

Robert N McCauley  
 (+852) 2878 7100  
 RMcCauley@bis.org.hk

YK Mo  
 (+852) 2878 7100

#### **IV. Special feature: Foreign currency deposits of firms and individuals with banks in China**

In principle, an economy with capital controls can maintain a stable exchange rate and set domestic interest rates independently. In practice, enforcement of capital controls is never easy and some leakage can be expected. Thus, a certain amount of capital flight can be the unwanted side effect of low domestic interest rates in the presence of imperfect capital controls. China's recent experience, which has combined a stable exchange rate, capital controls and falling domestic interest rates in relation to dollar interest rates, highlights an unappreciated means to limit this unwanted side effect. In China, foreign currency accounts are allowed within the system of capital controls. These serve to keep foreign exchange in the domestic banking system, in effect domesticating capital flight.

In this section, we analyse foreign currency deposits in the Chinese banking system. Their growth appears to reflect the disappearance of the yield premium on renminbi deposits relative to foreign currency deposit rates in China in the course of 1998 and the subsequent rise in the yield premium on US dollar deposits. The scale of foreign currency deposits suggests that the Chinese banking system is, in this respect at least, more open than has generally been recognised.

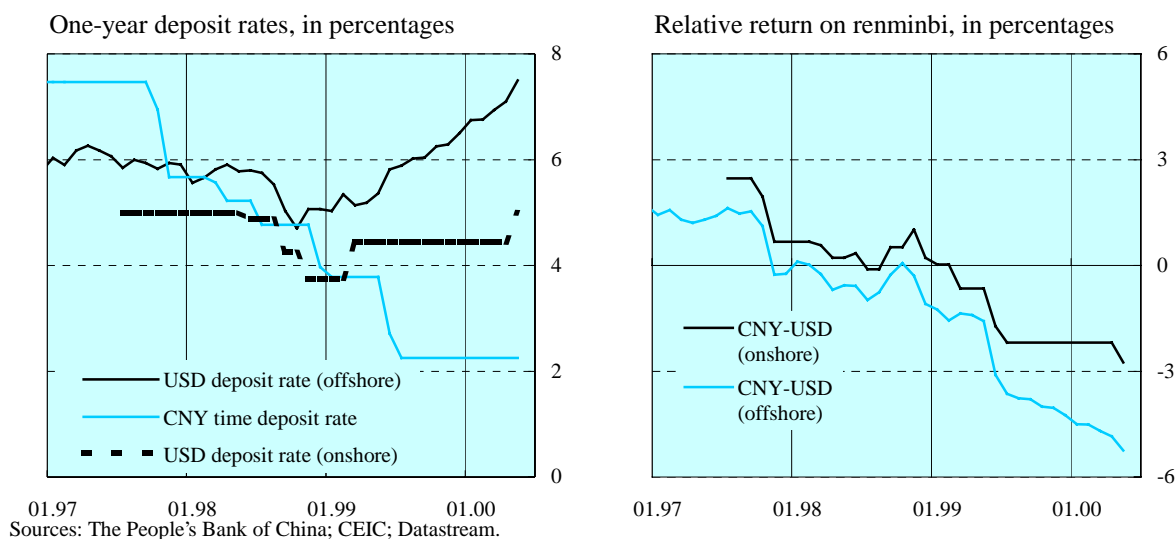
##### **The monetary background**

The stability of the renminbi's exchange rate against the dollar, together with the depreciation in the currencies of many of its trading partners in the course of the East Asian crisis of 1997-98, led to a substantial effective appreciation of the renminbi in that period. This external pressure for lower prices in China was reinforced by domestic factors, including good harvests and overcapacity in the production of many manufactured goods. These external and internal forces resulted not only in a decline in China's rate of inflation from the uncomfortably high levels of the early 1990s but also in actual price falls. These have lasted 33 months, if measured by the retail price index; the consumer price index has roughly stabilised after 22 months of decline. Over time, in conjunction with the recovery of trading partners' currencies, falling domestic prices have helped restore the renminbi's real effective exchange rate to pre-crisis levels. The Chinese monetary authorities responded to these price trends by reducing renminbi interest rates. When the Asian crisis struck, borrowing rates on renminbi loans stood at 10%; by the end of 1998, they had been brought down in six steps to below 7%. In parallel with the reduction of lending rates, the renminbi deposit rate was cut from about 7½% to 5% by mid-1998, where it was maintained for some time before being lowered further to 2¼% by late 1999 (Graph IV.1).

##### **The changing relationship between renminbi and dollar deposit rates**

These interest rate changes, through their effects on the relative returns on renminbi and dollar deposits, posed challenges for the Chinese authorities (Graph IV.1). On the one hand, during 1997-98 the authorities seemed concerned at the prospect of renminbi rates falling below domestic (or onshore) dollar rates, which might have induced shifts out of the renminbi. On the other hand, they seemed concerned at the prospect of domestic dollar rates falling too far below international (or offshore)

Graph IV.1  
Renminbi and US dollar deposit rates



dollar rates, which might have induced shifts out of the country. Thus the pause in the decline in renminbi interest rates in the middle of 1998 occurred against the backdrop not only of extremely strained regional markets but also of a convergence of renminbi and dollar yields in China. The decline in US policy rates after Russia's default and the LTCM debacle permitted dollar rates in China to be reduced, reintroducing a premium for domestic renminbi yields over domestic dollar yields. The further declines in renminbi rates up to the end of 1998 again eliminated this premium.

Thus, by the end of 1998, the authorities appeared to have accepted renminbi and foreign currency deposits offering much the same yields to domestic depositors. And given the possibility of a depreciation of the renminbi, interest rate parity rendered foreign currency deposits quite attractive, as indicated by the amounts involved (see below).

In 1999, the Chinese authorities went a step further and let renminbi yields fall well below dollar yields. As offshore dollar rates rebounded after the Federal Reserve stopped lowering its federal funds target, offshore dollar yields came to exceed their onshore counterparts by 1%. In March, onshore dollar yields were boosted to a level well above yields on renminbi. In mid-year, renminbi interest rates were cut again, which left dollar yields in China still further above renminbi yields. In September, rates on Hong Kong and Canadian dollar deposits in China, but not US dollar deposits, were raised again. Thus, after pausing in 1998 as renminbi rates came into line with dollar rates, the authorities pushed renminbi yields substantially lower than dollar yields in 1999. In late May 2000, with the Bank of China leading and other banks following suit, domestic dollar yields were raised again to 5%.

As of July 2000, the one-year renminbi deposit rate in China, at 2.25%, was more than 500 basis points below its offshore US dollar counterpart and 275 basis points below its onshore US dollar competitor. However, these comparisons overstate the gap for two reasons. The offshore rate is Libid, which is a wholesale rate, while term deposit rates for one-year deposits at HSBC in Hong Kong range 60-120 basis points below Libid, depending on the size of the deposit ( $\geq \$1$  million down to  $\geq \$2,000$ ). Within China, the imposition of a 20% tax on interest received on both renminbi and foreign currency accounts from November 1999, a measure intended to boost consumption, leaves the after-tax gap between renminbi and dollar yields somewhat narrower.

As mentioned above, a key feature of the administered pricing of foreign currency accounts in China is the prevention of too wide a gap between onshore dollar rates in China and offshore (eurodollar) rates. Thus, in July 2000, the 5% yield on one-year deposits in China was below, but not too far below, one-year dollar Libid rates of 7%; as noted, the latter is a wholesale rate available only on large deposits.

Onshore dollar yields set reasonably in line with international yields apparently serve to keep foreign exchange in the Chinese banking system.

### The response: the build-up of foreign currency deposits in the Chinese banking system

An early indication of the scale of foreign currency bank deposits in China was the substantial sum reported by the Bank of China, which is the leading bank for foreign exchange in China.<sup>14</sup> Its 1998 Annual Report disclosed that the bank had some \$44.0 billion in foreign currency liabilities in its domestic banking book, up 23.2% from \$35.7 billion in 1997.

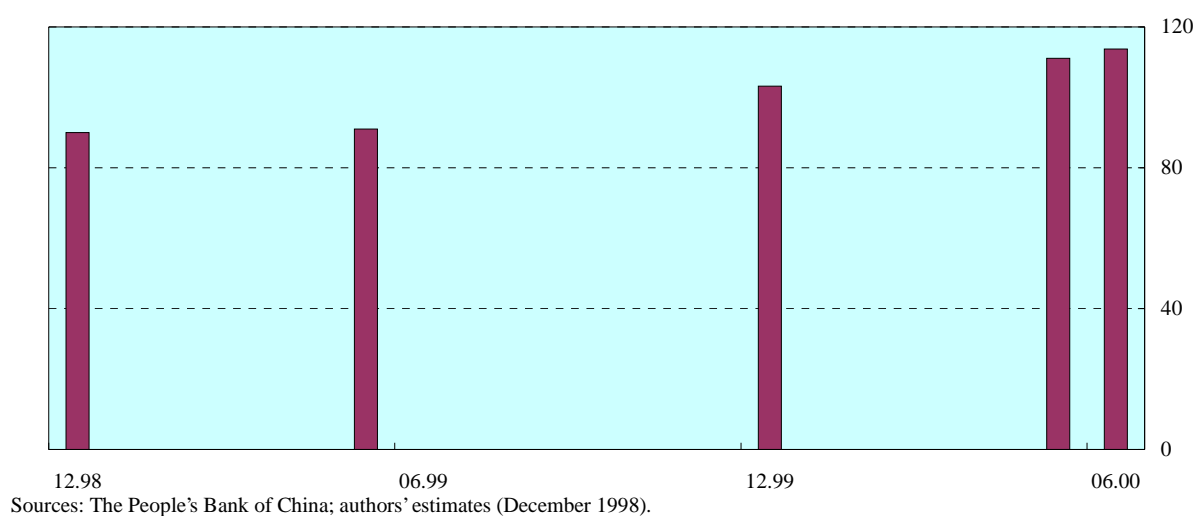
More recently, the People's Bank of China has begun regularly to disclose the sum of foreign currency deposits and lending in the banking system (Graph IV.2). These deposits grew by 22% in the year to end-May 2000, a rate well above that of the M2 measure of the money supply. The latest figure shows a continuation of the rapid growth; reported foreign exchange deposits stood at \$113.7 billion at end-June 2000.

We have used the annual reports of the big four state-owned commercial banks to estimate the cross-sectional distribution of foreign currency accounts in the Chinese banking system at end-1998. Figures reported in the annual reports of the Bank of China, the Industrial and Commercial Bank of China, the China Construction Bank and the Agricultural Bank of China, along with plausible assumptions about the remainder of the banking system, imply US dollar and other foreign currency deposits with banks in China of Rmb 735 billion (\$90 billion) by the end of 1998 (Table IV.1).

### The financial openness of the Chinese economy

Using these data on foreign currency deposits in banks in China and data on Chinese non-banks' deposits in BIS area banks, measures of the financial openness of the Chinese economy in both absolute and percentage terms can be compared to that of industrialised countries. One measure of the internationalisation of portfolios is the sum of non-banks' holdings of eurocurrency deposits, that is

Graph IV.2  
Foreign currency deposits with banks in China  
In billions of US dollars



<sup>14</sup> This bank has 60% of the market according to Andrew Browne; see "China's banks face foreign challenge", *Reuters*, 13 January 2000 at 09:35.

Table IV.1  
**Estimated foreign currency deposits in China**  
 End-1998

	<b>Total deposits (Rmb billions)</b>	<b>Foreign currency deposits (Rmb billions)</b>	<b>Foreign currency deposits as a % of total deposits</b>
<b>State-owned commercial banks</b>			
Bank of China <sup>1</sup>	1,082	357	33.0
Industrial and Commercial Bank of China <sup>2</sup>	2,632	125	4.7
China Construction Bank <sup>3</sup>	709	24	3.4
Agricultural Bank of China <sup>4</sup>	1,366	37	2.7
<b>Other deposit money banks<sup>5</sup></b>	<b>917</b>	<b>61<sup>6</sup></b>	<b>6.7<sup>7</sup></b>
<b>Urban and rural cooperatives and finance companies</b>	<b>1,957</b>	<b>131<sup>8</sup></b>	<b>6.7<sup>7</sup></b>
<b>Total</b>	<b>8,663</b>	<b>735</b>	<b>8.5</b>

<sup>1</sup> Bank of China, *Annual Report* 1998, p 11. <sup>2</sup> Industrial and Commercial Bank of China, *Annual Report* 1998, pp 8 and 41. <sup>3</sup> China Construction Bank, *Annual Report* 1998, p 17. <sup>4</sup> Agricultural Bank of China, *Annual Report* 1998, p 16. <sup>5</sup> Excluding deposits with urban and rural cooperatives and finance companies. <sup>6</sup> Estimated by applying 6.7% to deposits with other deposit money banks. <sup>7</sup> The weighted average of the Industrial and Commercial Bank of China, the China Construction Bank and the Agricultural Bank of China is 4.0%; including the Bank of China, it is 9.4%; 6.7% is the average of the two ratios. <sup>8</sup> Estimated by applying 6.7% to deposits with urban and rural cooperatives and finance companies.

holdings of foreign currency deposits, whether in banks located within the country or abroad.<sup>15</sup> At almost \$1.3 trillion, these amount to about 7% of broad money in the euro area and the rest of the Group of Ten.<sup>16</sup> Thus, a comparison of the currency composition of Chinese residents' holdings of bank deposits with the composition of deposits in other countries suggests a relatively open economy, financially speaking. Table IV.2 shows resident holdings of foreign currency deposits, whether inside a given country or outside its borders. A striking observation is that the estimated absolute scale of foreign currency deposits in the domestic Chinese banking system surpasses that of every G10 country save the United Kingdom and Switzerland.

The table shows as a memorandum item in the last column the sum of these deposits in relation to a broad monetary aggregate. As regards the share of foreign currency holdings, that of residents of the Chinese mainland is substantial. Outliers aside, including two international banking centres each with a population of 7 million (Switzerland and Hong Kong), and a country that hosts the headquarters of the treasuries of many multinationals (the Netherlands), China's position does not differ much from that of the major industrial countries. On this basis, at least, its openness is slightly greater than that of Germany, France or Italy, and noticeably greater than that of the United States or Japan. While a comparison of China with other emerging economies is beyond the scope of this section, it should not be presumed that China's openness on this measure is low by emerging market standards. Emerging market economies with histories of high inflation, Argentina for instance, may have higher shares of foreign currency deposits than does China. Other countries, such as Korea, have lower shares.

<sup>15</sup> See BIS, *Guide to the BIS Statistics on International Banking* (Basel, 1995), Table I-C-1.

<sup>16</sup> Of which, foreign currency deposits at *domestic* banks amount to about \$0.5 trillion in the BIS reporting area (see Annex Table 4B). Even within the ambit of the BIS reporting area, however, these domestic deposit data are incomplete insofar as the United States, Japan, Hong Kong and Singapore do not report data. In the case of the two larger countries, the penetration of foreign currency accounts is generally thought to be quite limited, which is why the authorities there have not collected deposit data broken down by currency to date. In the case of Hong Kong and Singapore, however, holdings of foreign currency accounts by domestic residents are probably substantial in relation to monetary aggregates. Nevertheless, a breakdown by the residence of holders of such accounts is not available.

Notwithstanding the substantial stock of eurocurrency deposits in China, the continuing interest rate differential between renminbi and dollar deposits does suggest that capital controls are effective. One could perhaps view the policy of permitting foreign currency deposits as an option within a set of capital controls that might serve to capture foreign currency for the domestic banking system.<sup>17</sup>

Going forward, foreign currency banking in China may both offer opportunities and pose challenges to the Chinese authorities. The Chinese authorities look set to liberalise interest rates on foreign currency deposits and loans before doing so on renminbi deposits and loans. While foreign currency banking may thus present the opportunity to introduce reforms gradually and test the result, the ongoing possibility of substituting foreign currency deposits and credit for their domestic currency counterparts may constrain future choices.

Table IV.2  
**Foreign currency deposits and broad money in selected economies**

At end-December 1999, in billions of US dollars

	Foreign currency deposits of domestic non-banks			Memorandum items	
	with domestic banks	with foreign banks	Total	Broad money <sup>1</sup>	Foreign currency deposits as a % of broad money
Euro area	106.8	417.6	524.4	4,798.9	10.9
Belgium	8.7	37.6	46.3	237.3	19.5
France	14.4	37.9	52.3	983.9	5.3
Germany	15.5	83.5	99.0	1,447.5	6.8
Italy	5.4	28.4	33.8	556.8	6.1
Netherlands	13.1	135.3	148.4	319.9	46.4
Canada	25.5	22.5 <sup>2</sup>	48.0	464.8	10.3
Japan	99.7 <sup>3</sup>	16.1	115.8	6,138.9	1.9
Sweden	5.7	4.9 <sup>2</sup>	10.6	108.8	9.8
Switzerland	104.6	65.9	170.5	300.8	56.7
United Kingdom	142.1	128.6	270.7	1,315.3	20.6
United States <sup>4</sup>	.	137.9	137.9	6,512.0	2.1
<b>Total euro area and other G10</b>	<b>484.4</b>	<b>793.5</b>	<b>1,277.9</b>	<b>19,639.5</b>	<b>6.5</b>
China					
Mainland	103.2	6.4	109.6	1,448.1	7.6
Hong Kong <sup>5</sup>	181.7	36.6 <sup>2</sup>	218.3	424.8	51.4

<sup>1</sup> For Belgium, France, Germany, Italy and the Netherlands, end-December 1998. <sup>2</sup> Estimated as deposits with identified currency denomination; estimate should be viewed as a minimum. <sup>3</sup> BIS estimate. <sup>4</sup> The United States does not report foreign currency deposits with domestic banks; they are thought to be small in amount. <sup>5</sup> Holdings of foreign currency deposits by both resident and non-resident non-banks.

Sources: National data; BIS; authors' calculations.

<sup>17</sup> Similarly, a duty-free store at the airport for incoming passengers is an option within the fiscal system.