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Reforming China's exchange arrangements

Monetary and financial sovereignty, sequencing and the foreign exchange market

Huw McKay

China's choice of foreign exchange regime has been a topic of busy debate for more than a decade (Goldstein 2004; Eichengreen 2004; Frankel 2004; Prasad et al. 2005; McKinnon 2006; and McKay 2003, among many others). This discussion has been entwined logically with the question of capital account reform (Prasad et al. 2005; McKay 2005a) and the degree of monetary sovereignty China enjoys under its evolving international financial arrangements (Ma and McCauley forthcoming; Cheung et al. 2003; Ma et al. 2004; He Dong et al. 2005; McKay 2005b). A less populated field applies current, historical and projected regime parameters to the development of, and prospects for, the Chinese financial system and the foreign exchange market itself (McKay 2006; Ho et al. 2005).

The decision to reform the parameters of China's exchange arrangements has always been about more than rapprochement with the United States in the matter of financial suzerainty. There is no attempt in this chapter to address the international externalities generated by the combination of China's policy choices and those made simultaneously by other current account surplus economies and the United States. China's policy deliberations are viewed as a predominantly internal matter, which involve the balancing of a number of competing endogenous priorities and mismatched incentives.

This chapter details the state of play in Chinese foreign exchange markets and sketches a potential development path that envisages respectable growth in trading activity over a multi-year horizon. This outcome is contingent on a gradual phased reduction in outward capital controls and a more rapid (but still

managed) pace of currency appreciation. Issues surrounding this assumption form a significant portion of the body of this chapter.

The basic conclusion is that foreign exchange turnover—which is currently exceptionally low in absolute and relative terms—will expand with increasing symmetry in the capital control regime and increased volatility in the US dollar–renminbi exchange rate. The anticipated increase in onshore liquidity, and in renminbi trading generally, should be seen as a benign development for the regional and global foreign exchange market. It is natural to anticipate that some of the gross increase in onshore trading will be diverted from other centres. Yet with aggregate turnover so low at present, and given that this low level of liquidity is an outgrowth of administrative design rather than market forces, it is natural to predict that a shift towards a more liberal constellation of exchange arrangements will provide a continuing net fillip for global foreign exchange market liquidity.

Historical background and the state of play

China unified onshore currency trading in 1994, with the establishment of the Shanghai-based China Foreign Exchange Trading System (CFETS). Before the inauguration of this trading platform and clearing system, trading took place in upwards of 100 independent centres. Initially only US dollar–renminbi and Hong Kong dollar–renminbi were traded. Japanese yen–renminbi was added to the system in 1995 and euro–renminbi in 2002. In May 2005, eight non-renminbi crosses were also made available: US dollar–Japanese yen, euro–US dollar, US dollar–Swiss franc, US dollar–British pound, US dollar–Hong Kong dollar, Australian dollar–US dollar, euro–Japanese yen and US dollar–Canadian dollar. Forward trading was added to the platform in August 2005, two months after the revaluation of the renminbi against the US dollar.

Turnover data from the early years of CFETS' operation show that little growth occurred between 1994 and 1998. The triennial foreign exchange survey for 1998 by the Bank for International Settlements (BIS 1999a) estimated that foreign exchange turnover in mainland China averaged US\$211 million a day, one-tenth of 1 per cent of the global total.¹ The interim survey in 2001 implied relative stasis (BIS 2002), but turnover for 2004 (BIS 2005) showed resounding growth. In April 2004, onshore turnover had risen to US\$614 million a day, equivalent to three-tenths of 1 per cent of the global total. It is important to note that the BIS data could exclude a number of transactions involving the non-bank sector, and interbank clearing activity that occurs outside of the CFETS platform (Ho et al. 2005). So it is likely that renminbi turnover is underestimated to a degree. Adding in an estimate of non-reported onshore trades, plus all other recorded trades

involving the renminbi, irrespective of location, including the non-deliverable forward market,² raises the total to US\$3.6 billion. That would be equivalent to 1.5 per cent of global foreign exchange turnover.

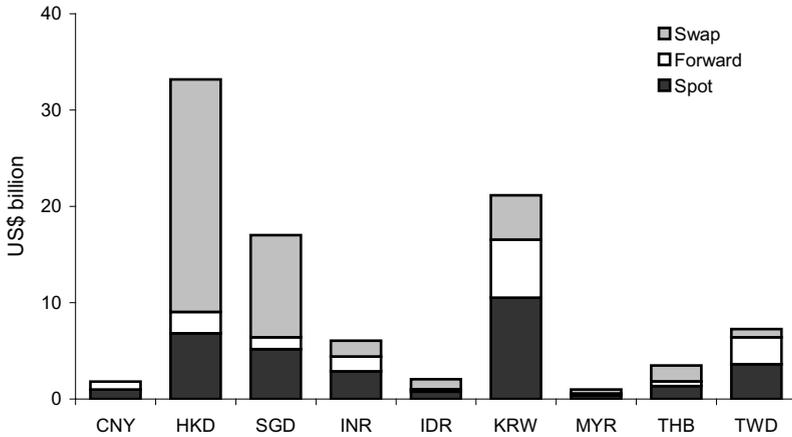
By counter-currency, in the December quarter of 2004, the US dollar was involved in 53.2 per cent of CFETS trades, the Japanese yen in 38.7 per cent, the Hong Kong dollar in 8.1 per cent and the euro in a negligible portion (CFETS data from the CEIC China database). A factor that will impact on foreign exchange market development will be the evolution of the invoicing practices of China's trading firms. At present, the US dollar is by far the dominant invoice currency for Chinese trade transactions, however, that might not always be the case. As Chinese exporters move up the value chain, it is possible that they will pursue an 'invoicing-to-market' currency denomination strategy. This trend has been observed among the G7 countries and in Korea (Yun 2005). This would bias turnover away from the US dollar and towards other international currencies such as the euro and the Japanese yen. If and when the renminbi becomes internationalised, it could become the invoice currency for many Chinese imports. That would bring those firms which export to China into the renminbi markets, offering depth and an injection of foreign exchange risk management experience.

The BIS data for April 2004 show a dominance of spot transactions relative to forwards or swaps in the traditional market space, and a relatively low level of overall activity in the renminbi. Spot transactions accounted for about 55 per cent of all renminbi trades, compared with 47 per cent for the Indian rupee, 21 per cent for the Hong Kong dollar, 49 per cent for the Korean won, 37 per cent for the Indonesian rupiah, 30 per cent for the Singaporean dollar and 38 per cent for the Thai baht. In the derivatives market, renminbi turnover is extremely low. Cross-currency swaps reportedly averaged just US\$4 million a day, and options just US\$136 million—far below the levels prevailing in the markets of the new industrialised economies.³ Relative volume and market structure are summarised in Figures 15.1 and 15.2. These figures indicate that not only is the Chinese foreign exchange market rather shallow, it is far from sophisticated. The fact that the CFETS platform accommodated forwards trading only from August 2005 underscores this point.

Analysis

It is useful to scale the turnover data to help define the relative depth of the Chinese foreign exchange market. Three figures have been prepared with this in mind, representing the relationship between foreign exchange turnover and income, scale and real demand proxies, respectively. Figure 15.3 plots foreign exchange turnover against a measure of relative living standards: gross domestic product (GDP) per capita at purchasing power parity (PPP) exchange

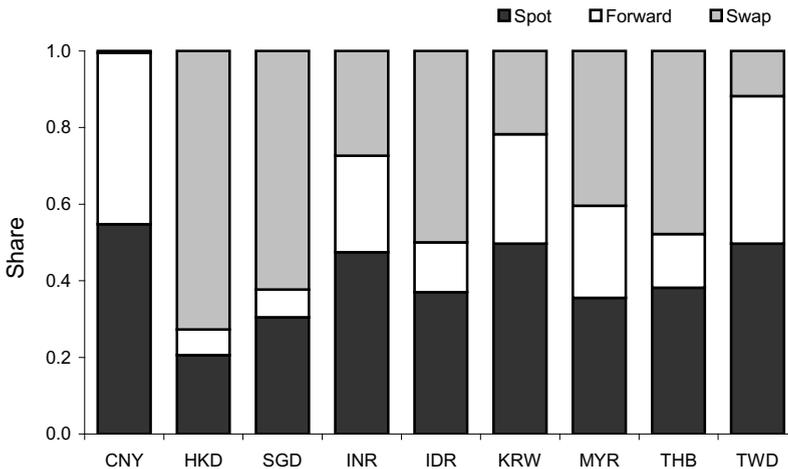
Figure 15.1 **Asian foreign exchange turnover, by transaction type, 2004**
(US\$ billion)



Notes: CNY Chinese renminbi, HKD Hong Kong dollar, SGD Singaporean dollar, INR Indian rupee, IDR Indonesian rupiah, KRW Korean won, MYR Malaysian ringgit, THB Thai baht, TWD Taiwan dollar.

Source: Bank for International Settlements (BIS), 2005. *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2004*, Bank for International Settlements, Basel.

Figure 15.2 **Shares of foreign exchange turnover, by transaction type, 2004**



Notes: CNY Chinese renminbi, HKD Hong Kong dollar, SGD Singaporean dollar, INR Indian rupee, IDR Indonesian rupiah, KRW Korean won, MYR Malaysian ringgit, THB Thai baht, TWD Taiwan dollar.

Source: Bank for International Settlements (BIS), 2005. *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2004*, Bank for International Settlements, Basel.

rates as a percentage of the US level. Figure 15.4 plots foreign exchange turnover against a scale measure (share of world GDP at PPP exchange rates). Figure 15.5 plots foreign exchange turnover as a ratio to gross trade flows, which are an approximation of the real underlying demand for foreign exchange.

The last two measures show that China is a clear outlier, exhibiting sharply lower turnover than might be expected given the economy's overall size and the scale of its trading activity. The first relationship, however, implies that China's low foreign exchange turnover figures are a state of nature that might be deduced from its low relative living standard.

The correct way to balance these apparently contradictory results is to argue that, as a low-income country China should not be expected to exhibit highly open exchange arrangements at this point in time; but given that China's foreign exchange markets are even less liquid than its East Asian peers, the current constellation of exchange arrangements is less liberal than it might be at this stage of economic development.

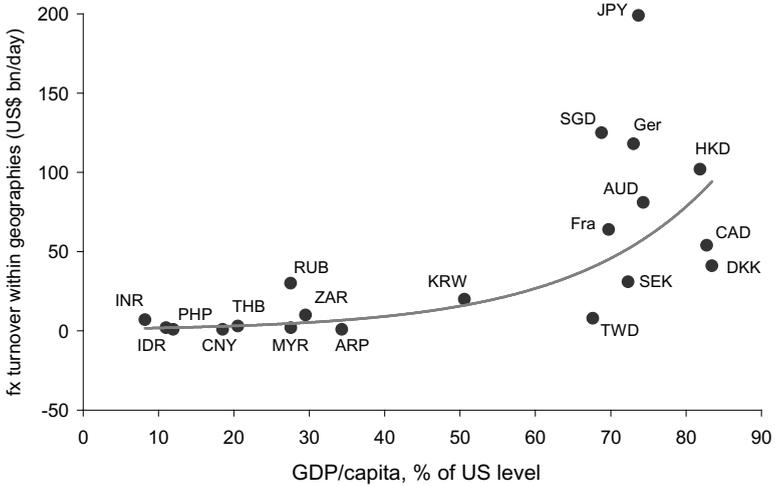
China's lowly ranking in the foreign exchange turnover stakes has implications for the debate on the effectiveness of the capital control regime. To stylise somewhat, China's capital controls are relatively porous with regards to inward flows, but relatively binding on outward flows. This view rejects the claim that China's controls are ineffective at the aggregate level, eroding monetary sovereignty.⁴ If outward controls are binding—as they certainly appear to be (Ma and McCauley forthcoming)—onshore parties will experience an unrequited (latent) demand for foreign exchange transactions. Yet binding controls prevent these demands from being requited. Ergo, Chinese foreign exchange liquidity will be lower than in markets where similar outflows are not restricted, all other things being equal.

Note that this hypothetical reasoning says nothing about the exchange rate itself, which is the price at which actual transactions take place. The discussion is for the moment interested solely in turnover rather than the demand–supply balance. The proposition being established is that turnover is low not because the demand for foreign exchange is low, but because the market is distorted (suppressed) by regulation. The distortion serves to penalise turnover by disallowing transactions that might otherwise take place. Remove the restrictions and liquidity will rise.

Future development

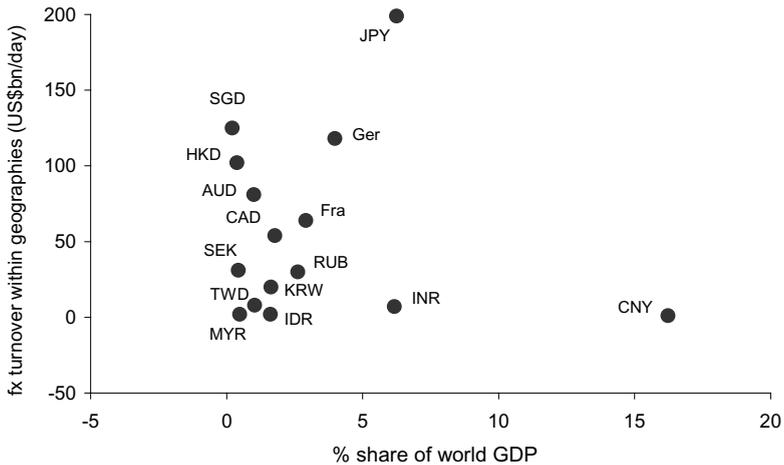
Any effort to sketch a development path for China's foreign exchange markets must incorporate a view on the evolution of the regulatory environment for capital flows. It must also encompass a view on the future course of the

Figure 15.3 Foreign exchange market depth and income level

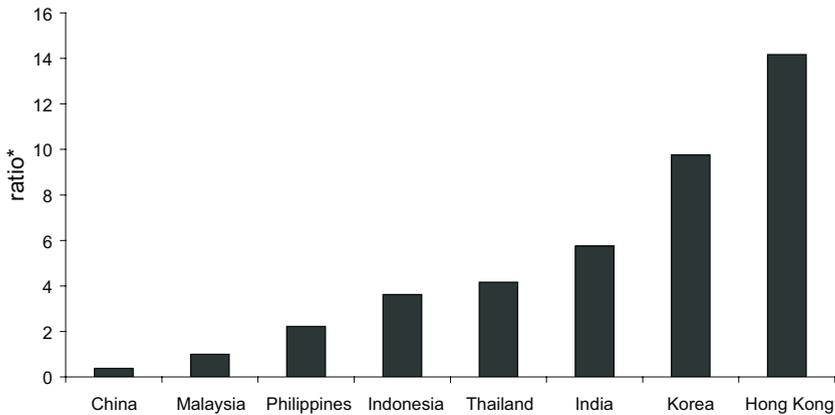


Sources: Turnover data from Bank for International Settlements (BIS), 2005. *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2004*, Bank for International Settlements, Basel. GDP per capita and PPP weights from International Monetary Fund WEO Database. Available from <http://www.imf.org/external/pubs/ft/weo/2007/01/data/index.aspx>

Figure 15.4 Foreign exchange market depth and scale



Sources: Turnover data from Bank for International Settlements (BIS), 2005. *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2004*, Bank for International Settlements, Basel. Share of world GDP and PPP weights from International Monetary Fund WEO Database. Available from <http://www.imf.org/external/pubs/ft/weo/2007/01/data/index.aspx>

Figure 15.5 **Foreign exchange turnover and real demand, 2004 (ratio*)**

^a Annualised foreign exchange turnover scaled by gross merchandise and services trade for 2004 calendar year, converted at market exchange rates.

Sources: Turnover data from Bank for International Settlements (BIS), 2005. *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2004*, Bank for International Settlements, Basel. Ratios are author's calculations using trade data from the World Development Indicators database. Available from <https://publications.worldbank.org/WDI/>

exchange rate regime itself. These issues cut deep into the umbrella theme of macroeconomic policy design for the next decade.

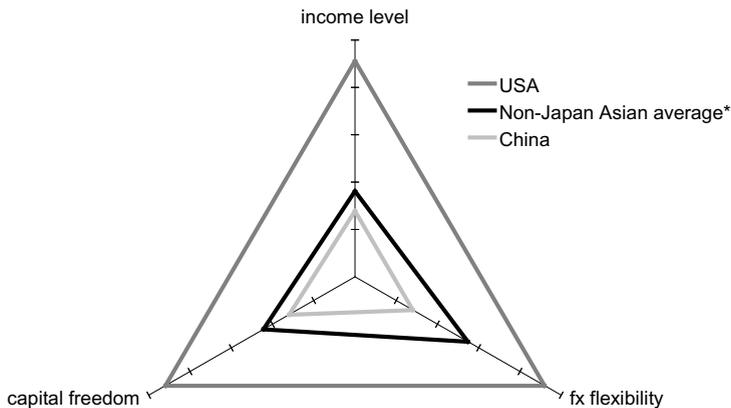
The choice of an exchange rate regime and the basic regulatory approach to cross-border capital flow is inseparable from the broader issue of monetary policy design. Theory is unequivocal on the point that the combination of a fixed exchange rate with an open capital account and an independent monetary policy is incompatible. Yet China and a number of developing economies arguably attempt to run a monetary policy that is in effect a bastardised form of this 'unholy trinity'.⁵ The virtue of each arm of monetary policy is compromised while the authorities search for a pragmatic constellation that is not obviously damaging but always feels like second best, or worse (Corden 2002; Tarapore 2006).

Figure 15.6 shows two arms of the trinity—the degree of exchange rate flexibility and the degree of capital account openness—in concert with per capita GDP. The large equilateral triangle represents the United States, with its wealth, its open capital account and its flexible exchange rate. The middle-sized triangle represents the average economy in East Asia (excluding Japan). The smallest triangle is China.

Note the illiberal overall policy regime in Asia, and China's low absolute scores on capital account openness and foreign exchange flexibility. There is also information content in the skew of these two triangles. In Asia generally, the skew is moderately towards a more flexible currency and away from an open capital account. This reflects in part the failure of intermediate regimes in Korea, Thailand and Indonesia during the East Asian financial crisis, dragging policymakers reluctantly down the more flexible path. At this time, policymakers across Asia reacted by strengthening capital controls, exercising *ex post* financial sovereignty after the collapse of the *ex ante* exchange rate regime. Open capital accounts in Singapore and Hong Kong boost the average on the bottom left axis substantially.

In China, the skew goes the other way. The policy mix in China is a clear illustration of the 'cherry-picking' approach to regime design. The higher score on capital openness comes from China's willingness to indulge inflows, particularly of direct investment. The lower score on exchange rate flexibility derives from the heavily managed exchange rate regime and the low turnover created jointly by the lack of volatility and the depressing impact of capital controls.

Figure 15.6 **The triangular dynamics of regime parameters**



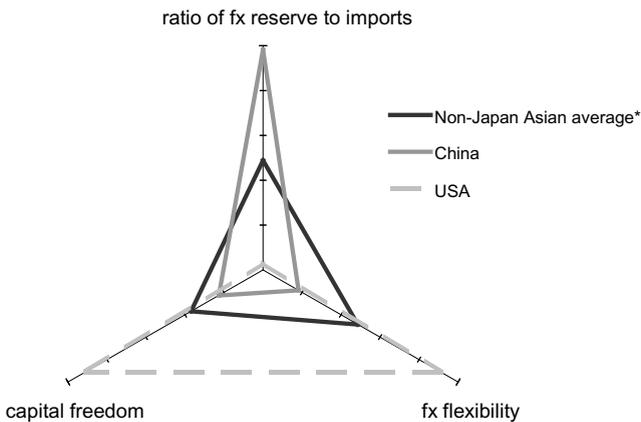
Note: * Non-Japan Asian average computed from author's estimate of foreign exchange flexibility and capital openness in the newly industrialised economies (as defined in Note 3) plus Malaysia, Thailand, the Philippines, Indonesia and India.

Sources: Author's estimates for foreign exchange flexibility and capital openness. Income levels from International Monetary Fund WEO Database. Available from <http://www.imf.org/external/pubs/ft/weo/2007/01/data/index.aspx>

The loophole in the unholy trinity conditions that China exploits is that you can have your cake (an inflexible exchange rate and domestic monetary sovereignty) and eat it too (capital inflow of the desired kind), if you are willing and able to intervene in the foreign exchange market and sterilise capital inflows sufficiently to neuter the impact on domestic monetary conditions. In other words, the People's Bank of China must be willing to accrue foreign exchange reserves equivalent to the sum of the current account balance and the capital and financial accounts. It must also withdraw the liquidity that its foreign exchange intervention generates. In a macro regime sense, Figure 15.7 shows the ever-increasing intervention/sterilisation imperative if China's exploitation of the loophole is to be prevented from leaking into domestic liquidity conditions.

By March 2007, China's foreign reserves had risen to a total of US\$1,202 billion. In the six months to March, reserves accumulated at an average monthly pace in excess of US\$50 billion. In addition to mopping up liquidity through bond

Figure 15.7 **Loophole strategy drives big foreign exchange reserve accretion**



Note: * Non-Japan Asian average computed from author's estimate of foreign exchange flexibility and capital openness in the newly industrialised economies (as defined in Note 3) plus Malaysia, Thailand, the Philippines, Indonesia and India.

Sources: Author's estimates for foreign exchange flexibility and capital openness. Foreign exchange reserves and import levels from the CEIC Data Company. Where necessary, imports were converted to US dollars using exchange rates from the Reserve Bank of Australia *F Tables* (available from <http://www.rba.gov.au/Statistics/Bulletin/index.html>).

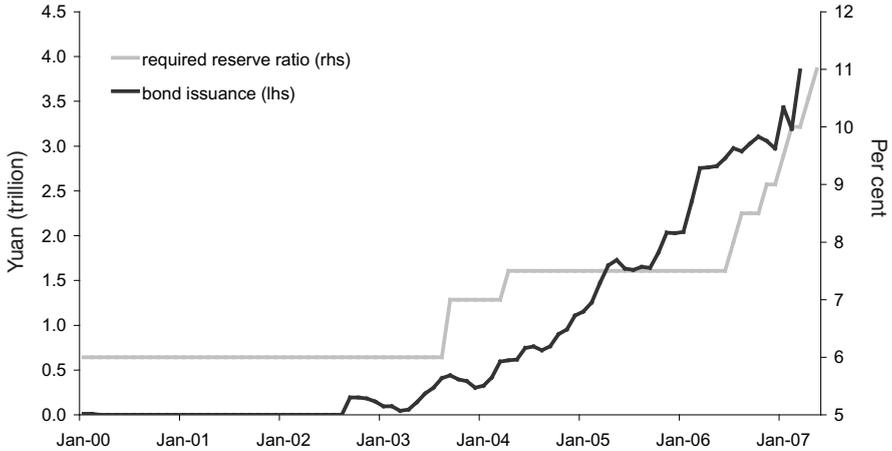
issuance—an activity that was sufficient for sterilisation purposes from 2003 to the first half of 2006—the authorities began using other tools as well. Through progressive policy shifts, the proportion of bank deposits held compulsorily at the central bank (the required reserve ratio) increased from 6 per cent in 2003 to 11 per cent in April 2007. Further increases in the required reserve ratio are just a matter of time.

The effectiveness of the administrative sterilisation effort in the early stages of the boom in capital inflow is assessed in He Dong et al. (2005) and McKay (2005b). Both papers argue that China's sterilisation activity was sufficient to successfully insulate domestic credit conditions from capital inflow. In other words, monetary sovereignty was maintained. Admittedly, the datum samples in each paper do not extend to the second half of 2006, when the sterilisation burden was rising dramatically in line with the spectacular increase in the monthly trade surplus from August. Further, as interest rates are not fully market determined, it is difficult to deduce a clear signal from the onshore money markets in this regard. Thirdly, McKay (2005b) found tentative evidence that foreign exchange reserve growth leaked into the grey lending market in a limited fashion. The statistical relation was judged to be of insufficient strength to be of macroeconomic significance, but that could easily change if the degree of intervention required to stabilise the currency were to rise steeply.

China has not yet reached a point where its sterilisation operation is becoming a major macroeconomic or logistical problem. Other Asian economies—such as Korea, Taiwan and Malaysia—have directed a far greater effort to sterilisation at times in the past 10 years, consistent with their higher trade-to-GDP ratios relative to China. Issuance of sterilisation instruments in these three economies peaked at 431 per cent, 228 per cent and 132 per cent of base money, respectively, during the current US dollar downturn. In China, central bank bond issuance rose to about 125 per cent of base money in mid 2006. Huge inflows in the March quarter of 2007 pushed issuance above 140 per cent of base money. Hikes in the required reserve ratio began to be instituted from mid 2006, reducing the burden somewhat (see Figures 15.8 and 15.9).

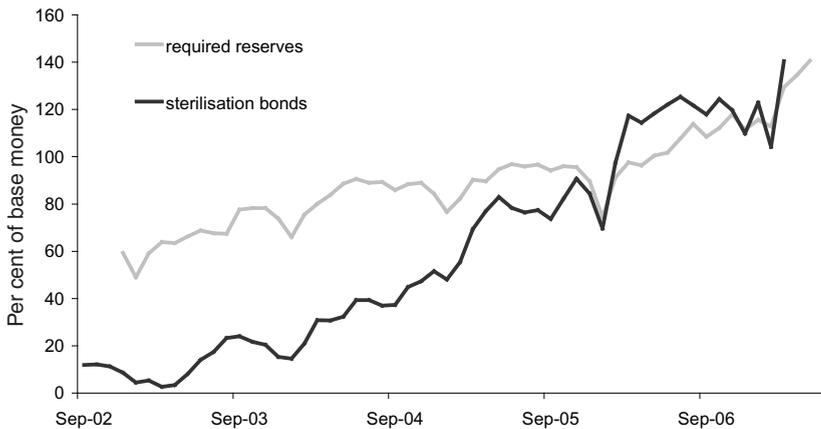
Given the superordinate long-term policy goal of achieving a consumer-oriented economic structure, it seems natural that in future the authorities will compromise less and less in terms of their control over domestic credit conditions. Further, while the present methods of intervention and sterilisation can continue for some indeterminate time, it is clearly a finite method. The resources chewed up by the sterilisation effort (labour and capital, funds kept as reserves and therefore not employed elsewhere) have an opportunity cost that at some point will exceed the perceived benefits. Consumerism also implies a

Figure 15.8 Sterilisation effort is the price of sovereignty



Source: CEIC Data Company.

Figure 15.9 Reserve ratio hikes take the pressure off bond issuance



Note: The last datum point in the required reserves ratio to base money was calculated before the 29 April 2007 announcement of a rate hike.

Sources: CEIC Data Company.; author's calculations.

reduced focus on exchange rate stability and external competitiveness issues in the future. That in turn would ease the pressure to maintain capital controls. In short, the parameter loophole that China is currently exploiting will at some point decline in popularity with policymakers.

The present mix of parameters is consistent with the export-driven development model that has served China well. The maturation and exhaustion of this strategy will signal a new approach to monetary policy and international financial arrangements.

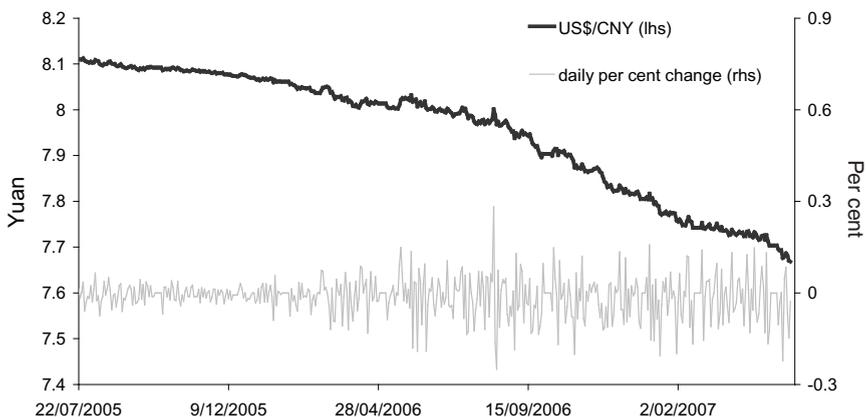
If the authorities did have it in mind to move away from the current constellation of regime parameters, preparatory activity and policy changes would be observed following a sequence similar to that outlined below. Under benign internal and external economic conditions, the normative path from a fixed to a floating exchange rate is reasonably well defined. The following catalogue of tasks will get the job done in a decade or so. The benchmark work in the 'sequencing' field is McKinnon (1993).

1. Establish convertibility on the current account and unify onshore trading of the currency.
2. Work towards establishing an alternative anchor for monetary policy. This step also incorporates progressive liberalisation of interest rate determination. Inflation targeting is one possible alternative model/anchor, successful application of which requires central bank independence, the unification of monetary and foreign exchange policy⁶ and the establishment of inflation-fighting 'credibility' with the market.⁷
3. Establish an onshore forward market to provide domestic institutions with the tools to hedge the risks associated with increased exchange rate flexibility.
4. Widen the allowable trading band around the existing peg to give domestic institutions a chance to 'train' themselves to deal with exchange rate volatility under protected conditions. Progressively decrease the market-making role of the monetary authority as the interbank market matures.
5. Work to alleviate any existing asymmetries in capital account regulations to avert a bias in capital flows that will create skewed risks regarding movement in the exchange rate. Design a strategy for ensuring fuller capital account convertibility in the future (more on this theme below). This could include the highlighting of concomitants, although they should be couched in such a way as to not materially reduce policy flexibility in the future.

6. Progressively increase the allowable degree of exchange rate volatility as competency improves and the market deepens organically.
7. When the allowable degree of volatility approaches a level where it is essentially redundant, quietly move to a free-floating, market-determined exchange rate.

In China, we have seen activity in many of these areas, notably a widening of the allowable trading band against the US dollar to ± 0.5 per cent on 18 May (Figure 15.10). Yet with the exception of the initial step of current account convertibility—which was completed in the mid 1990s—conditions remain fluid. The central bank has been working on the greater application of market-based counter-cyclical tools, yet they continue to be mixed with administrative controls. The intended benchmark for market-based interest rate determination—the newly instituted Shanghai interbank offered rates (SHIBOR, in multiple tenors)—was unveiled on 4 January 2007 (*China Money* 2007). Deposit and lending rates are still constrained by floors and ceilings. The interbank money markets are immature and relatively illiquid. The direction of reform is clear, but there are obvious hurdles still to surmount in this area. Song (2005) provides a useful analysis of developments in interest rate liberalisation and offers a compelling efficiency argument for deregulation.

Figure 15.10 **Flexibility has increased, appreciation pace gradual, 2005–2007**



Sources: Bloomberg; author's calculations.

The relative immaturity of the onshore forward foreign exchange market has already been detailed. It was established in August 2005, so it is a very young market. Spot transactions still dominate overall turnover. It is not credible to say to the private sector that 'the currency is going to be more flexible, do something about it', in the knowledge that a liquid onshore forward market is not readily available to firms wishing to hedge the newly created risk.

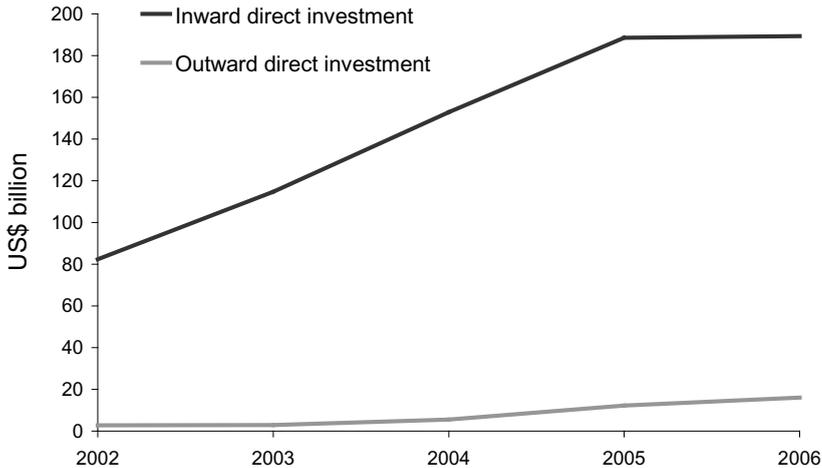
One way that the authorities are seeking to boost liquidity is by imposing private turnover targets on the major players in the onshore market. This tactic has, however, not been a great success. Interviews with market participants show that these targets are often met through dummy trades that are position neutral, and are therefore not adding real liquidity to the market.⁸ Players with the credit worthiness to access onshore and offshore markets tend to transact in the deeper and more sophisticated of the two, which undoubtedly is offshore. In short, the market participants who could do the most to deepen the onshore market are choosing to conduct a minimum of transactions there.

The authorities are simultaneously working hard to simulate two-way risk within the newly minted ± 0.5 per cent band without deviating from a 3–5 per cent annualised rate of nominal appreciation against the US dollar. The announced daily fixing rate sometimes looks incongruous in the larger context of broader foreign exchange market movements, but sometimes it must be so to train firms to expect the unexpected, thereby encouraging them to protect themselves accordingly. Once again, this activity is preparatory for a more flexible future, but not a bold new world starting tomorrow.

Once again, the incentives of the bureaucratic architects of the market are in conflict with those of potential participants. The bureaucrats would like firms to begin transacting in forwards now to build competency and familiarity under the benign conditions of weak volatility exhibited by the current regime. But firms are not transacting, because conditions have been too benign. To be blunt, firms will not bear hedging costs unless they are scared by what they have observed on the exchange rate appreciation front. But scaring firms with sharp renminbi gains would remove the protective conditions the authorities have been cultivating so carefully. It is the latter that is most likely to give, as the non-hedgers hold the rational ground.

US dollar–renminbi moves since the revaluation in 2005 have clearly not been sufficiently frightening to spur hedging activity. The new allowable daily volatility of ± 0.5 per cent, announced in the lead-up to the 2007 Strategic Economic Dialogue with the United States, was instituted despite the old band of ± 0.3 per cent not being consistently tested. The lack of volatility has generated complacency rather than panic. It seems likely that hedging activity,

Figure 15.11 **Outward direct investment^a still the poor cousin, 2002–2006**
(US\$ billion)



^a Both series exclude investment in financial firms.

Sources: CEIC Data Company; 2006 data for inward investment are author's estimate.

and forward turnover, will remain low until the trading band is widened (or tested with more frequency) and more aggressive appreciation is delivered.

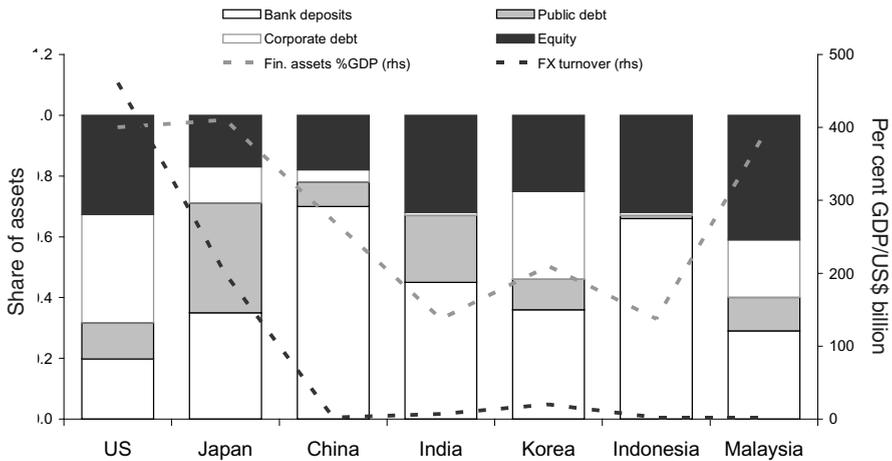
The fifth item in the catalogue is another major sticking point. As stated many times already, Chinese capital controls are of the cherry-picking variety. Foreign direct investment (FDI) attraction is a stated policy goal, and a performance metric for provincial governments. Newly instated Qualified Foreign Institutional Investor (QFII) inward-bound investment quotas will add to overall inflow. More than 50 QFII applications have been approved since May 2003, with combined quotas in excess of US\$8 billion (State Administration of Foreign Exchange n.d.). Further, the FDI exemption potentially allows not only genuine investment but capital flow of a less permanent nature (Ma and McCauley forthcoming). Consequently, the capital account is quite porous in the inward direction. In addition, China's immense trade surplus (US\$177 billion in 2006 and likely to easily exceed US\$200 billion in 2007 after recording a US\$46 billion outcome in the seasonally unfavourable March quarter) generates a large and expanding inward flow. On the other hand, domestic savings are fenced in, with outflows limited to official reserve asset management, a meagre amount

of debt repayments and currently modest Qualified Domestic Institutional Investor (QDII) outward-bound investment flows. A burgeoning demand for outward foreign direct investment, particularly in the strategic areas of energy, food and metals, is yet to make much of a splash. Figure 15.11 highlights the imbalance between inward and outward direct investment flows.

The asymmetry inherent in this structure leads to an appreciation bias for the renminbi. If funds come in, without a corresponding flow in the opposite direction, an excess supply of foreign currency is generated, putting appreciation pressure on the local unit. In effect, China runs a twin external surplus on its current and capital accounts. The asymmetry could be corrected either by waiving controls on outflow or penalising inflow. The momentum of reform clearly favours the former option.

Projecting reforms designed to liberalise capital outflow is not as easy as it might at first seem. The difficulty comes due to the fact that liberalising outflow means the potential release of captive domestic savings. China's financial asset

Figure 15.12 **The financial asset stock in selected countries**



Sources: Turnover data from Bank for International Settlements, 2005. *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2004*, Bank for International Settlements, Basel. Financial stock data sourced from McKinsey Global Institute global financial stock database, cited in Farrell, D., Lund, S. and Morin, F., 2006. 'The promise and perils of China's banking system', *The McKinsey Quarterly*, July (available from <http://www.mckinseyquarterly.com>).

stock features an unusually high share of bank deposits (Figure 15.12). This has not come about by chance. Keeping a high level of household savings in deposits is a form of subsidy for the banks. Bank balance sheets have been weak since the sharp inflationary boom of the mid 1990s turned sour (Lardy 1998; Bank for International Settlements 1999b; Huang 2001; Ma and Fung 2002; Ma 2006; McKay 2005c).

China's bank profits rely to a large extent on an artificially wide margin between deposit and lending rates. This margin is created by official controls on 'floor' lending rates and 'ceiling' deposit rates. If, however, the pool of domestic savings were to shrink due to heightened capital egress, these cosy arrangements would have to end. The local banks would require the flexibility to offer more attractive terms to maintain depositors. Two per cent of China's population controls close to 60 per cent of deposits (Farrell et al. 2006). This wealthy population segment can safely be described as sophisticated investors. They will no doubt seek to diversify their cash holdings in terms of asset class, geography and currency denomination once the opportunity to do so arises. That said, the weak take-up of QDII products may indicate that the recent strength of the A share market and the threat of the currency eroding offshore gains may indicate that at present there is a rational incentive to be over-weight domestic assets.

If the banks had robust balance sheets, this would not be a great threat. As things are, legacy non-performing loans (NPLs) have not been fully carved out, creating an inherent vulnerability. The administration knows that these loans—and those sitting unsold on asset management company balance sheets—are basically contingent fiscal liabilities. That being the case, it is not in the government's interest to expose the banks to a material loss of deposits at this time, particularly in the light of the World Trade Organization-inspired increase in competition from foreign banks in domestic currency business since December 2006.

The recent initial public offerings of major state banks were attractive for many reasons, not the least of which was to get strategic foreign investors to provide capital injections that paid a huge premium over book value without ceding controlling interests. These new shareholders are part of the NPL bail out story, as are the existing shareholders (Ministry of Finance, Huijin) and bank customers. But the main loser is likely to be the taxpayer (Ma 2006).

Figure 15.13 represents a story similar to the catalogue of normative reform steps outlined above. The difference is that with knowledge of the vulnerability of Chinese banks, the assumption of benign internal conditions must be overturned. Indeed, when the banking equation is considered, the arguments on international financial reform become somewhat circular.

Figure 15.13 **The circularity of the flexibility argument**

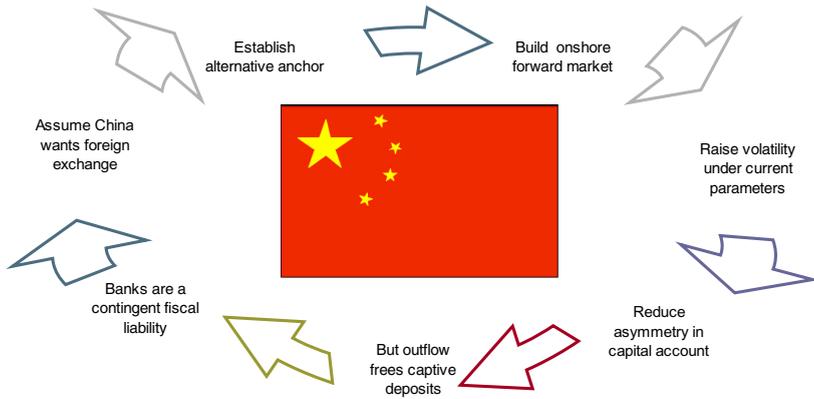
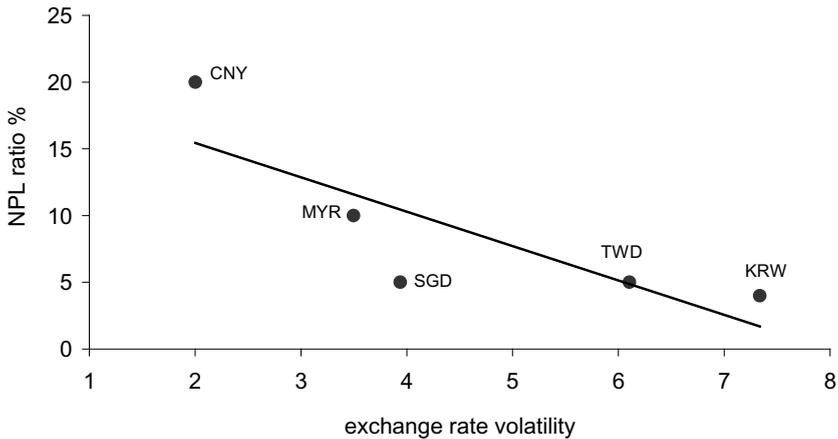


Figure 15.14 **Banking sector strength and foreign exchange volatility**



Sources: Standard and Poor's rating agency for NPL estimates (subscription only newsletter); Westpac Strategy for foreign exchange volatility estimates. In many cases the Standard and Poor's estimate will be many multiples of the official estimate. Standard and Poor's is used to ensure consistent methodology across the sample.

The major sticking point is the need to reduce asymmetry in the capital account to reduce the existing one-way bias on the exchange rate. That means allowing significant outflows and that in turn means freeing bank deposits to find a new home. That is obviously anathema. Yet if the capital account is left asymmetric, appreciation pressure will remain undimmed due to a continuation of the excess of inflows. Figure 15.14 shows the relationship between foreign exchange volatility and financial system strength in selected Asian countries. The countries in the sample have been chosen for their demonstrated capacity to manage volatility in their exchange rate. Ergo we can style observed volatility levels as a policy choice. The negative relationship between bank balance sheets and sanctioned volatility is strong and consistent with the core of the argument.

A strategy for gradual capital account liberalisation

From the Chinese administration's point of view, the path of least resistance seems clear: try to muddle through on the reform front until the banking system grows out of its NPL problem. Yet a bolder administration can do more than muddle through. Here we revisit point five in our catalogue, where the concept of a road-map for fuller capital account openness was introduced. India has formalised this concept with the publication of a report from a working committee of the Reserve Bank of India on fuller capital account convertibility (Tarapore 2006).

Capital outflows can be liberalised in a selective fashion that makes it difficult for household savings to move offshore but enables firms and institutional investors to do so more freely. A heightened degree of outward foreign direct investment is the obvious first point of call.

Outward direct investment is permitted only after an examination of the source of the foreign exchange funds for the venture is undertaken and the relevant ministries have been informed and have authorised the transaction. Strategic activities such as export promotion, resource development and scientific research and development are already given preferential treatment (International Monetary Fund 2006). Yet outward direct investment flows have been weak (see Figure 15.11).

One reason for the lack of direct investment outflow could be that Chinese manufacturing firms have little desire to build production capacity offshore, when they can produce much more competitively at home. Further, advanced-country tariff rates are not presently restrictive, so there is little reason to set up behind these barriers. Another factor could be that due to the legacy firm structure, the conglomerate/network structures that encouraged upstream

vertical integration by Japanese corporate groups during that economy's industrialisation drive are less evident in China.⁹ In the particular case of resources, including energy, it is only since 2003 that prices have become onerous. Large importers of commodities and energy faced a benign price and supply environment through much of the 1990s. Therefore, direct control of resources was not a major issue. That has clearly changed.

It would seem natural that in the current environment the Chinese administration would heighten its focus on acquiring suitable offshore assets in the resources arena. That would be very easy to formalise in the policy rhetoric, as nothing in particular has to be done to the letter of the law to boost outward direct investment. The authorities can play a firmer signalling role though, perhaps via bilateral trade arrangements with resource-rich jurisdictions that could allow preferential treatment for Chinese entities in the direct investment field.¹⁰

Stronger outflows of direct investment would also provide a vehicle through which other funds could find their way offshore. Just as hot money reportedly currently makes its way into China under the guise of 'real demand' flows, well-connected domestic investors could use the same clandestine methods to get their money out.

On the portfolio side, as discussed above, domestic investors can apply to move funds offshore for specific purposes. By requiring approval for everything, the authorities hope to minimise the sort of outflows that might be problematic given the backdrop of bank balance sheet vulnerability. It is not difficult to foresee a modest increase in outward portfolio flow through the QDII channel. It is more difficult to see the sort of reforms that would enable Chinese household savers to directly send their funds offshore.

In sum, China's strategy regarding capital egress is likely to focus on outward direct investment in the first instance, and portfolio flows at a more distant date.

Capital account deregulation is an immense and complex task, particularly so when an élite bureaucracy has bound up the gamut of international financial arrangements with red tape. Examples abound across East and South Asia in this regard. It should be noted that Japan took some 30 years to unwind its once pervasive capital account regulations. That seems like a long time, particularly when much of the work was done against the backdrop of apparently healthy bank balance sheets in the 1980s. The reforms were not due to outside pressure; they were a response to internal demand (McKay 2004).

In India, it is now 16 years since the initial liberalising reforms of then Finance Minister Dr Manmohan Singh. The issue had been moot for a decade before now Prime Minister Singh put it back on the agenda last year (Tarapore 2006).

The lesson from these countries is that capital account deregulation proceeds at an unpredictable pace, with flurries of energy interspersed with long periods of inactivity. Contrary to foreign exchange regime choice, which can be thrust on a country by market forces (McKay 2003; Bubula and Ötoker-Robe 2003), capital control is a discretionary legislative matter: sovereignty is always maintained. That implies firmly that capital account (de)regulation can be conducted voluntarily at times of domestic need and can stand aloof to external or market pressures.

How long might China take to achieve symmetry in its capital flow regime against the present backdrop of a strikingly weak financial system? That is beyond the scope of this work. What is important to note is that, for the moment, a proactive approach to boosting outward direct investment and a prudent approach to increasing portfolio flows by the corporate and professional investment communities is probably in China's best interests. Equally importantly, any reform should be designed to keep household savings captive for a while longer.

Summary and conclusions

China's foreign exchange market is characterised by a low level of turnover and a lack of sophistication. Low absolute and relative levels of liquidity are an outgrowth of the risk-averse umbrella policy regime. The current regime restricts capital outflow and exchange rate flexibility. A material increase in turnover in the onshore market awaits a more liberal policy setting on both counts.

Prospects for deregulation are sound but not completely overwhelming. The weakness of the banking system intrudes rather rudely on the normative arguments for exchange rate flexibility and accompanying de-restriction of the capital account. Indeed, the line that China is ready to accommodate greater exchange rate flexibility and a substantially more open capital account appears circular when the banking issue looms into view. Yet a selective easing of restrictions on outflow by corporations and professional investors would help alleviate a portion of the existing asymmetries, without unduly threatening captive bank deposits.

Greater outflows are needed to reduce the strong one-way bias for the exchange rate and to stem the rapid accumulation of foreign exchange reserves. In turn, this would reduce the required sterilisation effort. China's loophole approach towards its core policy parameters is clearly a finite one. At some future point, the sum of the sterilisation effort and the opportunity cost of reserve holding will exceed the perceived stability benefits in the minds of policymakers.

Once China commits fully to the pursuit of a consumer-driven economic structure, the current mix of policy parameters will be discarded rationally. The present mix of parameters is consistent with the export-driven development model that has characterised the economy in the reform era. The maturation and exhaustion of this strategy will signal a new approach to monetary policy and international financial arrangements. The emphasis will shift from an external anchor—the fixed exchange rate—to levers controlling internal liquidity.

On the exchange rate regime itself, the appreciation trajectory of the renminbi since the revaluation has been managed so tightly that firms have chosen to eschew hedging activity. Turnover is likely to be relatively suppressed until the imperative to hedge rises. The very gradual appreciation of the renminbi observed so far has not been sufficient to convince firms that the costs of hedging are less than those of not doing so. Given this reality, the administration could decide that greater appreciation and associated volatility are a necessary evil on the way to building a developed foreign exchange market.

Notes

- 1 The data presented here are for turnover by country, not by currency. They are taken from Table E-4 of the triennial BIS surveys (1996, 1999a, 2002, 2005).
- 2 'Non-deliverable forwards', or NDFs, are a cash-settled forward contract on a non-capital account convertible (that is, 'non-deliverable' offshore) currency. The notional principal amount, the outright foreign exchange rate and maturity (fixing date) are all agreed at inception. On maturity there is no exchange of principal. A cash differential, in US dollars, is paid or received depending on the relativity between the fixing rate and the original contract. For an overview of the Asian NDF market, see Debelle et al. (2006) and Ma et al. (2004). For logistics of NDFs relative to deliverable forwards, see Westpac Institutional Bank (2006).
- 3 New industrialised economies as defined by the International Monetary Fund: Republic of Korea, Taiwan Province of China, Hong Kong Special Administrative Region of China and Singapore.
- 4 This debate is played out in Cheung et al. (2003); Eichengreen (2004); Ma et al. (2004); and Ma and McCauley (forthcoming).
- 5 The 'unholy trinity' of an open capital account, a fixed exchange rate and an independent monetary policy is a logical finding from the open-economy macroeconomics developed in the early 1960s by Mundell (1960, 1963) and Fleming (1962). Their ideas on the exchange rate were synthesised and augmented by Dornbusch (1976). It can be found in contemporary texts as the 'Mundell–Fleming–Dornbusch' model: for example, in Obstfeld and Rogoff (1996).
- 6 The Bank of Korea is an inflation targeter, but the Ministry of Finance and Economy still controls foreign exchange policy. It is not an impossible separation of powers, but is likely a sub-optimal one.
- 7 The literature on inflation targeting is immense. For a useful survey, see Lowe (1997). For a discussion of the applicability of inflation targeting for Asia, see Debelle (2001).

- 8 Interview subjects came from local Chinese banks and foreign banks with a high-profile presence in the onshore and offshore markets.
- 9 This is a huge topic and far beyond the reaches of this work. For a comparative study of firm structures across Asia, see Tipton (2007).
- 10 Bilateral free trade agreements currently under discussion with Chile and Australia could eventually meet this criterion.

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