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Putting the Cart Before the Horse? Capital Account Liberalization and Exchange Rate Flexibility in China

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Like their counterparts in many other emerging market economies, Chinese policymakers are facing a complex set of questions related to the desirability and appropriate mode of implementing exchange rate flexibility and capital account liberalization. The Chinese authorities have stated publicly that both exchange rate flexibility and capital account convertibility are their medium-term objectives, but they have resisted recent calls from the international community for an early move toward more flexibility.

The issue has come to the fore in the context of discussions about the appropriateness of maintaining the current exchange rate regime—wherein the renminbi is effectively linked to the U.S. dollar—given the rapid pace of China’s reserve accumulation. Many observers have interpreted this surge in reserve accumulation over the past two years, which has reflected a rapid expansion of China’s exports as well as large inflows

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of foreign direct investment (FDI), as clear evidence of undervaluation of the renminbi. However, it also reflects large speculative capital inflows, suggesting that the evidence on whether the renminbi is substantially undervalued in terms of fundamentals is far from conclusive.¹

A more important reason for recommending exchange rate flexibility is that it is in China's own interest. As its economy matures and becomes closely integrated with the global economy, China will inevitably become more exposed to different types of macroeconomic shocks, both internal and external. It would therefore benefit from having some flexibility in the exchange rate and, by extension, a more independent monetary policy to help the economy better adjust to such shocks. Thus, a strong argument can be made for an early move toward greater exchange rate flexibility in China, irrespective of whether or not the renminbi is substantially undervalued. A corollary to this argument is that it is a move toward flexibility rather than a revaluation of the rate that is desirable.² As experiences of other countries have shown, rapid economic growth and a strong external position constitute relatively favorable circumstances for making such a move.

An interesting point in this public discussion is that the Chinese authorities as well as a number of observers on both sides of the exchange rate flexibility debate have conflated the issue of exchange rate flexibility with that of capital account liberalization.³ One of the main points of this

¹On the one hand, IMF (2004) and Funke and Rahn (2005) conclude that there is no strong evidence that the renminbi is substantially undervalued. Goldstein (2004) and Frankel (2004), on the other hand, argue that the renminbi is undervalued by at least 30–35 percent. Market analysts have a similarly diverse range of views. The role of speculative capital inflows in accounting for pressures on China's exchange rate appears to have increased substantially since 2001. For instance, about half of the increase in international reserves in 2003 can be accounted for by non-FDI capital inflows (for more details, see IMF, 2004; and Prasad and Wei, 2005).

²See Prasad (2004b) for a further discussion of this point. Goldstein and Lardy (2003) argue for a two-step approach to exchange rate reform in China—a revaluation followed by a widening of the trading band. At the other end of the spectrum, the most prominent proponents of the view that China should not alter its current exchange rate regime include McKinnon and Schnabl (2003) and Mundell (2003).

³To cite a prominent example, Alan Greenspan has been quoted as saying that, “Many in China fear that removal of capital controls that restrict the ability of domestic investors to invest abroad and to sell or to purchase foreign currency—which is a necessary step to allow a currency to float freely—could cause an outflow of deposits from Chinese banks, destabilizing the system” (Ip, 2004). News reports interpreted his statement as indicating “...that before floating its exchange rate China should fix its banking system” (Ip, 2004). Standard & Poor's has also said, in their evaluations of China, that “risk control systems are ill prepared to deal with rapid liberalization of the exchange rate and capital controls,” suggesting that the two issues are linked (S&P, 2003).

paper is that these are related, but distinct, issues. They do not necessarily have to be implemented simultaneously, and neither one necessarily implies the other.

The juxtaposition of these issues appears to have come about in the context of the notion that exchange rate flexibility could pose major problems for the financial sector. Indeed, a number of observers—and the Chinese authorities themselves—have argued that the weaknesses in China's banking system are a reason to defer making a move toward greater exchange rate flexibility. The logic appears to be that such flexibility could expose the financial system's vulnerabilities by facilitating outflows from the banking system as domestic economic agents take advantage of investment opportunities abroad.

We argue that with existing capital controls in place—even if these are somewhat porous—the banking system is unlikely to be subject to substantial stress simply as a result of greater exchange rate flexibility. Domestic banks do not have a large net exposure to currency risk, and exchange rate flexibility by itself is unlikely to create strong incentives (or channels) to take deposits out of the Chinese banking system. Furthermore, the introduction of greater flexibility would create stronger incentives for developing the foreign exchange market and for currency risk management, including developing the hedging instruments and forward markets that are currently absent. In this way, the introduction of exchange rate flexibility could, in fact, facilitate capital account liberalization by better preparing the economy to deal with the impact of increased capital flows.

Capital controls do, however, tend to become less effective over time. Expanding trade and the increasing sophistication of domestic and international investors invariably generate new ways to get around capital controls. In addition, the experiences of numerous emerging market countries have shown the risks associated with maintaining a fixed exchange rate in tandem with a capital account that is open in either *de jure* or *de facto* terms, especially if there are weaknesses in the domestic financial system. Thus, the authorities' recent efforts to gradually liberalize capital outflows in the context of the current exchange rate regime could well prove counterproductive. Moreover, these factors suggest that delaying a move toward greater exchange flexibility could precipitate the need for an adjustment in the future under far less desirable circumstances.

At the same time, given the weaknesses in China's banking system, a cautious and gradual approach to capital account liberalization would, indeed, be appropriate. There are substantial risks associated with exposure to capital flows in the absence of sufficient institutional development, especially in the financial sector. The liberalization of capital flows

should be sequenced in a manner that reinforces domestic financial liberalization and allows for institutional capacity building to manage the additional risks. A more stable financial system and experience over time with greater flexibility in the exchange rate should, in fact, be regarded as prerequisites to fully opening the capital account.⁴

But what does it mean to have exchange rate flexibility if the country's currency is not convertible on the capital account? The exchange rate can still be allowed to fluctuate in response to the evolution of supply and demand for foreign exchange, even though there may be constraints on capital flows. A move toward more flexibility also does not necessarily mean immediate adoption of a free float.⁵ In fact, a period of "learning to float" can be advisable to overcome "fear of floating," a term used to characterize policymakers' initial aversion, upon exiting a fixed exchange rate regime, to allow the nominal exchange rate to move significantly. At the same time, the maintenance of capital controls can, to some degree, support this process by providing protection from potential instability arising from capital flows while institutional arrangements needed to support capital account convertibility are allowed to develop.

The remainder of this paper develops the case for two key points: that a move toward greater exchange rate flexibility is in China's own interest and that it should precede capital account liberalization (Eichengreen, 2004, reaches similar conclusions). It does not deal with a whole host of related (and equally important) issues, including how the move toward greater exchange rate flexibility should be managed, what the best alternative exchange rate regime would be, what form an alternative monetary anchor could take, or how much financial sector and institutional development is adequate to minimize the risks of capital account liberalization.

The Case for Exchange Rate Flexibility

With China's increasing integration into the global economy, its exposure to external shocks has increased. This has heightened the need for an autonomous monetary policy and greater use of market-oriented instruments such as interest rate changes to control economic activity. Indeed, the constraints on the use of such instruments have been highlighted by

⁴Yu (2004) has argued that it would be optimal for gradual capital account liberalization and moves toward greater exchange rate flexibility to proceed simultaneously.

⁵IMF (2004) notes that an initial move toward flexibility could take the form of a widening of the renminbi trading band, a peg to a currency basket, or some combination of these.

the capital inflows since 2001 that have increased liquidity in the banking system and complicated domestic monetary management. During this period, rapid growth of bank credit has contributed to a surge in investment growth, leading to the possible buildup of excess capacity and associated nonperforming loans in several sectors of the economy, as well as potential problems of more generalized overheating. Increases in interest rates to control these problems have perforce been limited by the increased incentives for capital inflows that would result.

In this context, it is worth reiterating that the Chinese authorities themselves have clearly articulated the desirability of having a more flexible exchange rate and independent monetary policy; the main focus of the recent debate has been about the appropriate timing for such a move. It is useful to set the stage for the case for an early move to flexibility by reviewing the economic concerns that could be inhibiting it.

Concerns About Greater Exchange Rate Flexibility

China's export growth is widely regarded as playing an important role in catalyzing overall economic and employment growth. Thus, a key concern about allowing more flexibility is that an appreciation of the renminbi could hurt China's external competitiveness, thereby reducing export growth and weakening prospects for continued FDI inflows (see Mundell, 2003). However, the direct impact on exports of a moderate appreciation of the exchange rate is likely to be considerably muted by the high import content of China's exports, as well as China's strong productivity growth and low labor costs. Indeed, during the period 1999–2002, China's total exports (in value terms) rose by 37 percent despite a 7 percent real effective appreciation. Trade data show that more than 50 percent of Chinese export operations involve the final assembly of products using intermediate inputs produced by other countries. Despite the high gross value of Chinese exports, the domestic value-added content of these exports to the rest of the world in general, and to the United States in particular, is only about 30 percent and 20 percent, respectively (Lau, 2003). An appreciation of the renminbi, while raising the cost of processing and assembly in China, would also lower the cost of imported intermediate inputs. Hence, an appreciation of the renminbi may not put much of a dent in China's external competitiveness.⁶

⁶Anderson (2004) makes a similar point. Lau (2003) estimates that a 10 percent real appreciation of the renminbi would increase the cost of Chinese exports to the United States by only about 2 percent.

Another concern is that an exchange rate appreciation could adversely affect the agricultural sector. There is believed to be a large amount of surplus labor in the rural areas—about 150 million workers by the Chinese authorities' own estimates. This, in conjunction with the notion that the Chinese agricultural sector is not internationally competitive, has raised considerable concerns among policymakers that a fall in domestic prices of food imports that would result from an appreciation of the renminbi could have significant adverse consequences. Although this is a plausible and relevant concern, there is as yet little empirical evidence to support it. In addition, recent research suggests that the competitiveness of China's agricultural sector has improved significantly in recent years, making it less sensitive to external shocks (see Rosen, Rozelle, and Huang, 2004).⁷

As noted earlier, a greater concern is that exchange rate flexibility could imperil the health of the banking system. Indeed, this is a typical problem in countries in which a devaluation imposes a large burden on firms and banks that have large amounts of debt denominated in foreign currencies. The situation in China is of course quite the opposite because current pressures are for an appreciation, but the fact that domestic banks have a positive net foreign asset position implies that there could still be costs to the banking sector.

The current overall exposure of the corporate sector and banks in China to foreign exchange risks appears to be low; however, there are some indications that the degree of exposure has been on the rise in recent years. In 2003, banks' net foreign assets accounted for 3 percent of broad money and 6 percent of GDP, and foreign currency lending constituted about 5 percent of domestic credit and 9 percent of GDP. These indicators seem relatively innocuous when compared with those of other countries. Their recent evolution, however, points to a trend that bears watching closely: during 2001–03, banks' foreign currency loans to domestic residents have increased by more than 60 percent, net foreign currency liabilities are up by nearly 50 percent, and total short-term external debt (which is denominated in foreign currencies) has risen by more than 50 percent. These are trends that are likely to continue with China's increasing global integration and the opening of the financial system as part of the terms of World Trade Organization (WTO) accession.

There are some caveats to be borne in mind in interpreting the aggregate figures discussed above. Detailed information on exposures of large

⁷This study notes that, contrary to expectations, the agricultural sector was able to cope quite well with the opening up of China's agricultural markets that resulted from WTO accession commitments.

financial institutions, including the currency composition and maturity of foreign currency assets and liabilities, would have to be analyzed to determine the exposure of specific institutions and any possible systemic spillovers that could result from the effects of an exchange rate appreciation on any of these institutions. Moreover, there is currently little information available on hedging practices in the corporate sector. Anecdotal evidence suggests that the use of hedging instruments is limited; however, other forms of hedging—particularly “natural” hedges (for example, denomination of processing imports and related exports in the same currency)—may be more prevalent.

A more general concern is that nominal exchange rate volatility under a more flexible exchange rate regime could affect trade flows and FDI inflows, both of which have been important to China’s growth. On the former, recent studies find little evidence that exchange rate volatility has a significant adverse effect on trade flows (see Clark, Tamirisa, and Wei, 2004). It is also worth noting that, by maintaining an effective peg to the dollar, China’s currency is stable relative to its major trading partner—the United States—but it still fluctuates relative to most of China’s other trading partners. This does not appear to have hurt China’s trade expansion in other industrial country markets.

There is also little evidence in the literature that exchange rate volatility has a significant role in determining the level of FDI a country receives. The most important factors affecting FDI include market size, GDP growth, productivity growth, political and macroeconomic stability, the regulatory environment, and the ability to repatriate profits (Lim, 2001). Nevertheless, some recent papers have suggested that China’s maintenance of an undervalued exchange rate is crucial for its ability to attract strong FDI inflows.⁸ Our view is that, given China’s strong productivity growth, increasing access to world markets, and rapidly expanding domestic demand, there is little reason to believe that an exchange rate appreciation would have a substantial negative effect on FDI inflows. Indeed, the prospects of greater macroeconomic stability that could result from exchange rate flexibility could well offset any negative effects from an appreciation.

In summary, our assessment is that the net adverse effects on the Chinese economy of any appreciation in the renminbi resulting from a move toward greater flexibility would be quite modest. There could,

⁸For instance, this is implicitly suggested by the work of Dooley, Folkerts-Landau, and Garber (2004), although it is not their central thesis.

however, be significant distributional effects, with some sectors such as agriculture potentially facing larger adjustment costs.

All of these potential costs would, in any case, depend on the persistence of any appreciation of the currency. Under current circumstances, a near-term appreciation of the renminbi is widely regarded as a sure thing. Over the medium term, however, the trend in the real exchange rate is much harder to predict because it will depend on a number of additional factors with potentially offsetting effects. Forces for appreciation include the continuing strong productivity growth in China's traded goods sector, aided by structural reforms and further improvement in access to world markets. Forces for depreciation include the further liberalization of China's domestic market that will take place as part of WTO accession commitments, and the expected gradual liberalization of the capital account, which could lead to more outflows if domestic agents sought to undertake some international diversification of their portfolios. Moreover, as noted earlier, recent upward pressure on the exchange rate reflects strong capital inflows that in large part appear to be driven by speculative inflows in anticipation of a currency appreciation. Such inflows are likely to be transitory and could easily reverse. Thus, it is far from obvious that greater flexibility will result in a persistent appreciation of the renminbi.

The Potential Costs of Not Having Exchange Rate Flexibility

We now turn to a discussion of the costs of delaying a move toward exchange rate flexibility. In this context, it is first worth reviewing why countries adopt fixed exchange rate systems in the first place. A crucial consideration for developing economies is that such regimes provide a well-defined nominal anchor and, in principle, impose discipline on macroeconomic policies. This discipline can be useful for countries with institutional and policy weaknesses that tend to manifest themselves in higher inflation, problems of debt sustainability, fragile banking systems, and other sources of macro volatility. Empirical studies have shown that fixed or relatively rigid exchange rate regimes have indeed provided some benefits in terms of macroeconomic stability, especially to low-income countries where financial market development is limited and the capital market closed (see, for example, Rogoff and others, 2004). But these benefits tend to erode over time whereas exchange rate flexibility becomes more valuable as economies mature and become integrated with global markets.

In fact, maintenance of a fixed exchange rate regime can often mask underlying policy and institutional weaknesses and result in the buildup

of various sorts of imbalances. These problems can be exacerbated by an open capital account. For instance, governments may accumulate external debt in order to get around constraints to domestic financing of budget deficits. Domestic firms and financial institutions may also react to the perception of limited foreign exchange risk by taking on foreign currency debt. Given the relative riskiness of lending to emerging markets as perceived by international investors, much of this debt tends to be short term. The presence of large amounts of short-term external debt denominated in foreign currencies is now widely recognized as being a key risk factor in precipitating balance of payments crises.

In addition to these general considerations, the particular circumstances that China faces also generate some specific costs of maintaining a fixed exchange rate. The sterilization of capital inflows has been facilitated by the fact that domestic interest rates related to the main sterilization instrument (central bank bills) have been lower than interest rates on medium- and long-term industrial country treasury bonds, which is where much of China's reserves are presumed to be held. Thus, the traditional net costs of sterilization are absent in this case. However, maintaining such low domestic interest rates, which have recently been negative in real terms, requires domestic financial repression, which in turn creates large distortions and efficiency losses (see Prasad and Rajan, 2005a).

Moreover, the depreciation of the U.S. dollar since 2003 suggests that the terms of trade for China have worsened. This effectively acts as an implicit tax on consumption and, although such costs are difficult to detect directly, they are likely to be significant in terms of potential welfare losses, especially in view of China's high level of trade openness.

Furthermore, if fundamental factors such as relative productivity growth create persistent pressures for real exchange appreciation, these pressures eventually tend to force adjustment through one channel or another. Even in an economy with capital controls and a repressed domestic financial sector, these pressures can be bottled up for only so long (Rajan and Subramanian, 2004). It is typically better to allow the required adjustment to take place through changes in the nominal exchange rate rather than through inflation. Particularly in a developing economy, such inflationary dynamics can pose serious risks because expectations of rising inflation can feed on themselves and become entrenched.

For an independent monetary policy (with exchange rate flexibility) to be most effective, further institutional and operational improvements would be needed to establish a credible monetary policy framework and improve the monetary policy transmission mechanism. However, the movement

toward an independent monetary policy regime should not be delayed. Although it may indeed be possible to maintain China's present exchange rate regime for a long period, the explicit and implicit costs of maintaining this regime are potentially large and likely to grow over time, especially in view of China's increasing integration with global markets and the authorities' stated objective to gradually liberalize the capital account.

Capital Account Liberalization

Benefits and Risks in Theory and Practice

The financial crises experienced by many emerging markets in the past two decades have led to an intense debate about the benefits and risks of capital account liberalization for developing countries. In theory, capital account liberalization should have unambiguous benefits in terms of promoting more efficient international allocation of capital, boosting growth in developing countries through a variety of channels, and allowing countries to reduce their consumption volatility by offering opportunities for sharing income risk. The reality, however, is far more sobering. There is little conclusive evidence of a strong and robust causal relationship between financial integration and growth. Moreover, there is evidence that financial integration could actually increase the relative volatility of consumption growth for emerging markets (see Prasad and others, 2003).

Opening the capital account while maintaining an inflexible exchange rate regime, especially when domestic macroeconomic policies are not consistent with the requirements of the regime, has proven to be a precursor of crisis in many countries. Recent episodes involving emerging market economies, from the "tequila crisis" of 1995 through the Asian, Russian, and Brazilian crises of 1997–98, have added to the evidence that a fixed exchange rate regime with an open capital account provides a fertile ground for crises. By contrast, emerging market economies that maintained greater flexibility in their exchange rate regimes have generally fared much better when faced with external pressures. For example, Chile, Mexico, Peru, South Africa, and Turkey all seem to have benefited from the flexibility of their exchange rates during periods of instability in emerging markets. China and India were less affected by the Asian crisis of 1997–98, and their relatively closed capital account regimes have been credited with helping to limit vulnerability to financial contagion, although other factors may have played a role as well, including comfortable foreign reserves positions (see Krugman, 1998; and Fernald and Babson, 1999).

As noted earlier, capital account liberalization can also aggravate risks associated with imprudent fiscal policies. Moreover, in the presence of weak and inadequately supervised banking systems and other distortions in domestic capital markets, inflows of foreign capital could be misallocated and create a host of problems, including currency, maturity, and duration mismatches on the balance sheets of financial and corporate sectors, as well as unsustainable levels and maturity structures of external debt (Ishii and Habermeier, 2002).

All of this suggests that China would do well to adopt a cautious approach to capital account liberalization. Indeed, China's approach of opening up to FDI rather than other types of capital inflows has helped insulate it from many of the risks associated with capital account liberalization. But, as discussed below, the dominance of FDI in China's total capital inflows has declined markedly in recent years, implying that the composition of inflows is likely to be increasingly driven by market forces rather than the desires of policymakers.⁹

Capital Controls and Their Inevitable Erosion Over Time

Growing awareness about the potential pitfalls of capital account liberalization has refocused attention on the usefulness of capital controls in managing the process of integration with the global economy. Capital controls do provide a degree of protection from the vagaries of international capital flows and can help control the risks posed by a weak financial sector. However, they can often perpetuate inefficiencies and distortions in domestic financial systems, with consequences for long-term growth and stability.

In countries with weak financial systems, capital controls can prevent the corporate sector as well as domestic banks—whose operations may not entirely be run on a commercial basis and that may have inadequate risk assessment capacity—from excessive external borrowing. In countries with an inflexible exchange rate regime, capital controls are also used to preserve a degree of monetary policy autonomy. Some countries resort to capital controls to reduce both exchange rate volatility generated by swings in short-run capital flows as well as exposure to balance of payments crises. At the same time, capital controls can also support policies of domestic financial repression that can be used to ensure that domestic

⁹Prasad and Wei (2005) document changes over time in the relative importance of FDI in China's total capital inflows and discuss various hypotheses about why China's inflows have been largely tilted toward FDI.

savings are used to finance the government budget and sectors deemed as priorities by policymakers.

In practice, capital controls tend to be far from watertight. A number of channels can be used to evade capital controls. One of the most frequently used channels has been under- and over-invoicing of export and import contracts (Gulati, 1987; Kamin, 1988; and Patnaik and Vasudevan, 2000). Multinational companies can also use transfer pricing schemes to evade capital controls. Another trade-related channel for unrecorded capital flows is associated with the leads and lags in the settlement of commercial transactions or variation in the terms offered on short-term trade credits. Remittances of savings by foreign workers in the domestic economy and by domestic nationals working abroad, family remittances, and tourist expenditures—although typically regarded as current account transactions—have also been used as vehicles for the acquisition or repatriation of foreign assets.

There is by now considerable evidence that the effectiveness of capital controls tends to diminish over time, especially when strong exchange rate pressures are resisted by official intervention. Japan's experience in the wake of the collapse of Bretton Woods system in the 1970s and the experiences of Latin American countries during the debt crisis of the 1980s demonstrate that capital controls have generally not been very effective in restricting capital outflows (inflows) when there is strong downward (upward) pressure on the exchange rate.

Capital controls in China are extensive and appear to have been reasonably effective in the past. However, recent experience suggests that their efficiency may be waning. It is widely cited that China's capital controls were one reason the country withstood the Asian financial crisis (for example, Gruenwald and Aziz, 2003), but it should be noted that the capital flight from China during the Asian crisis was triggered by external shocks, whereas public confidence in the domestic financial system remained basically intact. In this sense, China's capital controls have not really been tested in a crisis context.

Despite the existence of controls on capital outflows, sizable amounts of financial capital still appear to have flown out of China during the Asian crisis and its aftermath.¹⁰ Since 2001, expectations of an appreciation of the renminbi, coupled with a positive Chinese-U.S. interest differen-

¹⁰Gunter (2004) estimates that capital flight from China exceeded US\$100 billion a year during 1997–2000. He also notes that, during this period, stricter controls on cross-border currency and investment flows were largely offset by increasing use of trade mis-invoicing.

tial, have resulted in substantial net inflows of non-FDI capital despite the extensive controls on non-FDI inflows (see Prasad and Wei, 2005). Moreover, these expectations have also been reflected in recorded capital account transactions. Foreign currency loans from domestic banks to residents increased by almost 30 percent during 2003, whereas residents' foreign currency deposits declined slightly. At the same time, anecdotal evidence of early collection of export receipts and increased use of trade credit for imports are also consistent with general expectations of an appreciation of the renminbi.

These experiences, corroborated by more formal empirical work (for example, Cheung, Chinn, and Fujii, 2003), suggest that the capital controls have become less effective over time, increasingly limiting the room for an independent monetary policy. China's continued rapid trade expansion also creates a growing scope for getting around capital account restrictions. As China becomes increasingly integrated into the global economy in the context of its WTO accession, with commitments to further liberalization of trade and the opening up of the financial sector, its capital controls are likely to become even more porous.

The Foreign Exchange Market

Some commentators have argued that the absence of a well-functioning foreign exchange market will inhibit any move toward greater exchange rate flexibility. Furthermore, it has been argued that, so long as controls on capital account transactions are in place, there will not be a fully functioning foreign exchange market in China, because much of the potential demand for foreign exchange in China is still excluded from the market (for example, Lau, 2003). The latter is a valid point. However, although liberalizing the capital account can expand the sources and uses of foreign exchange, an open capital account is not a necessary condition for deepening the foreign exchange market. Because China has a large volume of trade transactions and few restrictions on convertibility on current account transactions, there is clearly potential for a deep and well-functioning foreign exchange market even without a fully open capital account.¹¹

¹¹Dutttagupta, Fernandez, and Karacadag (2004) also discuss the potential to develop the foreign exchange market in these circumstances and show that it is difficult to establish a strong positive relationship between capital account liberalization and depth of foreign exchange markets.

Furthermore, the notion of needing to first perfect the foreign exchange market before moving toward greater flexibility is, in our view, a red herring. In fact, the functioning of the foreign exchange market can be greatly improved even within the context of the present exchange rate regime.¹² A phased approach toward flexibility should not pose any major risks even if existing financial instruments to hedge foreign exchange risks are limited, and would give economic agents stronger incentives to hedge foreign exchange risks that have so far been borne entirely by the monetary authorities. This would itself be an important factor nurturing the development of a deeper and more sophisticated foreign exchange market.

Considerations of Timing

International experiences have varied considerably in terms of the order in which countries have adopted policies to open up to global integration. Some countries have liberalized capital flows without exchange rate flexibility—an approach that entails considerable risks if financial markets are not sufficiently developed—whereas others have introduced exchange rate flexibility well in advance of capital account liberalization. In general, countries appear to have better medium-term outcomes if they introduce exchange rate flexibility before fully liberalizing their capital account, especially if there are weaknesses in the financial sector.¹³

The Chinese authorities have attempted to alleviate recent appreciation pressures by easing controls on capital as well as current account transactions in order to provide more channels for capital outflows.¹⁴ These measures, although broadly in the direction of the authorities' long-term objective of full capital account convertibility, run the risk of getting the sequencing wrong. As discussed above, an increasingly open capital account without exchange rate flexibility has been the root cause of many recent emerging market financial crises.

¹²For instance, allowing enterprises access to the China Foreign Exchange Trading System through a licensed broker system would increase trading volume and reduce the dominant role of official intervention in the market. Even within a narrow band of a *de facto* peg, relaxing bid-offer spreads could encourage participants to take positions on both sides. Foreign exchange surrender requirements could also be further reduced. Easing the requirement that enterprises need “real commercial demand” to enter forward contracts would allow them to hedge based on future needs (see Lin, 2004; Luo, 2004; and Ma, 2004).

¹³Selected international experiences are discussed in Annex I of the fuller version of this paper (Prasad and Rajan, 2005b). India is one example of a country that has recently introduced some exchange rate flexibility while only gradually easing capital account restrictions.

¹⁴See Annex II of Prasad and Rajan (2005b) for a detailed description of recent measures taken to ease restrictions on cross-border foreign exchange transactions.

Moreover, easing controls on capital outflows may end up being counter-productive because this could stimulate further inflows. The removal of controls on outflows, by making it easier to take capital out of a country when desired, tends to make investors more willing to invest in a country (Labán and Larraín, 1993). In addition, to the extent that an easing of controls on outflows is perceived as a commitment to sound domestic macroeconomic policies, more capital could be induced to flow in (Bartolini and Drazen, 1997). A number of countries that have removed controls on outflows (for example, Uruguay in 1970, Italy in 1984, New Zealand in 1984, and Spain in 1986) have experienced rapid and massive inflows soon after.

Although capital controls provide some degree of protection to the domestic financial system, these controls are likely to become less effective over time. It would, therefore, be in China's best interest to consider an early move toward exchange rate flexibility, while the existing capital account controls are still relatively effective and the underlying structural problems manageable. The current strength and stability of the economy, together with existing capital account controls, have contributed to a reasonably high level of confidence in the banking system despite its weak financial position. But domestic banks are likely to come under increasing competitive pressure, especially once foreign banks are allowed to enter the Chinese market under WTO accession commitments.

In principle, an orderly exit from a fixed exchange rate regime to greater flexibility can best be accomplished during a period of relative tranquility in exchange markets. Because such periods are rare and fleeting, however, experiences of other countries suggest that a next-best set of circumstances is when the domestic economy is strong and pressures are for an appreciation of the currency (Eichengreen and others, 1998; and Agénor, 2004). Such circumstances provide a useful window of opportunity that should be taken full advantage of. History is replete with examples of countries that, having passed up such opportunities, had to change their exchange rate regimes in far less ideal circumstances and with much less desirable macroeconomic outcomes during the adjustment to the new regime.

Concluding Remarks

China is firmly on the path of greater integration with the global economy—a path that has provided great benefits for China and for the world in general (see Prasad, 2004a). The Chinese authorities clearly intend to continue on this path, undertaking more trade integration and

a gradual liberalization of capital controls. In view of these objectives, gaining experience over time with greater flexibility in the exchange rate and achieving a more stable financial system should be prerequisites to fully opening the capital account.

Introducing more flexibility in the exchange rate would help to improve macroeconomic control and reduce vulnerabilities to shocks. Steps toward more flexibility in the exchange rate need not be deferred until all of the prerequisites for full capital account convertibility have been achieved. The exchange rate can be allowed to move in response to the evolution of supply and demand for foreign exchange, even though these forces may be constrained by restrictions on capital flows.

Historical experiences of other countries highlight the risks associated with capital account liberalization in the absence of exchange rate flexibility. Easing controls on capital outflows in order to alleviate pressures on the exchange rate could, in fact, be counterproductive and induce even larger inflows. Thus, capital account liberalization should be given a lower priority and should not be regarded as a substitute for greater exchange rate flexibility.

This paper has also argued that greater flexibility can be introduced without creating disruptions in the financial sector. Maintenance of capital controls can, to some degree, support this process by providing protection from potential instability arising from capital flows while institutional arrangements needed to support capital account convertibility, including a stronger domestic banking sector, are allowed to develop. A movement toward more exchange rate flexibility also does not necessarily mean immediate adoption of a free float. In fact, a period of “learning to float” can be useful in overcoming “fear of floating.”

However, capital controls will become increasingly ineffective as integration with the global economy continues. Furthermore, historical experiences of other countries clearly show the merits of making a move toward flexibility when the domestic economy is growing rapidly and the external position is strong. All of these factors lead to the conclusions that a relatively early move toward greater exchange rate flexibility would be in China’s best interest and that there could be significant costs associated with long delays in making such a move.

Bibliography

- Agénor, Pierre-Richard, 2004, “Orderly Exits from Adjustable Pegs and Exchange Rate Bands: Policy Issues and the Role of Capital Flows,” background study for *Global Development Finance 2004* (Washington: World Bank).

- Anderson, Jonathan, 2004, "How I Learned to Stop Worrying and Forget the Yuan," *Far Eastern Economic Review*, Vol. 168 (December), pp. 37–42.
- Bank for International Settlements (BIS), 2003, "China's Capital Account Liberalisation: International Perspective," BIS Paper No. 15 (Basel).
- Bartolini, Leonardo, and Allan Drazen, 1997, "Capital Account Liberalization as a Signal," *American Economic Review*, Vol. 87 (March), pp. 138–54.
- Cheung, Yin-Wong, Menzie D. Chinn, and Eiji Fujii, 2003, "The Chinese Economies in Global Context: The Integration Process and Its Determinants," NBER Working Paper No. 10047 (Cambridge, Massachusetts: National Bureau of Economic Research).
- Clark, Peter B., Natalia Tamirisa, and Shang-Jin Wei, 2004, *A New Look at Exchange Rate Volatility and Trade Flows*, IMF Occasional Paper No. 235 (Washington: International Monetary Fund).
- Dooley, Michael P., David Folkerts-Landau, and Peter Garber, 2004, "Direct Investment, Rising Real Wages and the Absorption of Excess Labor in the Periphery," NBER Working Paper No. 10626 (Cambridge, Massachusetts: National Bureau of Economic Research).
- Dutttagupta, Rupa, Gilda Fernandez, and Cem Karacadag, 2004, "From Fixed to Float: Operational Aspects of Moving Towards Exchange Rate Flexibility," IMF Working Paper 04/126 (Washington: International Monetary Fund).
- Eichengreen, Barry, 2004, "Chinese Currency Controversies," CEPR Discussion Paper No. 4375 (London: Centre for Economic Policy Research).
- , and others, 1998, *Exit Strategies: Policy Options for Countries Seeking Exchange Rate Flexibility*, IMF Occasional Paper No. 168 (Washington: International Monetary Fund).
- Fernald, John, and Oliver D. Babson, 1999, "Why Has China Survived the Asian Crisis So Well? What Risks Remain?" International Finance Discussion Paper No. 633 (Washington: Board of Governors of the Federal Reserve System).
- Frankel, Jeffrey A., 2004, "On the Renminbi: The Choice between Adjustment under a Fixed Exchange Rate and Adjustment under a Flexible Rate" (unpublished; Cambridge, Massachusetts: Harvard University, Kennedy School of Government). Available via the Internet: <http://ksghome.harvard.edu/~jfrankel/On%20the%20Renminbi.pdf>
- Funke, Michael, and Jörg Rahn, 2005, "Just How Undervalued Is the Chinese Renminbi," *The World Economy*, Vol. 28 (April), pp. 465–90.
- Goldstein, Morris, 2004, "Adjusting China's Exchange Rate Policies," Working Paper 04/1 (Washington: Institute for International Economics).
- , and Nicholas Lardy, 2003, "Two-Stage Currency Reform For China," *Asian Wall Street Journal*, September 12.
- Gruenwald, Paul, and Jahangir Aziz, 2003, "China and the Asian Crisis," in *China: Competing in the Global Economy*, ed. by W. Tseng and M. Rodlauer (Washington: International Monetary Fund).

- Gulati, Sunil, 1987, "A Note on Trade Misinvoicing," in *Capital Flight and Third World Debt*, ed. by D. Lessard and J. Williamson (Washington: Institute for International Economics).
- Gunter, Frank R., 2004, "Capital Flight from China: 1984–2001," *China Economic Review*, Vol. 15, No. 1, pp. 63–85.
- International Monetary Fund, 2004, "People's Republic of China: Staff Report for the Article IV Consultation" (Washington). Available via the Internet: <http://www.imf.org/external/pubs/cat/longres.cfm?sk=17828.0>
- Ip, Greg, 2004, "The Economy: Greenspan Warns About Yuan Float," *Wall Street Journal*, March 2, p. A2.
- Ishii, Shogo, and Karl Habermeier, 2002, *Capital Account Liberalization and Financial Sector Stability*, IMF Occasional Paper No. 211 (Washington: International Monetary Fund).
- Kamin, Steven, 1988, "Devaluation, Exchange Controls, and Black Markets for Foreign Exchange in Developing Countries," International Finance Discussion Paper No. 334 (Washington: Board of Governors of the Federal Reserve System).
- Krugman, Paul, 1998, "Saving Asia: It's Time to Get Radical," *Fortune* (September).
- Labán, Raul, and Felipe Larraín, 1993, "Can a Liberalization of Capital Outflows Increase Net Capital Inflows?" Working Paper No. 155 (Santiago: Pontificia Universidad Católica de Chile).
- Lau, Lawrence, 2003, "Is China Playing By the Rules? Free Trade, Fair Trade, and the WTO," testimony at a hearing of the Congressional-Executive Commission on China, Washington, September 24.
- Lim, Ewe-Ghee, 2001, "Determinants of, and the Relation Between, Foreign Direct Investment and Growth: A Summary of the Recent Literature," IMF Working Paper 01/175 (Washington: International Monetary Fund).
- Lin, Yuli, 2004, "Welcoming a New Era in the Development of China's FX Market," *China Money*, No. 2 (Shanghai: China Foreign Exchange Trading System). Available via the Internet: <http://202.108.40.100/content/online2002/english/finance2.html>
- Luo, Xi, 2004, "Options and Measures for Further Development of China's FX Market," *China Money*, No. 2 (Shanghai: China Foreign Exchange Trading System). Available via the Internet: <http://202.108.40.100/content/online2002/english/finance2.html>
- Ma, Guonan, 2004, "China's FX Market, An International Perspective," *China Money*, No. 1 (Shanghai: China Foreign Exchange Trading System).
- McKinnon, Ronald, and Gunther Schnabl, 2003, "China: A Stabilizing or Deflationary Influence in East Asia? The Problem of Conflicted Virtue." Available via the Internet: <http://www.stanford.edu/~mckinnon/papers/China.pdf>
- Mundell, Robert, 2003, "Globalization and RMB Exchange Rate," presentation at Renmin University of China, Beijing, October 31.
- Patnaik, Ila, and Deepa Vasudevan, 2000, "Trade Misinvoicing and Capital Flight from India," *Journal of International Economic Studies*, Vol. 14, pp. 99–108.

- Prasad, Eswar, 2004a, *China's Growth and Integration into the World Economy: Prospects and Challenges*, IMF Occasional Paper No. 232 (Washington: International Monetary Fund).
- , ed., 2004b, "Growth and Stability in China: Prospects and Challenges," remarks at the Harvard China Review Annual Conference, Cambridge, Massachusetts, April 17. Available via the Internet: <http://www.imf.org/external/np/speeches/2004/041704.htm>
- , and Raghuram Rajan, 2005a, "China's Financial-Sector Challenge," *Financial Times* (London), May 10.
- , 2005b, "Controlled Capital Account Liberalization: A Proposal," IMF Policy Discussion Paper No. 05/7 (Washington: International Monetary Fund). Available via the Internet: <http://www.imf.org/external/pubs/cat/longres.cfm?sk=18632.0>
- Prasad, Eswar, Kenneth Rogoff, Shang-Jin Wei, and M. Ayhan Kose, 2003, *Effects of Financial Globalization on Developing Countries: Some Empirical Evidence*, IMF Occasional Paper No. 220 (Washington: International Monetary Fund).
- Prasad, Eswar, and Shang-Jin Wei, 2005, "The Chinese Approach to Capital Inflows: Patterns and Possible Explanations," IMF Working Paper 05/79 (Washington: International Monetary Fund). Forthcoming in an NBER volume on capital flows edited by Sebastian Edwards (Chicago: University of Chicago Press).
- Rajan, Raghuram, and Arvind Subramanian, 2004, "Exchange Rate Flexibility Is in Asia's Interest," *Financial Times* (London), September 27.
- Rogoff, Kenneth, Aasim M. Husain, Ashoka Mody, Robin Brooks, and Nienke Oomes, 2004, *Evolution and Performance of Exchange Rate Regimes*, IMF Occasional Paper No. 229 (Washington: International Monetary Fund).
- Rosen, Dan, Scott Rozelle, and Jikun Huang, 2004, *Roots of Competitiveness: China's Evolving Agricultural Interests*, Policy Analyses in International Economics No. 72 (Washington: Institute for International Economics).
- Standard & Poor's (S&P), 2003, "Risky Move to Float China's Exchange Rate," September 13.
- Yu, Yongding, 2004, "China's Capital Flow Liberalization and Reform of Exchange Rate Regime" (unpublished; Beijing: Chinese Academy of Social Sciences).