Capital Flows, Overheating, and the Nominal Exchange Rate Regime in China

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China's historic entry into the World Trade Organization (WTO) in 2001 has increased the pace of reform and opening up, and the Chinese economy has gathered further momentum with real GDP growth reaching a phenomenal 9.5 percent in 2004. That spectacular growth performance and China's status as a "world factory" have led to massive capital inflows, pushing up official foreign exchange reserves to more than $600 billion by end of 2004. While there is much to celebrate, there is also cause for concern.

The Chinese economy has begun to show signs of overheating and inflation. At the same time, the massive capital inflows and soaring reserves have put a new spotlight on the country's de facto currency peg—an increasing source of friction with leading trading partners such as the United States and Japan. Instead of moving toward greater exchange rate flexibility, the Chinese authorities have responded by stepping up sterilized intervention, easing restrictions on selected capital outflows, and tightening inward portfolio investment. Despite the success of the Qualified Foreign Institutional Investor (QFII) program introduced in December 2002, the authorities have temporarily stopped approving new applications for the QFII program mainly to limit further portfolio investment inflows. The evidence of "hot money" clearly shows that China's cumbersome system of capital controls is not as effective as officials claim. There is no doubt that the greater openness of China's economy will certainly

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generate growing tensions with the country's closed capital account. China must put in place a sound institutional framework and financial infrastructure to accommodate increasing freedom of cross-border capital flows. Provided China can make meaningful progress in banking reform in the next three to five years, full currency convertibility remains a highly worthwhile and realistic medium-term policy goal.

Unprecedented Openness Is Increasingly at Odds with a Closed Capital Account

Following a quarter century of economic reforms and opening up, China has emerged from economic isolation and quickly established itself as a major participant in the world economy. It has completely abandoned its traditional "import substitution" and "self-sufficiency" development model, adhered to in the era of central planning, and embraced an outward-oriented new development strategy. Foreign trade soared to $1.2 trillion in 2004 from a meager $25 billion in 1978. China's external trade has been growing much faster, on average, than world trade for more than two decades, and today China is the world's third largest trading nation.

Fast economic growth and market opening have made China a magnate for foreign investment. Inward foreign direct investment reached more than $50 billion in 2002 and 2003, and in 2004 China became the world's largest recipient of foreign direct investment (FDI), attracting nearly $61 billion. Based on standard measures of economic "openness"—such as the ratio of trade to GDP—China ranks as one of the most open among the world's large economies (Table 1).

China has undertaken sweeping trade reforms. Average tariff rates for industrial products and agricultural produce have been reduced to 11 percent and 17 percent, respectively, which are among the lowest in developing countries. A wide range of nontariff protection measures, such as import permits, licensing requirements, and quotas have been eased or eliminated altogether. In addition, China has been reducing entry barriers in the service sectors, allowing foreign participation in telecom, transportation, and retail and wholesale commerce. Significantly, WTO entry has also boosted foreign access to financial services such as commercial banking, insurance, fund management, and securities underwriting.

While China formally accepted the IMF Article III Agreements (sections 2, 3, and 4) in 1996, which provided for current account convertibility for the renminbi, China continues to maintain extensive capital and exchange controls. Despite the official reluctance to relax

TABLE 1

TOP TEN GLOBAL TRADING NATIONS
(BILLIONS OF DOLLARS)

	Trade	GDP	Trade/GDP (%)	Capital Controls
United States	1,896	10,083	18.8	No
Germany	1,107	2,088	53.0	No
China	851	1,377	61.8	Yes
Japan	754	4,491	16.8	No
France	661	1,472	44.9	No
United Kingdom	625	1,590	39.3	No
Italy	494	1,088	45.4	No
Canada	480	680	70.6	No
Netherlands	464	387	120.1	No
Belgium	411	263	156.1	No

NOTE: 2003 data for China; 2002 data for all other countries.
SOURCES: World Trade Organization, Economist Intelligence Unit.

those controls, China's experience in recent years has shown that the effectiveness of capital controls has diminished and the system has become more difficult to sustain. In particular, current account convertibility, while bringing about massive efficiency gains, has also created numerous leakages and loopholes for illicit capital flows. The economic and social costs associated with continued draconian control over capital flows have become ever larger and better recognized. In addition to imposing a heavy administrative burden for the government, capital controls have distorted investment decisions by Chinese enterprises and households, and have led to the misallocation of capital, rampant corruption, and financial fraud.

In most aspects China is now a full-fledged member of the global economy with substantial cross-border flow of goods, services, and capital. Out of the world's 10 largest trading nations, however, only China continues to maintain extensive restrictions on the cross-border movement of capital (see Table 1). China's closed capital account is clearly incompatible with the country's high degree of economic openness. Further trade reforms and market opening will provide a strong impetus to capital account liberalization (Hu 2001).

QFII As a Major Step toward Capital Account Liberalization

On a practical level, however, China has taken a highly selective approach to its treatment of various capital account transactions. It has abolished most restrictions on inward FDI, except the handful of limitations related to national security. As far as direct investment is concerned, foreign investors are largely free to repatriate profits, interest income, and dividends, as well as principal capital. But China has sought to maintain extensive control over portfolio investment, including equities, bonds, bank loans, currencies, commodities, and derivative instruments. The pace of capital account liberalization in China has slowed sharply since the Asian financial crisis in 1997–98, which caused growing skepticism in both academic and policy circles about the wisdom of free capital mobility (Bhagwati 1998).

Nevertheless China has conducted cautious experiments aimed at gradual and orderly relaxation of capital controls. The most significant initiative launched by far is the introduction of the QFII scheme in 2002. The decision, jointly made by the China Securities Regulatory Commission (CSRC) and the State Administration of Foreign Exchange (SAFE), followed a two-year period of careful study and consultation. Under the QFII scheme, qualified foreign investors are allowed for the first time to invest in China's domestic-listed, local currency-denominated stocks ("A shares"), local currency, government and corporate bonds, exchange traded funds, and other securities. To encourage long-term holding and dampen short-term volatility, the regulations require QFII participants to hold their investment for a minimum of 12 months before they can apply for repatriation of capital or capital gains. Mostly on prudential grounds the CSRC and SAFE have imposed a number of other restrictions.

Despite the obvious limitations of the QFII program, its launch should be viewed as a milestone in China's financial sector reform and opening up, and it is likely to herald broader, albeit gradual, capital account liberalization. The QFII has already attracted an impressive list of leading global financial institutions to apply for quotas and invest in China's domestic securities (Table 2). China's strong economic fundamentals, including fast growth and its new status as the "world factory," have been the main factors stimulating strong global interest in investing in China.

Before the introduction of the QFII scheme, international investors could access China-related stocks only from Hong Kong by buying so-called red chips and H shares. With only approximately 100 Hong Kong-listed Chinese companies to invest in, stock selection was severely constrained for international investors. By contrast, China's domestic equity market, consisting of Shanghai and Shenzhen stock exchanges, already boasts of more than 1,227 listed companies spanning a wide range of manufacturing and service sectors. Moreover, in

TABLE 2

QFII PARTICIPANTS IN CHINA
(MILLIONS OF DOLLARS)

Institutions	Quota
UBS	600
Nomura Securities Co.	50
Citigroup Global Markets	200
Morgan Stanley & International	300
Goldman Sachs & Co.	50
The Hongkong and Shanghai Banking Corporation	100
Deutsche Bank AG	200
ING Bank N.V.	50
JPMorgan Chase Bank	50
Credit Suisse First Boston (Hong Kong)	50
Nikko Asset Management Co.	50
Total	**1,700**

SOURCE: State Administration of Foreign Exchange *Bulletin,* Beijing.

terms of market capitalization, it is the second-largest equity market in the Asia Pacific after Japan, and the biggest emerging market in the world. Clearly, China's domestic capital markets promise a much larger universe for international investors in terms of stock picking and asset allocation. The launch of the QFII program has therefore provided a welcome channel for international investors to directly access China's hitherto closed domestic capital markets.

China's local capital markets have been long dominated by retail investors who, while numbered at more than 65 million, are often no more than short-term oriented punters as opposed to long-term value investors. Because of the "free rider" problem, retail investors have neither the incentive nor the influence to monitor managerial performance and ensure good corporate governance in publicly listed companies. While the total inflow of funds under the QFII program, estimated to be less than $2 billion, is insignificant compared with total FDI inflows, the participation of global investors in China's domestic securities market has introduced professional fund management expertise and risk-control technology to China, and provided a new advocate for improving corporate governance, hence, contributing to the development of Chinese capital markets.

The successful debut of the QFII program in China has evidently instilled confidence among China's regulatory authorities. On the back of overwhelmingly positive response, the Chinese authorities are now seriously considering introducing several other policy initiatives, including the Qualified Domestic Institutional Investor program. The QDII, essentially the mirror image of QFII, will offer domestic financial institutions and corporations a legitimate and transparent vehicle through which to invest in international equities and bonds, with the Hong Kong market as the most likely testing ground. While both the QFII and QDII schemes impose certain unappealing limitations on investors, they nevertheless represent significant initial steps by the Chinese authorities toward liberalizing cross-border portfolio investment.

Implications of "Hot Money" and Overheating for Capital Account Liberalization

As China slowly liberalizes its capital account, it faces a key challenge other liberalizing economies around the world have confronted before with a mixed record—namely, how to embrace greater freedom of capital flows while maintaining domestic monetary and price stability. In the past few years, China has experienced an accelerating monetary expansion, a massive credit boom, a resurgence in consumer price inflation and a red-hot real estate sector. The talk of overheating has increasingly dominated headlines in the financial press. At the same time, there has been extremely vocal criticism in the international community of China's de facto currency peg. Both Japan and the United States, two of China's largest trading partners, have blamed China for keeping its peg against the U.S. dollar artificially low and have called for an upward revaluation of the renminbi. China has so far resisted such calls and has sought to maintain a pegged exchange rate of 8.28 RMB per dollar.

Managing the potential risks of overheating is currently the top priority of the Chinese policy authorities. However, it is a challenging task given China's pegged exchange rate regime, which makes it difficult for the authorities to exercise effective monetary control in the face of substantial external inflows. In 2002–03, China experienced a sharp acceleration in broad money growth and credit growth. Domestic credit expanded at more than 20 percent per annum in 2003, fueling a massive investment boom, especially in real estate, automobile, steel, cement, aluminum, and other basic industries. The last episode of excessive credit expansion, between 1991 and 1994, led to runaway inflation, with CPI inflation reaching 28 percent at its peak, and a sharp deterioration of asset quality, planting the seeds for substantial increases in nonperforming loans (NPLs). The current credit boom, if left unchecked, will have similar implications for asset quality in the banking sector as well as for inflation. Overheating in the

Chinese economy is a clear and present danger now taken seriously by investors and policymakers alike.

Maintaining a pegged currency in the face of a large balance-of-payments surplus has sharply pushed up China's official foreign exchange reserves, which increased by $47 billion in 2001, $74 billion in 2002, $117 billion in 2003, and by more than $200 billion in 2004. China's base money accelerated sharply in late 2001 to a high of 16.5 percent (year-over-year) by April 2002. However, the People's Bank of China (PBOC) subsequently managed to slow the growth of base money to 15.9 percent by December 2003. In order to rein in base money growth, the PBOC has had to beef up its capacity to sterilize its foreign exchange (forex) market intervention—that is, mop up the liquidity released when the central bank buys dollars with renminbi to keep the exchange rate stable.

In April 2002, the PBOC began draining liquidity through outright sales of securities. And from June 2002, open-market operations were complemented by repurchase (repo) operations, in which the central bank sells securities to commercial banks with the agreement to buy them back at a specified time. Finally, in September 2002, the PBOC replaced outstanding securities, used as collateral in a repurchase agreement, with central bank bills.[1] The issuance of PBOC bills has surged since then.[2] These sterilization operations are reflected in the contraction of "net other assets" in the PBOC balance sheet. It is clear that without sterilization, China's base money growth would indeed have surged much more markedly on the back of the rise in net foreign assets because of the sharp increase in forex reserves.

While China's capital account is still officially closed to portfolio (or "hot money") flows, other than the QFII channel that is tightly supervised by the authorities, we can already see an intriguing shift in onshore funds reminiscent of the cross-border flows. Most notably, the growth in U.S. dollar deposits in onshore banks—retail as well as corporate—has slowed markedly since early 2001, resulting in a steep decline in dollar deposits relative to renminbi deposits.

The decline in the share of onshore dollar deposits in China's banking system coincides closely with the fall in the *dollar-renminbi interest rate differential* from January 2001 when the Federal Reserve began slashing short-term rates. But the share of dollar deposits continued to decline despite some stabilization at the margin in the interest differential in 2002, pointing to an additional catalyst—rising

[1]Interest rates on repo operations as well as PBOC bills are determined by the bids from 40 primary dealer banks.

[2]These are largely short-term bills of 3-, 6-, and 12-month maturities.

expectations of renminbi appreciation, as indicated by the RMB/$ forward exchange rate in the nondeliverable forward market (Ma and McCauley 2003). It is also worth highlighting that the net errors and omissions component of China's balance of payments, which is often used as a proxy for capital flight, turned into a surplus of $7.8 billion in 2002 after many years of deficit. Again, this change is consistent with rising expectations of renminbi appreciation.

A declining appetite by the Chinese public to hold dollar deposits (onshore or offshore) has increasingly left the central bank as a "buyer of last resort" of dollars, which has important implications for monetary policy. The key difference between the public holding dollars and the central bank holding them is that, in the latter case, they become part of base (or high-powered) money. Of course, a persistently strong shift of dollars from the public to the central bank necessitates sterilization, which is precisely what has been happening in China. It remains to be seen whether onshore dollar deposits actually undergo an absolute decline, as opposed to a relative decline in renminbi deposits.

The evidence of "hot money" inflows clearly casts further doubt on the effectiveness of China's capital controls. Strong official reserve accumulation has prompted a series of policy proposals concerning both the current and capital accounts, including (1) raising the limit on the percentage of foreign exchange the public can keep as opposed to converting it into renminbi with the central bank, (2) encouraging Chinese domestic enterprises to invest abroad (outward direct investment), and (3) relaxing controls on the ability of Chinese firms to invest in foreign bonds. The latter policy should not be construed as an attempt to spur capital outflow; the "recycling" is taking place in any case through central bank purchases of U.S. treasuries. Rather, the main underlying policy motive is to slow the shift of foreign assets from the public to the central bank, thereby relieving pressure on base money growth. Again, this underscores already active "hot money" flows in response to interest-rate differentials and exchange-rate expectations. The potential size of such flows will likely get larger, not smaller, as China's capital account becomes "formally" more open.

With the introduction of QFII, China's capital account has become more open to portfolio flows in addition to the already robust FDI inflows, which is why China should gradually move to a flexible exchange rate. In addition, given China's domestic structural challenges (e.g., labor market imbalances and inefficiencies in the state industry) and potential external shocks (e.g., a shift in the terms of trade), a flexible exchange rate could cushion both domestic and external shocks and help maintain macroeconomic and financial stability. Under such conditions, China is more likely to reap the expected benefits from capital account liberalization while effectively controlling downside risks associated with unrestricted cross-border capital flows. If China insists on maintaining its currency peg for a period longer than desired, however, the inherent tensions between nominal exchange rate stability and large capital flows could well prompt the authorities to tighten existing capital controls or delay the pace of capital account liberalization.

Conclusion

While China has been making some efforts toward increased freedom of capital, with the introduction of QFII as the most significant initiative, the overall progress has been held up by an increasingly challenging policy hurdle—maintaining a pegged nominal exchange rate and domestic monetary control in the face of substantial capital flows. Sterilized foreign exchange market intervention cum tightening of capital controls could be a temporary policy response, as has been the case in China.

A longer term, and likely more appropriate, policy option deserving serious consideration is to jettison the de facto currency peg and introduce greater exchange rate flexibility. A flexible exchange rate regime would likely allow China to accommodate freer cross-border capital flows while conducting independent monetary policy more effectively to manage risks of overheating or to respond to negative domestic and external shocks.

Even if China is willing to move rapidly toward greater exchange rate flexibility, China is still well advised not to lift capital controls prematurely before putting in place the necessary institutional framework and a sound financial infrastructure. The most pressing need is to fix China's ailing banking system that remains plagued by massive nonperforming loans and poor risk management. The Chinese authorities have rightly put banking reform at the top of their agenda and have taken a number of initiatives to advance banking sector restructuring, including recapitalization, carve-outs of NPLs, and attracting foreign strategic investment. In December 2003, the Chinese government injected $45 billion in fresh equity into the Bank of China and China Construction Bank, two of the largest state-owned banks. The massive bailout is designed to help those two banks substantially reduce their NPLs, strengthen their capital base, and clean up their balance sheets, thereby paving the way for privatization through international IPOs (Hu 2004). The People's Bank of China, the

Ministry of Finance, and the China Banking Regulatory Commission, a newly established body dedicated to the task of bank supervision, have been the key advocates for accelerating banking restructuring. With vigorous reforms under way, it is expected that China will make meaningful progress in the next several years.

Unfortunately, there is still neither a well-formulated blueprint nor a definitive timetable for capital account liberalization in China. The liberalizing process has been driven by significant trade reforms unleashed, to a large extent, by China's membership in the WTO. Unlike the experience in some Latin American and East Asian countries, trade liberalization in China has been way ahead of capital account liberalization. The increased openness of the Chinese economy has created and will continue to create tensions with its closed capital account, rendering the latter less effective as evidenced by "capital flight" in the late 1990s, especially in the Asian Crisis episode, and by more recent "hot money" inflow problems.

To the extent the Chinese authorities can plan and control the process of liberalization, the sequencing of reforms seems likely to be as follows: first, a movement away from the renminbi peg to a more flexible exchange rate system; second, completion of a successful banking reform program and introduction of sound supervisory standards and practices in the domestic financial system; and third, substantial relaxation of capital controls. Such sequencing of reforms can potentially help China avoid downside risks in terms of macroeconomic imbalances and financial crises while embracing greater freedom of capital. Capital account liberalization in China remains a worthwhile and realistic medium-term policy goal.

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