

**Exchange-Rate Regimes and Capital Flows in East Asia**  
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**Introduction and Summary**

This is not a scholarly paper, but rather an essay on policy issues regarding exchange-rate regimes in emerging-market Asia. In most of these economies, it seems that domestic economic, political and social pressures push governments in the direction of a relatively inflexible exchange rate and freer short-term capital flows. This is a bad combination. It potentially leads to a long cycle of exchange-rate and capital-account difficulties, crisis and consolidation. Even though a country may be at the benign phase in this cycle, underlying conditions are unlikely to have changed, and the difficult, disorderly, phases of the cycle are likely to return.

The general combination of inflexible exchange rates and freer capital flows leaves emerging market economies exposed to large transactions with maturity and currency mismatches. A better domestic regulatory system might help, but these are difficult to achieve in an emerging market economy. Regulating capital inflows may be seen as a substitute for better domestic regulation, and a number of background conditions, like large FDI flows and global markets that make it easier for emerging markets to run surpluses, could make it easier for governments to navigate their difficult policy course.

In general, however, each emerging market has to look at its own circumstances to find

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ways to reduce the risks from exchange rate inflexibility with freer capital flows. Market-based flexibility backed up by adequate hedging activities may be the ideal tool, and when this is not possible because of opposition by domestic interest groups, the choices are much more difficult.

What is more, the significant gap between China's circumstances and Japan's means that any harmonization of currencies in the region, to achieve better exchange-rate predictability, is many decades away.

Exchange-rate predictability for any given transaction is one important objective. To my mind, the overarching goal of economic policy, including exchange-rate-regime determination, is orderly and sustained economic growth and poverty reduction. To this end, exchange rate stability and predictability would obviously be a boon to commerce and finance. Achieving it, however—even imperfectly—generally requires consideration and management of the impact of capital flows as well as domestic and international pressures. In principle, attempts at predictability can take several directions, each with its own benefits and costs. Let us consider the options available.

### **The Range of Options for an Exchange Rate Regime**

At one extreme in the predictability range is a common currency between relevant economies, for which exchange rates and currency convertibility are moot issues. The euro zone is the best example. The benefits are one-hundred-percent predictability and absence of currency mismatch, but with complete loss of monetary policy independence and severely constrained fiscal options. As a policy option for East Asian emerging economies, this extreme

seems unattainable for the foreseeable future.

At the other extreme are fully market-determined exchange rates in a multi-currency environment with zero government intervention. This extreme implies current-account and capital-account convertibility. The benefit is complete monetary and fiscal independence, but with potentially costly commercial hedging requirements to achieve predictability in the face of exchange-rate volatility and significant currency mismatches. For emerging East Asia, this option is nowhere to be found and, indeed, may be impractical because of the current inconvenience, high cost or impossibility of hedging many transactions and commitments. Hence, for the foreseeable future, this extreme also appears unattainable.

In between these two extremes lie the currency regimes of East Asia, all seeking greater exchange-rate predictability with pegs or managed floats, including at times significant interventions and significant degrees of exchange-rate variability. A wide range of factors has influenced the regimes in place, and these same factors influence the choices for reform and evolution of those regimes. Given time and space constraints on this paper, most examples will refer to China's exchange rate regime and its potential development.

### **“Triangle” Fundamentals: Capital Flows, Controls, Leakage, Speculative Flows and Monetary Policy**

A major factor in developing an exchange rate regime is the volume and nature of capital flows and the kinds of policies in place to influence them. Capital flows, along with exchange-rate flexibility and monetary policy independence, form the “trinity” or “triangle” so often central to exchange rate analysis. If an economy permits all manner of capital flows, then a

pegged exchange rate would imply it cannot set domestic interest rates independently of global interest rates because capital would flow from lower interest rates to higher interest rates, undermining domestic interest-rate policy. A peg with free capital flows also leave currencies vulnerable to speculative “bets” against the peg’s sustainability.

However, if capital flows are successfully blocked or controlled under a pegged currency regime, speculative “bets” are out of the question, and policy makers can adjust domestic interest rates independently of interest rates in the rest of the world. This kind of logic is well known, and this latter case describes China until recently.

The relationship becomes less clear-cut when one considers different degrees of failure in blocking or controlling capital flows. In other words, capital controls “leak” when businesses and individuals report transactions or use funds in different locations to move capital illegally, in spite of controls. As leakage increases, the economy shifts in the direction of free capital flows, and in the extreme, capital controls are largely ineffective and capital can in fact move freely. Out-flowing leakage has been apparent in large errors and omissions in China’s balance of payments for many years. Recent BIS data and China’s balance of payments data for 2003 indicate “leakage” is now significant on the inflow side as a result of speculation on currency revaluation, but the leakage is still limited compared to what it would be if capital controls were removed (in which case, outflows seeking portfolio diversification and better risk-adjusted returns might dominate speculative inflows).

Weakened monetary policy independence as a result of leaking capital controls may now have become an issue for China, as it considers raising interest rates to prevent overheating at the

same time its capital account appears to be leaking significantly in the same direction because of speculative “bets” on currency revaluation. Will capital inflows become even more dramatic if China raises interest rates, given that its exchange rate is effectively pegged within a very narrow band? Additionally, if capital controls leak in the inflow direction, does this mean that they will also leak so easily when the money tries to leave again?

Depending on the degree of leakage, an economy like China’s, with worsening leakage, is gradually shifting into a world where pegs cause more trouble than they are worth in terms of convenience and predictability. Exchange rate flexibility becomes a more attractive, if not a necessary, alternative.

### **Flexible Exchange Rate Regimes Can in Principle Help if Capital Flows More Freely**

In both realms of difficulty for a leaking or open capital account, speculative “bets” and interest-rate arbitrage, a currency with a more flexible exchange rate instead of a peg can in principle help avoid disorderly de-pegging and inconvenient policy dependence on world interest rates.

For example, a flexible exchange rate would quickly strengthen in response to speculative capital inflows, making them less profitable for new “copy-cat” investors, especially if appreciation of the currency appeared to increase the probability that it would devalue again in the near future. Even though some early speculators would be rewarded, a large and potentially accelerating volume of capital inflows would be avoided, and the damage to exchange-rate stability and monetary policy independence would be minimized. Similarly, if capital began to move in order to profit from a better interest rate, the relevant currency would appreciate, and as

a result subsequent capital transfers would appear less profitable

The therapeutic value of exchange-rate flexibility may have limits, however, for smaller economies in a world of open or badly leaking capital accounts, especially if fundamental economic policies and relationships are misaligned or shifting out of alignment. This is because potential exchange-rate volatility can be worsened by speculative and herd behavior based on unequal access to timely news and information about economic conditions and policy steps. If underlying economic fundamentals are misaligned or shift in ways that imply eventual exchange rate adjustment, persons who receive that information early and act on it quickly stand to gain the most. While in many instances this would be a healthy market adjustment process, when investors are able to use large transactions at the time of a supportive news story to “spook” the market, other investors following on, or “herding”, can cause exchange rate adjustment to overshoot, allowing the initial investor to unwind at a significant gain. The impact severity of such speculative behavior depends on the credibility of the information prompting the initial transactions. For many emerging Asian economies, instability in underlying economic fundamentals and unreliability in execution of needed policies are common and provide fertile ground for exaggerated exchange-rate volatility.

What is unclear in the case of China’s effective peg is the relative importance of speculative flows versus flows seeking an interest-rate advantage. Speculative flows promise a quick and very large reward. Interest rate differentials are smaller, take more time, and are therefore subject to additional uncertainties—including uncertainties associated with “leaking” foreign exchange through China’s capital controls. There are costs associated with “leaking” capital through China’s controls. As mentioned above, would the interest-rate differential gains

be large enough to compensate for the risk that “leaking” the capital out of the country may be a lot more difficult than “leaking” it in. The answer is not clear. However, it is clear that China is on the cusp of needing to operate in an environment with freer capital flows. China’s Third Party Plenum last autumn made gradual capital account convertibility a national goal. Thus, transition to an appropriate exchange-rate regime is the major job ahead.

### **Stylized Evolution of Exchange Rate Regimes**

This “triangle” analysis leads to theoretical conclusions about an appropriate evolution of exchange rate regimes for emerging markets, even if additional factors make such theoretical conclusions ultimately less applicable. If the starting point is exchange-rate rigidity and limited capital flows, and if the end point is a system with both exchange-rate flexibility and free capital flows, which dimension should liberalize first?

The starting point is in principle an easy situation. If a large economy can discipline its capital account—that is, not “close” it but manage the type and scale of flows, especially short-term flows—then from the point of view of monetary policy independence and speculative “bets”, it doesn’t matter whether it has a peg or a floating exchange rate. Given the transactional convenience of a pegged exchange rate, maximizing exchange-rate stability is a reasonable choice. Such a choice might be one way to describe China’s situation until fairly recently.

The most obvious stylized evolutionary path would relax the exchange-rate regime first and then open up to short-term capital flows second. This sequence has the advantage of allowing development of institutions for managing exchange-rate volatility, such as bank

supervision and hedging instruments, while the degree of volatility is still low. Additionally, there is no immediate concern about macroeconomic policy independence. The difficulty of this scenario is that it is not obvious that exchange-rate flexibility is needed, so social and political pressures favor limiting volatility. More importantly, without free capital flows, it is not clear that “market forces” give an accurate indication of desired changes in the exchange rate. For example, if capital flows are managed to allow or even encourage FDI inflows, market forces on the exchange rate would lead to appreciation of the currency beyond what is indicated by the current-account balance. Under these circumstances, introduction of exchange-rate flexibility before short-term capital flows would lead to domestically unpopular exchange-rate levels.

A second simple alternative would be to liberalize short-term capital flows while continuing to maximize exchange-rate stability. This has the political and social advantage of allowing domestic borrowers access to what looks like affordable capital from abroad. The disadvantages are quite serious, however, as mentioned above—loss of domestic policy independence and risks of speculative “bets” leading to collapse of the peg, often with damaging implications for growth and poverty reduction. Unfortunately, with “leakage” through capital controls, as is now the case in China, this second alternative can occur without a conscious policy decision.

The problems with both of these simple transition scenarios imply that both dimensions, capital flows and exchange-rate flexibility, need to proceed together in incremental steps. The result is a mix of incomplete capital account convertibility and incomplete exchange rate flexibility. This mix characterizes virtually all East Asian economies—heavy exchange rate



intervention with some capital account intervention as well. Unfortunately, with capital account openness increasingly popular, real-world domestic economic, political and social pressures still tend to make exchange-rate stability a high priority, a practice which makes incremental evolution look more like the second alternative above, open short-term capital flows with a relatively rigid exchange rate. This may, ironically, lead to greater exchange-rate volatility in the medium-term. Hence, real-world complications—of which there are many—limit the choices and effectiveness of a particular transition strategy. These same complications, in turn, place increased emphasis on the domestic financial system itself and its regulatory mechanisms in particular, to enable the transition to a mature system of exchange markets and capital flows.

### **Real-world Complications**

None of these policy positions and transition schemes—peg with capital controls, flexible exchange rate first, freer capital flow first, or both together—is independent of underlying economic, political and social circumstances. Perhaps the most fundamental underlying condition is economic—is the exchange rate appropriate for transmitting cost and price signals internationally? However, political and social forces also limit the freedom to make a range of adjustments linking the exchange rate with domestic and international economic conditions.

Underlying economic conditions are straightforward. In the case of a peg with capital controls, if the pegged value is out of line with what people are willing to pay to buy or sell the currency, secondary or black markets will appear, as they did in China in the 1980s. Monetary authorities must be ready to buy and sell at the designated rate, that is, to “intervene”. In

theory, if international payments imbalances shift for whatever reason—e.g., productivity gains, reduction in tariffs, and/or inflation—so that foreign exchange reserves begin to change dramatically, continuing the peg has domestic consequences as well as potential consequences for the peg itself.

In principle, with a rigid exchange rate, large net foreign exchange inflows put pressure on the money supply to expand and price levels to rise, eventually hurting the economy's current-account competitiveness and reducing the net inflow of funds. Conversely, net foreign exchange outflows and a decline in reserves should theoretically induce money contraction and a decline in price levels, enhancing current-account competitiveness and blunting foreign exchange outflows. However, monetary authorities generally resist inflation, and few economies have the political and social tolerance for falling prices and, eventually, falling wages.

With a rigid exchange rate, the clearest case is that of persistent net outflows of foreign exchange (e.g., a relatively large current account deficit). If prices and wages do not fall relative to international counterparts, because political forces insist on expansionary fiscal and monetary policy to maintain employment, for example, then competitiveness is not restored. What is more, over time, if foreign exchange reserves available are inadequate for selling on demand at the pegged price, government intervention would at some point have to stop intervening, and market forces would take over, resulting in secondary or black-market transactions at a depreciated price. The peg would have become unsustainable because it would have become seriously out of alignment with market forces. This describes the experience of a number of countries during the Asian Financial Crisis.

Again, under a peg with capital controls, the case of large net inflows is also subject to domestic economic, political and social forces, which in this case can resist fiscal and monetary steps to reflate the economy, arguably because of the importance of maintaining export competitiveness, profits and employment, for example. In this case, there is no shortage of funds, since domestic currency is used to purchase foreign exchange, but government must extract this same domestic currency back out of the economy to avoid reflation. “Sterilizing” currency in circulation through government bond sales of one kind or another is limited only by the willingness of government to pay an adequate interest rate on the bonds. Aside from whether such a policy is sustainable, the potential damage from such a policy comes from trading partners who might consider it to be unfair competition, ultimately resulting in trade sanctions and—in the extreme—threatening damage to the global trading system.

Moving beyond a peg with capital controls, both exchange-rate flexibility and capital flows make domestic economic, political and social factors even more important. Exchange-rate adjustment policies face at least two kinds of major domestic concern. In the face of net outflows and falling reserves, those with foreign-currency-denominated payment obligations resist decisions to devalue the currency and argue for continued intervention to defend its value. In particular, those domestic parties with foreign debts to service will resist devaluation, as will manufacturers who import a significant portion of their inputs. Similarly, if food and energy imports are important, concerns about social unrest linked to higher food and energy prices add to the pressure against devaluation. In the case of large net inflows and reserve increases, it is exporters who lobby for intervention against currency appreciation, and in situations where deflation has been a concern, monetary authorities will be hesitant to support currency appreciation for fear of making the deflation worse. Hence, in both cases, large inflows and

large outflows, domestic economic, political and social forces combine to prevent exchange-rate flexibility, leading to problems similar to those with a peg.

On the other hand, there is little economic, political or social resistance to freer capital flows—quite the reverse. Domestic borrowers, including the government itself, are attracted by what generally are lower interest rates from foreign lenders than from domestic sources. Similarly, local investors want the freedom to seek better risk-adjusted returns abroad wherever they exist. Those in favor of freer capital flows do not have to wait for a policy change, either, because if the rewards are large enough, they find ways around whatever capital controls are in place.

Importantly, freer capital flows, whether legal or illegal, make it more difficult to resist either domestic inflation and deflation or exchange-rate flexibility. In the extreme, if international investors sense that efforts to defend an exchange rate might not be successful, they will make “bets” to this effect, and the resulting capital flows will add to the likelihood the defense will fail. Even in the case where reserves are large and discourage speculation, capital flows work against exchange rate intervention. For example, in the case of net inflows and reserve accumulation, sterilizing the increased money supply from interventions requires selling government paper at higher and higher rates of return, but this only attracts more capital inflows, making the job of resisting appreciation just that much more difficult. In the case of net outflows, efforts to defend the exchange rate and fight deflation require purchase of domestic currency with foreign exchange reserves, which normally would cool the economy in deflationary ways. This situation requires open market operations to maintain domestic liquidity. But this in turn means interest rates will stay low, discouraging capital inflows that

might reduce downward pressure on the exchange rate and possibly encouraging further capital outflows.

It is for these reasons that many analysts consider efforts to resist either depreciation or appreciation ultimately futile. But in cases where capital controls still have some effectiveness or where interest rates and bank behavior are subject to government influence, resistance to both domestic adjustments and to exchange rate variation can go on for quite a long time.

This, then, summarizes the impact of domestic economic, political and social influences on exchange rate and capital account regimes. All told, they push the system in the direction of more rigid exchange rates and more open capital flows—which is just the combination that has proven so destabilizing and disorderly for so many countries in the past.

### **Risks of Crisis from Exchange Rate Rigidities with Freer Capital Flows: Maturity and Currency Mismatches**

As summarized above, natural economic, political and social forces lead in the direction of managed exchange rate rigidities and freer capital flows. As we have also seen, this combination is not a good one. Countries both suffer loss of macro policy independence and risk speculative bets against currency rigidities.

In emerging market economies, this combination is even more crisis-prone. This is because financial regulatory systems in emerging market economies are especially weak. Whether because of poor-quality laws establishing regulatory bodies, or corruption, or official inattention, regulatory bodies perform much less well than those in developed countries. They

often have trouble preventing even crude misuse of funds. As a result, these regulatory systems are even less able to prevent financial institutions from more subtle abuses involving currency and debt maturity mismatches. Such mismatches are often difficult for regulatory systems in developed economies to prevent, so emerging market economies are even more vulnerable.

The clearest case of such mismatches is that of borrowing short-term from abroad in foreign currency and on-lending to domestic clients with medium-to-long-term loans denominated in domestic currency. This common practice suffers from both currency and maturity mismatches.

First, the maturity mismatch means that if the foreign borrower decides not to roll over the short-term loan, the medium-to-long-term maturity of the matching asset will not have been repaid, and the financial intermediary can face a liquidity crisis. A mature financial regulatory system might have made this kind of mismatch more difficult to conduct, but in the absence of good supervision, such arrangements flourish, especially if the short-term borrowing rate is lower than longer-term interest rates. Such a liquidity crisis for an individual firm might be of little consequence, but if the decision not to renew the short-term loan is part of a general shift in international attitudes about credit-worthiness for the country as a whole, liquidity failures would be much more widespread, affecting the overall macro economy.

Second, currency mismatch, with an artificially inflexible exchange rate, also makes foreign borrowing appear more affordable than domestic borrowing. This is because domestic interest rates generally take into account expected domestic inflation, while foreign rates only reflect inflationary expectations in the lending country. The risk of inflation is generally higher

in borrowing emerging market economies than in lending developed economies. Ideally, this difference in inflationary expectations, of higher inflation in the borrowing country, would result in expectations for eventual devaluation. Such devaluation, of course, would make the foreign loan more expensive to service—and not just interest payments, but principal payments as well. What had looked like an inexpensive loan could become much more expensive.

A climate of managed exchange-rate stability makes it easy to ignore or under-emphasize the devaluation likelihood. If government, as is likely, eventually decides not to defend the exchange rate at the past level any more, but allows it to devalue with inflation—to maintain export competitiveness, for example—then all financial intermediaries with assets in domestic currency terms but debts in foreign exchange will suffer reductions in profits, if not outright losses. In the case of a large devaluation, they may not be able to service their debt or restructure it. In this case, they are bankrupt. In the worst case, even if the authorities continue to defend the currency, they may at some point run out of reserves and be unable to do so any more. The sudden and generally severe devaluation would seriously affect the servicing of all outstanding foreign borrowing.

Finally, the combination of maturity and currency mismatch is especially unstable. This is because foreign lenders' decisions not to roll over short-term loans to an emerging market economy would result in capital outflows. These outflows would put even greater pressure on the currency to devalue. In turn, such downward pressure on the currency and decline in foreign exchange reserves would signal to other foreign lenders that their clients might also have difficulty servicing their debt if there were a devaluation, making them also decide not to roll over their loans. The combination would be a panic outflow of capital that all but guarantees

devaluation and financial losses if not bankruptcies.

How would a more flexible exchange rate help prevent such developments? Most importantly, as capital flowed into the country in the form of the initial short-term loans, upward pressures on the exchange rate would result in a mild appreciation. The value of such an appreciation would be to remind borrowers that if the currency could revalue, it could also devalue, and prompt them to take a more careful look at this possibility. The revaluation would also open up the possibility that the currency was becoming overvalued and would be more likely than before to devalue again. As capital inflows and revaluation continued, the logical tendency would be for new borrowing to taper off because of the increased probability of high debt service costs from later devaluation.

Secondly, a speedy downward adjustment in the face of initial outflows might persuade a significant number of other lenders that further devaluation is less likely, prompting them not to withdraw additional capital. Furthermore, with devaluation already behind them, lenders and borrowers alike would be more comfortable agreeing on new capital inflows.

Third, a speedy devaluation in response to capital outflows would promise eventually stronger export competitiveness, weaker imports, and improved demand for the currency. This prospect would further persuade foreign lenders that the probability of continued devaluation had receded. Overall, the result of timely devaluation, of exchange-rate flexibility, would be to blunt the scale of net capital outflows and hence blunt the probability of serious crisis.

It is clear, then, that the risk of disorderly exchange-rate movements and precipitous capital flows is quite serious with the kind of exchange-rate and capital-control regimes in



emerging market economies—regimes resulting from natural domestic economic, political and social pressures in support of exchange-rate stability and freer capital flows.

### **Hedging with Derivatives is a Partial Answer to Systemic Currency Mismatch**

The proliferation of open capital accounts and managed exchange rates around the world has led to standardized availability of hedging instruments for reducing or eliminating exchange-rate risks for almost any transaction. Special cases of derivatives important for reducing exchange-rate-related risks are in the forward and futures markets for foreign exchange. A financial institution borrowing internationally to lend domestically can in principle purchase a futures or forward contract that guarantees the exchange rate it will be able to use when it comes time to repay its foreign loan.

To maximize the usefulness of such instruments, they must be available, and potential users must be willing to pay the cost of using them. Availability is generally not a problem, and even in China, financial authorities are already licensing banks to conduct derivatives transactions, even though the Renminbi-dollar exchange rate is still constrained within a very narrow band. The cost of these transactions, however, generally goes up with the perception of exchange-rate volatility and with the length of time into the future for which the transaction is guaranteed.

If all transactions were hedged, and if the hedging institutions were in no danger of insolvency, hedging capital flows against exchange rate risks could offer a workable solution to concerns about currency mismatch. However, as costs of hedging go up with volatility risk, financial intermediaries in emerging market economies can be increasingly reluctant to incur

both the cost and inconvenience of such contracts. Just as they would downplay the risk of devaluation in the example given above, so they would downplay the need to purchase protection. In the case of well-managed firms, balance sheets would be managed so different transactions hedged one another, without the need to purchase commercial hedging instruments. But this kind of behavior—which is just that sought by domestic regulatory bodies—is less likely in emerging market economies.

In sum, the extent to which derivative market participation in emerging market economies can resolve currency mismatch concerns to any significant degree is not clear, and it is likely to be partial at best in an emerging market economy.

### **Capital Controls as an Extension of Weak Domestic Financial Regulatory Systems**

Our conclusion is that a weak financial regulatory system and only partial use of derivatives leave an economy especially vulnerable to crisis when its managed exchange rate is inflexible and when capital flows are badly leaking or free. Given the difficulty of maintaining capital controls, emphasis on the regulation of financial transactions becomes a policy priority. This implies a whole host of secondary improvements in enterprise governance, accounting and regulatory sophistication. The domestic regulatory system should be monitoring and setting standards for the use of borrowed capital by financial institutions. These regulatory steps are resisted and are often ineffective in an emerging market economy because they represent government interference in the freedom for financial firms to manage their own business. In developed economies, such interference is tolerated because of the risks for society at large, and for creditors in particular, of financial mismanagement.

It is understandable, therefore, that with regulatory institutions inadequate for the task, authorities in emerging market economies frequently look to capital controls as cruder but more practical mechanisms for avoiding the risks of currency mismatch and disorderly exchange-rate and capital-flow volatility. It is important to note that capital controls do not imply a closed capital account. Rather, the volume and nature of capital flows are regulated. In comparison to examining and regulating all credit transactions, which is the mandate for various domestic regulatory agencies, administering regulated capital flows involves fewer transactions generally conducted by a smaller number of institutions. For an emerging market economy, therefore, administering regulated capital flows appears more likely to succeed in reducing currency mismatch risks than is relying on the domestic regulatory system.

Indeed, this may be one of the reasons that neither the IMF nor the World Bank is encouraging China to rush to full capital account convertibility. What about countries that have neither capital controls nor adequate domestic regulatory systems? There are examples of the re-imposition of capital controls in some countries, but as a general rule, it is not clear that this strategy is the right solution. The best that can be said is that each emerging-market economy's circumstances are different, and whether the focus is on greater exchange-rate flexibility, stronger domestic regulatory capabilities, capital controls, derivatives, or some combination of these, depends on administrative capabilities and potential for greater independence of monetary authorities responsible for exchange-rate intervention.

### **FDI, Export Surpluses and Major Economy Responsibilities to Buy**

Given that emerging market economies find themselves with fewer choices than they

would like for exchange-rate and capital-flow regimes, it is important to note that a number of outside factors can make the job easier, whatever solution is sought. In general, larger reserves and a reliable source of foreign exchange inflows give an economy more freedom to make policy mistakes and manage crises as they emerge, if not before they emerge. This “cushion” can be achieved most easily with FDI inflows and with better access to export markets. This latter possibility highlights the potential importance of sustained trade deficits in the already-industrialized world.

Creating the policy and institutional environment to attract significant FDI net inflows has substantial payoffs in terms of reducing emerging-market economy risk to shortcomings in the exchange-rate and capital-account regimes. The contribution to reserves and to expectations about future foreign exchange availability reduces risk of speculative attacks on the currency and reduces the importance of the exchange rate as a key lever in ensuring stability. In this regard, China has established an FDI policy regime and a legal and regulatory environment for FDI that has resulted in substantial inflows and indirect substantial support for pressures brought to bear by other capital account transactions. Other countries in the region, perhaps most notably Indonesia, have failed to develop such an FDI-friendly environment, and as a result rely more on shorter-term capital inflows. Concentrating on this factor in the overall exchange-rate regime process has the advantage that it needn’t stir up opposition of the kind brought to bear directly on exchange-rate policy itself.

A second source of foreign exchange that can act as a “cushion” for exchange-rate developments is exports. Achieving a trade surplus or a current-account surplus is difficult for most emerging market economies. It is made easier by the large U.S. trade deficits. It would

be easier still if other large OECD economies, especially Europe and Japan, could do likewise and run sustained trade deficits rather than large surpluses. These mature economies no longer need to be reliant on net exports for such a large share of final demand. Quite the contrary, these countries could make their domestic markets more open to emerging-market exports until significant and long-term deficits appear. Such a strategy would also increase circulation of the Euro and Yen throughout Asia.

### **Long-cycle evolution of exchange-rate and capital-account volatility**

Finally, when we consider the balance-of-payments statistics for a number of Asian countries we see that many of them actually have trade surpluses, and so it is tempting to think that their policy regime in this regard is already about right. However, this ignores the possibility that there is a long-run cycle operating in emerging-market countries with regard to the exchange rate, in which case the fact that conditions appear better should not reduce the sense of urgency to make progress in institutions promoting exchange-rate flexibility, derivatives, and FDI investment climate improvement.

If there is such a long-run cycle, it might go something like this: an emerging market economy with tax revenue problems, resulting budget deficits and consequent inflation starts out by seeing its export competitiveness eroded by inflation, leading to growing trade and current-account deficits. While intervening to support the currency, reserves begin to shrink and capital begins to shift out of the country. Before long, the currency can no longer be defended, and it devalues substantially. With the devaluation, export competitiveness improves and domestic producers improve their abilities to compete with imports. At this point in the cycle, a current

account surplus appears, and it seems that there is no serious problem with underlying institutions and policies. However, as time goes on, and the fiscal deficits persist and inflation builds—in part because of the major devaluation—the surpluses diminish and turn to deficit again, and short-term capital flows become important. The cycle is ready to start again.

To the degree that such a cycle describes long-term patterns for emerging-market economies in Asia, it cautions us not to be complacent in working to build healthier institutions.

### **Implications for a Pan-Asia Monetary, Fiscal and Exchange-rate Convergence to a Common Currency**

Given the potential instability in exchange rates and capital flows in Asian emerging market economies, as well as the very different levels of development in terms of financial institutions, regulatory bodies, reliance on fiscal deficits, and inflation, we can only consider monetary convergence as a very long-term proposition.

In terms of an anchor currency, there is probably not going to be any one currency that dominates. It is most likely that the Japanese yen and the Chinese renminbi will both be hard currencies used for reserve purposes by other countries in the region. In this case, the foundations for regional monetary convergence will have to be collaboration between Japan and China and convergence of their two currencies. This requires surrendering a degree of macroeconomic control to one another, since exchange rate flexibility between the two would be greatly reduced. But even this first step of Japanese-Chinese collaboration seems far away—largely because of the potential difficulty for China to give up its ability to use fiscal and monetary policy in potentially extreme ways on short notice. Outgrowing China's need for at

times dramatic policy independence could take half the century.