia and Malaysia, began to contemplate similar ideas. Such perceptions, however, were proven over-optimistic soon after the global financial crisis began.

How much reserves are sufficient? Traditionally the minimum requirement of foreign exchange reserves is the country's short-term debt. In this sense, the main purpose of accumulating foreign reserves is to cope with risks of sudden stop of financial flows. In cases of external shocks, financial flows could terminate abruptly. If a country does not have enough foreign reserves, it would be forced to default its foreign debts. Therefore, short-term foreign debt plus long-term debt that would mature in the coming year constitute the narrowest definition of required foreign reserves.

The medium definition is a country's total external financing needs, including both retiring debts and current account deficits. Normally current account deficits need to be balanced by capital flows. Should financial flows stop suddenly, the country needs to finance the current account deficits in order to continue regular economic activities.

The broadest definition of necessary foreign exchange reserves includes not only total external financing needs but also mobile foreign capital in the country. Mobile foreign capital refers to portfolio investment by foreign investors in domestic equity and debt markets. Portfolio investment is highly mobile and can flow across borders quickly as investment risks rise and fall, which often leads to significant fluctuation of the exchange rate.

Obviously, foreign reserves covering mobile foreign capital have different purpose from foreign reserves covering external financing needs. The latter would be drawn to maintain regular economic order in cases of sudden stop of financial flows. The former would normally not be used to fill the gaps left by mobile foreign capital but to guard against speculative attacks on the currency.

Application of the above three definition of "sufficient foreign reserves" generates three foreign reserve cover ratios: foreign reserves/retiring debts, foreign reserves/total external financing needs, and foreign reserves/total external financing needs plus mobile foreign capital (see Table 2).

Table 2. Foreign Exchange Reserve Cover Ratios for Selected Asian Economies (US\$ Billion)

	FX Res (1)	ST Debt by Remain Maturity (2)	CA Deficit (in2009F) (3)	Total Ext Fin Req (2+3)	FX Res/ST Debt by Remaining Mty (1/2)	FX Res/Total Ext Fin Require (1/(2+3))	Foreign hold of stocks (7)	Foreign hold of bonds (8)	Ext Fin + Mobile Capital (9)	FX Res/(Ext Fin + Mobile Capital) (1/9)
China	1946	250	-427.0	-177.0	7.8	n.a.*	30		-147	n.a.
Indonesia	50.9	33.2	-1.9	31.3	1.5	1.6	18	7.1	56.4	0.9
India	251.5	91.9	23.0	114.9	2.7	2.2	94	6.7	215.6	1.2
Korea	201.7	191.1	-13.0	178.1	1.0	1.1	111	27	316	0.6
Malaysia	91.3	42.4	-21.3	21.1	2.2	4.3	22.3	11.8	55.2	1.7
Pakistan	6.9	3.2	10.2	13.4	2.1	0.5	1.3	0	14.7	0.5
Philippines	39.6	14.3	-4.7	9.7	2.8	4.1	11.6	0.6	21.9	1.8
Sri Lanka	1.75	3.3	3.3	6.6	0.5	0.3	0	0.1	6.7	0.3
Thailand	112.3	35.1	-14.5	20.7	3.2	5.4	30.7	1.7	53.1	2.1
Taiwan	292.7	99.1	-30.0	69.1	3.0	4.2	101	1.1	171.2	1.7
Vietnam	22.0	7.1	4.8	11.9	3.1	1.9	2.1	0.5	14.5	1.5

Source: Johanna Chua, "Asia Macro Views: Asia – Reassessing FX Reserve Adequacy", February 23, 2009, Citigroup.

Clearly, of the 11 emerging Asian economies examined, most of them had enough foreign reserves to cover retiring debts at the end of 2008 (cover ratio greater than 1). The only exception was Sri Lanka. Most economies also had enough foreign reserves to meet total external financing needs. According to both measures, Korea barely had enough foreign reserves to cover either retiring debts or total external financing needs (Korea's cover ratio for retiring debts is greater than that for external financing needs because it had current account surplus). This picture of generally sufficient foreign exchange reserves across the region was a result of the policy reforms introduced after the 1997/98 crisis.

However, when both external financing needs and mobile foreign capital are included in the calculation, the cover ratios fell below one in Indonesia, Korea, Pakistan and Sri Lanka. India's cover ratio is only marginally above one. In fact, with exceptions of China and Thailand, all cover ratios were below two. These are consistent with the broad weakening of Asian currencies when risk premiums rose during the current financial crisis. Korean won, Indonesian rupiah and Indian rupee experienced sharpest declines.

Pursuing Asian Monetary Integration

After the 1997/98 financial crisis, Asia is already moving quickly from trade integration to monetary and financial cooperation. ASEAN+3 has focused its efforts on regional economic surveillance (Economic Review and Policy Dialogue), regional short-term arrangements (Chiang Mai Initiative), and local currency bond market development (Asian Bond Markets Initiative) (de Brouwer 1999; Bergsten and Park 2002; Ghosh 2006).

The ASEAN+3 Finance Ministers' agreement on reserve pooling in May 2008 was a very positive step. In January 2009, ASEAN+3 raised the size of foreign reserve funds from \$80 billion to \$120 billion. A recent Asian Development Bank (ADB) study on emerging regionalism also recommended two new institutions, including an Asian Financial Stability Dialogue and an Asian Secretariat for Economic Cooperation (ADB 2008). ADB has also initiated efforts at creating an Asian Currency Unit (Kawai 2008).

Asia's experiences during the current crisis, however, suggest that these regional initiatives were not sufficient in supporting regional economic and market stability when facing external shocks. Excessive currency volatility in some regional economies was particularly worrisome as they cause difficulties for not only trade and investment activities but also macroeconomic policymaking. Asian policymakers, therefore, need to make more efforts to either strengthen the existing frameworks or find new ways for regional monetary policy cooperation.

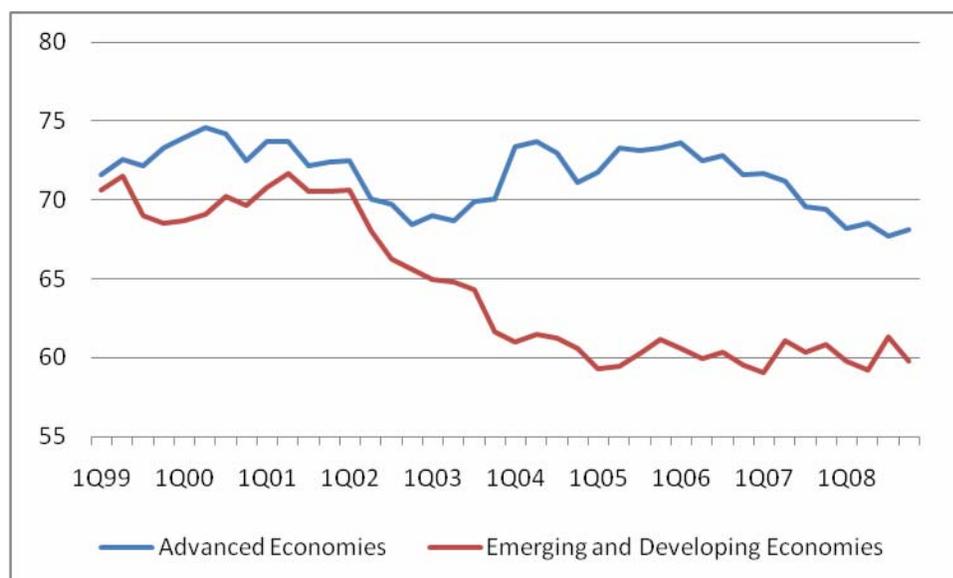
Expected changes of the international monetary system further necessitate regional cooperation in Asia. Since 1944, the U.S. dollar has dominated the international economic system as the major global currency. Although the U.S. dollar will likely remain a key reserve currency for some time, the importance of dollar will probably decline and its value will like fall after this global crisis. U.S. dollar should stay as the most important currency for accounting and transaction in international economic dealings. But its function of value stocking has already diminished and will likely diminish further (see Chart 12).

Such change poses important challenges for Asia. The world currency system may evolve into a new system based on multi-global currencies. And this implies greater exchange rate uncertainty going forward. This is particularly so for Asian economies whose central banks traditionally pay much closer attention to U.S. dollar than any other currencies in the world.

Asia's monetary policy cooperation should focus on three areas:

- Contribution to reforms of the international currency system;
- Initiatives promoting regional exchange rate coordination; and
- Efforts improving quality of macroeconomic policymaking in individual economies.

Chart 12. Shares of U.S. Dollar Assets in Official Foreign Exchange Reserves, 1Q 1999 – 4Q 2008 (%)



Source: International Monetary Fund.

The central issue facing Asian policymakers collectively is the form of monetary integration they must pursue. In the long run, it may be ideal to unify the regional monetary system under one currency, just like the EU economy under the euro. But the question about which currency will dominate the future regional financial system should be left open for the time being. It could be an Asian dollar, Japanese yen, Chinese yuan, Indian rupee or even a combination of some of the regional currencies. This decision can only be sensibly made in the future.

In the near term, it may be difficult to immediately pursue EU-type monetary integration. Unlike EU at the beginning of monetary integration, Asia is consisted of economies with very different stages of economic development, very different sizes, very different macroeconomic cycles and very dynamic economic weights. It is difficult to fit all these economies under one exchange rate regime. Lack of successful resolution of historical differences also points to difficulties in achieving political consensus on high degree integration.

Taking currency unification as the ultimate goal, Asia's monetary integration may follow a three-stage approach:

- Stage 1: Building regional foreign reserve funds and conducting policy surveillance and dialogue;
- Stage 2: Standardizing macroeconomic policy framework across the region, such as independent monetary policy and inflation targeting;
- Stage 3: Integrating regional monetary system under a regional central bank with one regional currency.

Stages 1 and 2 can be regarded as preparatory steps for Stage 3. Given the current conditions, the first two stages, especially Stage 2, might take a multi-decade period.

An important reason why monetary integration in Asia will take more time than that in Europe is the differences among emerging Asian economies. Asian central bankers face an old but delicate question about trade-offs between currency flexibility and stability. For most emerging Asian economies, free float is probably not the best option considering potential damages of exchange rate volatility (and thereby possible excessive speculations) to investors' and exporters' expectations and financial institutions' risk management.

Asia's own experiences before the 1997/98 crisis also confirmed that fixed exchange rate regime is also not a preferred option, as it forces all economic adjustments to domestic monetary policies. Individual economies also need to maintain some flexibility versus other regional currencies, given their different stages of economic development and macroeconomic cycles.

The best option is probably managed float, which is the most common regime in Asia today. But it needs to be supplemented by certain market mechanisms to avoid excessive speculation and currency volatility.

The purpose of the first stage policy efforts is to strengthen the region's collective macroeconomic fundamentals in order to promote stability of regional exchange rates. It is also continuation of earlier policies introduced after the 1997/98 financial crisis. The previous policies aimed at building foreign reserves by individual economies in order to reduce risks of balance of payment crisis. However, definition of necessary foreign reserves expanded as Asian economies open up their capital markets. Therefore, building enough foreign reserves by individual economies is neither practical nor efficient.

However, Asia as a whole has already accumulated large volumes of foreign reserves. Collectively, these reserves are probably sufficient to support stability of regional currencies. The current foreign reserve funds, at \$120 billion, are too small to be effective. Ideally, they will probably need to be increased by 8-10 times. But that will have to happen over time.

A more challenging task is administration of the foreign reserve funds. In the region, there is already an operating ASEAN+3 framework. This needs to be expanded to include other important regional players such as India and possibly even Australia. And for the purpose of monetary policy integration, the region needs to create an Asian Central Bank Forum (ACBF or an expansion of the Asian Financial Stability Dialogue, AFSD), alongside the existing Finance Ministers' Meeting.

The ACBF or AFSD can then act as a central point for dialogue among regional monetary policymakers and for fostering macroeconomic policy surveillance across the region. ASBF should also maintain a close link with global financial institutions, such as IMF. But ASBF should not act as a regional central bank, at least during this early stage.

The purpose of the second stage is to enhance monetary policymaking in Asian economies and to eventually reduce gaps in economic development and even induce synchronization of macroeconomic cycles. This is a critical preparatory step for the ultimate integration of the regional currency system.

During this stage, the roles of ACBF or AFSD should be expanded from a forum for policy dialogue and administer of the Foreign Reserve Funds to more active coordination of monetary policies, especially the policymaking approaches, across the region. For instance, all participating central banks will need to gradually become independent from the government systems and adopt a common set of indirect policy instruments. Managed float exchange rates and inflation targeting could be examples of common policy instruments.

The purpose of the last stage is to establish a regional currency system. One possibility is to adopt a regional currency like the Euro Area. But this regional currency can be a new currency or an existing currency, such as Japanese yen or Chinese yuan. If Asia successfully moves to this stage, then ACBF can turn into a regional central bank. But integration of the monetary system will be conditional on certain degree of political integration. And it is also entirely possible that Asian monetary integration halts at Stage 2. But that should be a positive outcome also.

Concluding Remarks

Asian economies underwent significant transformation after the 1997/98 crisis. Policymakers implemented a set of changes in order to strengthen external sector fundamentals and reduce balance of payment crisis risks. Exchange rate regimes became more flexible but remained relatively conservative in order to promote exports growth, external account surplus and foreign reserve accumulation. As a result, current accounts turned from deficits to surpluses and foreign reserves grew rapidly. Asian leaders also introduced a number of regional cooperation initiatives, such as Asian Bond Funds and Asian Reserve Funds.

These changes put Asia on a much stronger footing to withstand external shocks. During the U.S. subprime crisis, emerging Asia weathered much better than many other emerging economies. Despite collapse of the export sector and significant capital outflows, Asian economies stayed relatively resilient. Most Asian governments are able to take aggressive stimulus measures to boost domestic demand.

But currency performance varies widely across the region. During the five quarters between the first quarter of 2008 and the first quarter of 2009, the nominal effective exchange rate of Korean won collapsed by 30 percent. Both Indonesian rupiah and Indian rupee weakened by about 16 percent. And Philippine peso and Thai baht depreciated by 11-13 percent. Meanwhile, Japanese yen strengthened by 27 percent and Chinese yuan appreciated by 14 percent.

Different currency performance probably reflected differences in a number of factors, including openness and exchange rate flexibility. But a critical factor is individual economy's level of foreign reserves. There are three criteria judging whether or not an economy's foreign reserves are sufficient: the narrowest compares only with debt amortization, the medium compares with total external financing needs (debt amortization plus current account deficits), and the broadest compares with the sum of external financing needs and mobile foreign capital.

Most Asian economies' foreign reserves are sufficient to cover external financing needs. However, as Asian capital markets gradual became more open, mobile foreign capital grew. And according to the broadest criteria, Korea, Indonesia and India face higher capital flow risks. This is probably why their currencies suffered the greatest damages during the current crisis, while their central banks thought they built enough reserves less than two years ago.

Application of the broadest definition, however, means every economy will need to accumulate massive foreign reserves in order to support investor confidence and maintain currency stability. But this would be neither practical nor efficient. Since Asia collectively has accumulated large amount reserves, a better option is probably to enhance regional cooperation in this area. Currently Asia has a Foreign Reserve Fund of \$120 billion. This fund needs to be multiplied in order to play a meaningful role in regional financial markets.

But strengthening of the reserve fund should only be a small part of the broad efforts of regional monetary integration, which may follow a three-stage approach. The first stage involves expansion of the foreign reserve fund and creation of Asian central bank forum (or expansion of the Asian Financial Stability Dialogue) for both reserve administration and policy dialogue. The second stage focuses on improvement and standardization of macroeconomic policymaking across the region. And the final stage integrates the regional currencies. Depending on economic and political development, the last stage of monetary integration may or may not happen.

While a single currency may be viewed as a long-term goal, it is best to pursue a different integration in Asia as in Europe. Some exchange rate stability is helpful for most emerging Asian economies, but certain degree of flexibility is also critical for macroeconomic management in individual economies given their different stages of economic development and macroeconomic cycles. This is why Asian monetary integration should probably focus on enhancing the reserve funds and improving policymaking, not on specific currency arrangements.

But Asia also faces an important and urgent task: contribution to reform of the international monetary system. Asia has the world's second and third largest economies and five out of 20 G20 members. If U.S. and Europe represent the old power of the world economy, Asia represents the rising new power. Yet, Asia doesn't have a single and consistent voice in both G20 and IMF discussions. Asia has a strong vested interest in facilitating smooth evolution of the global currency system.

Finally, regional integration efforts should also be accompanied by policy reforms by individual countries. Regional dialogue or forum may provide some guidance, but the initiatives must come from the national governments. One critical condition for potential monetary integration is synchronization of macroeconomic cycles. This requires adoption of transparent and consistent monetary policy frameworks, such as inflation targeting, in addition to deeper economic integration.

Exchange rate policy reform is also critical. In particular, internationalization of Chinese yuan should help promote regional monetary cooperation, given Chinese yuan's importance in regional exchange rate decisions. For more than 10 years, China has been preparing for currency convertibility under the capital account. It is now time for China to speed this process. Cautious but swift realization of Chinese yuan convertibility is likely to prove beneficial not only to China but also to the region as a whole.

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