
China's Monetary Policy Challenges

Takeshi Jingu

I. Introduction

China's monetary policy is becoming increasingly difficult to manage. Its sustained current account surpluses and still rapidly growing foreign exchange reserves create a bias toward excess liquidity in the domestic economy. The trade and direct investment components of China's current account surplus will be difficult to change over the near term, given the structural factors at work, namely the huge role that China plays within the global division of labor, as evidenced by China's processing and assembly exports accounting for roughly half of its total trade. There are some observers who think that if China continues to hike interest rates, hot money will increasingly flow into the country. There is also a possibility that if China accelerates reforms to its exchange rate regime, specifically by rapidly widening the yuan's trading band, it may trigger a sharp yuan appreciation. This makes such an acceleration of reforms an unattractive option for the Chinese government, which is concerned about the negative impact on employment.

This paper looks at the monetary policy tools available to China's central bank, the People's Bank of China (PBC), within an environment predisposed to excess liquidity. More specifically, we look at the development to date of, and recent improvements to, those tools, the most representative of which is open market operations, and consider the challenges that remain.

II. Monetary policy tools

A central bank's monetary policy tools are generally seen as including changes to the discount rate and deposit reserve requirement, open market operations, and window guidance (or moral suasion). In China, as well, the lifting of controls on the amount of lending by commercial banks in 1998 motivated a shift in monetary policy emphasis away from direct control and toward indirect control, and this same shift occurred in its monetary policy tools. Below, we provide an overview of China's monetary policy tools: deposit reserve requirements, central bank lending and rediscounting, interest rate adjustments, window guidance, and open market operations.

1. Deposit reserve requirements

China's deposit reserve system was established in 1984, when central banking became the PBC's primary function. There were two types of reserves, deposit reserves and payment reserves, with the former not being used for payments and settlements. At the time, the deposit reserve system was not a tool of monetary policy, but did play an important role in restructuring industrial loans by enabling lending by the central bank to the agricultural industry and other critical industries.¹ In 1994, however, China established three policy banks -- the China Development Bank, the China Export Import Bank, and the China Agriculture Development Bank -- and handed them the role of implementing industrial lending policy. At the same time, it reformed its deposit reserve system, merging deposit reserves with payment reserves in March 1998, while also lowering the deposit reserve ratio from 13% to 8%. In addition, in step with its lifting of controls on the amount of lending to commercial banks, it began using changes in the deposit reserve ratio as a tool for monetary policy adjustments.

In 2004, it added a mechanism for raising a bank's required deposit reserve ratio on a punitive basis. The new regulation increased that ratio by 0.5 percentage points for banks deemed to have high risk based on their capital adequacy ratio. Note that in China, the central bank pays interest to commercial banks on their reserve deposits.²

2. Central bank lending and rediscounting

Next, we look at lending and rediscounting by the central bank. The PBC began making loans in 1984, when its first-level branches started lending to commercial banks based on a centralized plan. The loan recipients included agricultural businesses, key state construction projects, and large and mid-size state-owned enterprises. PBC lending remained the key channel for expanding the monetary base until 1994, after which, as explained later, it lost importance because of growth in the monetary base resulting from increases in foreign exchange reserves.

Since the establishment of the policy banks in 1994, PBC lending to those banks, particularly the China Agriculture Development Bank, has been growing. PBC loan recipients other than the China Agriculture Development Bank include local governments, which used the funds to shutter insolvent small and mid-size financial institutions, and asset management companies, which used the funds to spin off nonperforming loans from state-owned banks. Traditional lending to commercial banks declined as a result.

In 2005, the PBC lent to securities firms suffering liquidity problems, and also provided financing for the acquisition by four asset management companies of nonperforming loans from the Industrial & Commercial Bank of China. Thus lending

¹ Guo (2006). Guo (2006) and Dai (1997) are the main sources of reference for discussion in this chapter.

² As of September 2007, legally required reserves earned an annual yield of 1.89%, and surplus reserves 0.99%.

by the PBC has become more of a way to supply funds to financial institutions, particularly those in crisis, and less of a means to make daily monetary adjustments.

There was some activity in the rediscounting of commercial bills in the 1980s, but the weak understanding that China's corporate sector had of credit wound up creating problems, including that of "triangle debt" (interlocking debt among three or more companies). Because of this, measures were taken in the mid-1990s to standardize commercial bank bills, a rediscounting window was established at the main branch of the PBC, interbank discounting was encouraged, and a commercial bill market was set up in certain key cities.

When the PBC set the rediscounting rate in March 1999, it did so with the mindset of managing monetary policy, and when the counterparties or companies started determining the discount rate based on this rediscount rate, it finally took shape as a monetary policy tool. The overall size of these transactions is actually still small, and they have thus far played only a small role in the larger scheme of macro controls.

3. Interest rate policy

Partly owing to the conditions of the commercial bill market described above, interest rate policy was built primarily around the statutory lending and deposit interest rates set by the PBC, rather than on the official discount rate. Interest rates have been used as a policy tool for quite a while. This includes rate hikes during the inflationary period of the late 1980s and early 1990s and during the overheated economy of the past three years, as well as rate cuts during the deflationary period of the late 1990s.

4. Window guidance

Window guidance began in China in 1998. Since March 1998, the PBC has sponsored a monthly meeting to facilitate mutual understanding with commercial banks. The central bank began down the path of indirect control in 1998, but it was not an easy transition to make, and the PBC still had to rely on a form of administrative guidance.

This was especially true in 1998, when China also experienced a credit crunch as a result of the Asian currency crisis. Although the bank did reform its reserve system and lower interest rates, a lack of tangible results led it to resort to window guidance. This window guidance took the form of targets for the amount and timing of loans.

Another example of this occurred when concern over economic overheating first emerged in 2003. In response to an excess of real estate loans in certain regions, the PBC issued a circular instructing a tightening of controls over the real estate lending business.

5. Open market operations

The PBC classifies open market operations as either operations involving the foreign exchange account or other yuan-related operations.³ Reforms to the currency regime in 1994 opened the way for a managed float regime and the establishment of an interbank foreign exchange market. The PBC responded by conducting open market operations aimed at currency market adjustments when conditions warranted. With China maintaining a current account surplus since 1994, the pattern was for the PBC to inject liquidity into the market by purchasing dollars, and conversely to mop up liquidity by collecting on central bank loans.

As for yuan-related operations, in 1996 the PBC conducted open market operations using government bonds, but on a fairly small scale and with little effect. In fact, the PBC completely halted open market operations using government bonds from 1996 until 1998. In response to the overheating of the stock market in June 1997, the banks moved their government bond transactions from the Shanghai and Shenzhen exchanges to the interbank market, which subsequently became the PBC's platform for open market operations.

The shift in the focus of monetary policy toward indirect controls in 1998 raised the level of open market operations. A system designating primary dealers for open market operations was established,⁴ and the bank began using policy bank bonds in addition to government bonds in its open market operations. In 1998, when there was a period of domestic financial contraction resulting from the Asian currency crisis, open market operations were used to supply liquidity to the market.

Since 2003, as China's current account surplus has grown larger, sterilized operations to offset surplus foreign exchange payments (or the injection of funds into the banking system) have become more important. This initially consisted primarily of absorbing liquidity through reverse repos. As the amount of funds to be absorbed grew larger in step with the rapid growth in China's foreign exchange reserves, however, this became increasingly difficult to accomplish with only bonds held by the central bank, since there were not enough to fill the needed reverse repos. Consequently, the PBC began absorbing liquidity by issuing central bank bills in April 2003.

³ Peoples Bank of China, (China Monetary Policy Report), 2002 (in Chinese)

⁴ There were 52 companies designated as primary dealers as of the end of 2006: 43 commercial banks, three securities firms, four insurance companies, and two fund management companies.

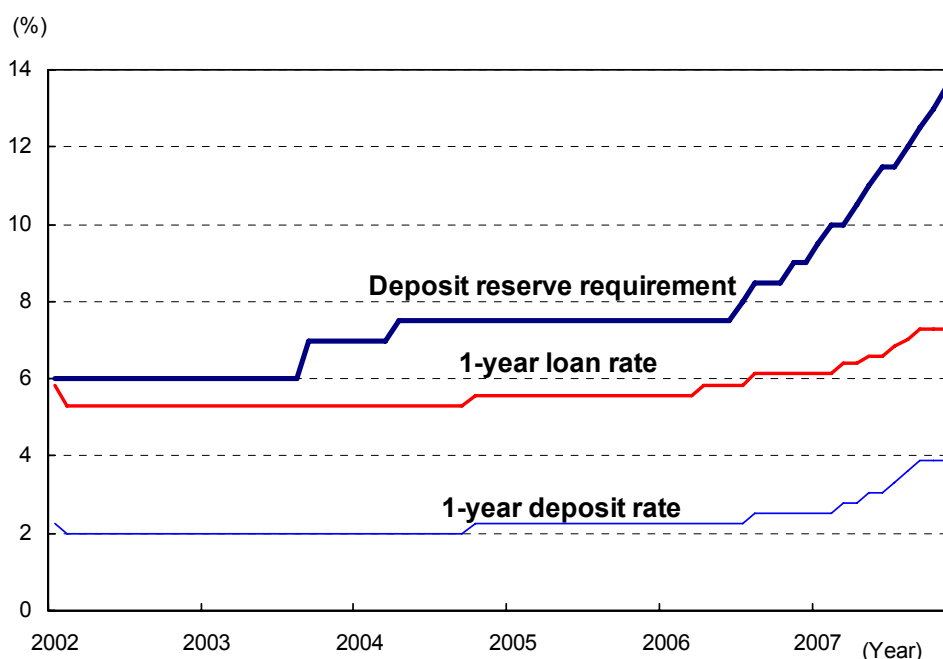
III. Recent trends

We look next at how these monetary policy tools have been used in the current context of economic overheating and rapidly growing foreign exchange reserves.

1. From 2003 until 2005

When overheating of the economy started becoming a concern in 2003, the government introduced restrictions on real estate lending (via administrative guidance) in June, and the PBC raised the deposit reserve ratio from 6% to 7% in September. In 2004, the central bank raised its lending rate by 63 basis points and its rediscounting rate by 27 basis points in March, and raised the deposit reserve ratio by another 50 basis points in April (Figure 1). It also added a mechanism for raising the required deposit reserve ratio on a punitive basis. In October, it raised the interest rate on deposits and loans. This was the first change in those rates since 1999, and the first increase since 1993 (for deposit rates) and since 1995 (for loans). The announcement itself had a fairly big impact, in that it signaled a more aggressive tightening stance at the PBC.

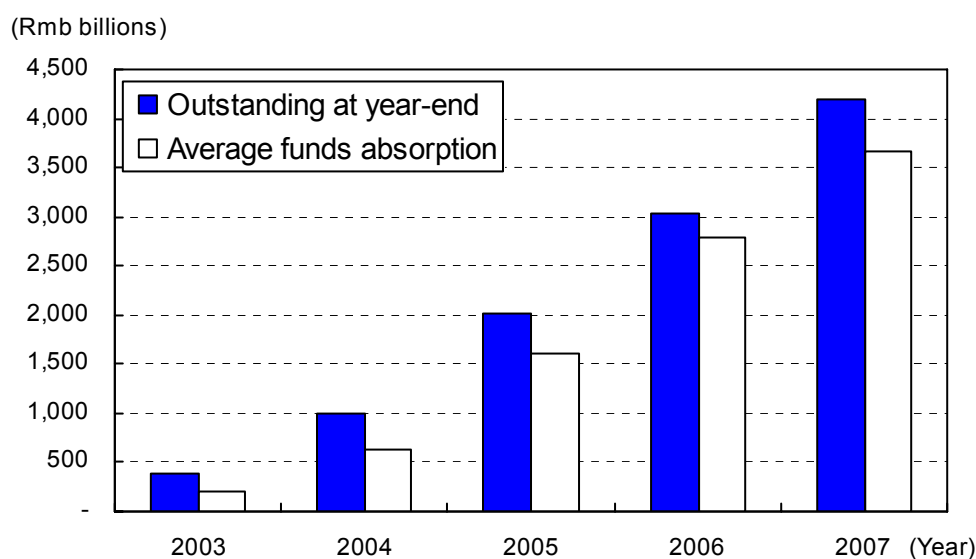
Figure 1: Deposit reserve requirement, deposit rates, and lending rates



Source: Nomura Institute of Capital Markets Research, based on data from the People's Bank of China

In 2005, the currency regime was changed in July, marking a break from the de facto fixed yuan/US dollar exchange rate that had been in place since the end of 1997. Open market operations became the workhorse of monetary policy, rather than changes in reserve requirements and deposit and loan rates, and central bank bills became the focus of those operations (Figure 2). Total central bank bill issuance in 2005 was Rmb2.7882 trillion, up from approximately Rmb1.5 trillion in 2004. In H1 2005, the PBC issued three-year bills on 16 occasions, and total issuance of bills with one year or longer maturity was approximately Rmb1.5 trillion. The average daily liquidity absorption⁵ increased from approximately Rmb600 billion in 2004 to Rmb1.6 trillion in 2005.

Figure 2: Central bank bills outstanding



Note: See main text for description of average daily liquidity absorption. Figures for 2007 are through end-August.

Source: Nomura Institute of Capital Markets Research, based on data from Wind Information

On the bond repo side, the PBC engaged in selling operations (reverse repos) 62 times and buying operations three times.⁶ The buying operations appear to have been aimed at supplying funds to meet seasonal demand, rather than an intentional policy shift. The selling operations totaled Rmb738 billion. These were short-term operations, such as 7-day reverse repos, in the first two quarters (January-June) of 2005, but in the third (July-September) quarter, the PBC conducted reverse repos with 6-month maturity 12 times, thereby lengthening the average maturity. Nevertheless, we

⁵ Although the annual liquidity absorption effect would be the same whether issuing Rmb10 billion of 3-month central bank bills and rolling them over every three months or issuing Rmb10 billion of 1-year bills, the former would result in a bigger gross issuance number. We therefore use the daily average for each year as a measure of liquidity absorption, calculated by multiplying the annual issuance amounts of each central bank bill (or repo) by that bill's number of days of maturity (adjusting for issues that straddle two years), and then dividing that product by 365.

⁶ Wind Information

estimate the average daily liquidity absorption was fairly small at about Rmb100 billion. In November 2005, in addition to central bank bills and repos, the PBC absorbed yuan by engaging in currency swaps with commercial banks (1-year maturity, US\$6 billion).

Regards interest rate adjustments, the PBC left both deposit and lending rates unchanged, but in March 2005 lowered the interest rate on surplus reserves to 0.99% (from 1.62%) and eliminated subsidized interest rates on residential mortgages.

2. From 2006 until present

In 2006, open market operations included the issuance of Rmb3.657 trillion in central bank bills. The PBC issued none of the 3-year bills it issued in 2005, but issued Rmb2.542 trillion in 1-year bills. Average daily liquidity absorption was approximately RMB2.8 trillion, an increase from 2005. Bond repos were focused on short-term rollovers: there were 39 selling operations totaling RMB1.990 trillion, but except for three 14-day repos, all were for a term of seven days. Consequently, this had little impact on liquidity absorption. Thus open market operations were focused on central bank bills in 2006, as well.

The PBC also began the "*dingxiang* (preordained) issuance" of central bank bills for what could be termed punitive terms, based on their low yields. *Dingxiang* issuance is earmarked for specific financial institutions, specifically banks that have had too much growth in their loan books. There were four issues totaling Rmb370 billion; the first three were part of an economic package to suppress investment in fixed assets and were issued primarily to four big state owned banks, while the last issue (in December), which was mostly aimed at suppressing excess liquidity, was issued to a large number of banks.⁷

The deposit reserve ratio was raised by half a point three times, in July, August, and November. A total of approximately Rmb300 billion was frozen on two occasions, once in July and once in August.⁸ The raising of the reserve requirement in 2006 appears to have been a reflection of a stronger desire to absorb liquidity. On the interest rate side, the PBC raised the lending rate in April and both the deposit and lending rates in August.

2006 was clearly a year in which the PBC started putting more emphasis on both cooling an overheated economy and absorbing liquidity. Particularly in the second half of the year, it not only attempted to mop up market liquidity through open market operations and raised interest rates, but also raised the deposit reserve ratio. In other words, the problem of domestic excess liquidity was serious enough to be reflected in the PBC's daily monetary adjustments. That said, the PBC has done a relatively good job of restraining growth in the monetary base.⁹

⁷ Based on interviews of market participants.

⁸ Li Yang (2007)

⁹ Xia and Chen (2007)

The trend in the second half of 2006 carried forward into 2007, when the bank retained a fairly aggressive stance with all of its policy tools: the deposit reserve ratio, interest rate adjustments, and open market operations. It raised the deposit reserve ratio nine times during the first 11 months, bringing it from 9% to 13.5%, the all-time high. As of November, the bank had already raised the interest rate on deposits and lending five times.

On the market operations side, as of the end of August it had issued central bank bills totaling Rmb3.4601 trillion, close to the total issuance for all of 2006. It also issued 3-year bills of Rmb1.031 trillion for the first time in two years, and as of September there were four *dingxiang* issues totaling Rmb404 billion. Average daily liquidity absorption as of the end of August was approximately Rmb3.7 trillion, even greater than in 2006. Probably an important point to note here is that the interest rate on the 3-year bill at issuance rose from 2.97% in January 2007 to 3.81% at the end of August.

There were a total of nine repos issues as of the end of August, including eight selling operations and one buying operation (apparently to handle seasonal demand), and six of those were in January. Selling operations totaled Rmb405 billion, down considerably from the pace set in 2006.

The trend thus far in 2007 suggests that the PBC is seeking to more aggressively absorb long-term funds by issuing central bank bills and by raising the deposit reserve ratio.

3. Emerging problems

For the past few years, the problems that the PBC has had to deal with have been an overheating economy and excess liquidity. The source of these problems is quite complex, and not something that the PBC can solve by itself. These problems have persisted for a fairly long time, however, as has the monetary policy response, and this has shed light on a number of other problems in the monetary policy arena. Two of these problems are as follows.

1) Problems with the monetary policy tools themselves

To start with, the major operational challenge for the PBC operations over the past several years has been how to absorb (sterilize) the liquidity growth resulting from rising foreign exchange reserves. With the exception of interest rate adjustments, there is a sense that monetary policy tools have either already been milked dry or will be so in the near future.

The deposit reserve ratio is already at 13.5%, its all-time high. Of course, it could be raised higher, but commercial banks had become increasingly unhappy over the effective increase in costs resulting from the interest rate paid on deposit reserves being lower than the interest rate charged on loans. In addition, China's deposit

reserve ratio is high compared with that at central banks overseas, and international competitiveness will eventually become an issue.

Open market operations are now being conducted within an environment in which neither short-term money markets nor bond markets have developed very far. Outstanding bond issuance only amounted to 44% of GDP in 2006, which is low compared with the industrialized countries.¹⁰ For example, the focus of open market operations in the US is on short-term treasuries, but China has thus far only issued a small amount of short-term government bonds.

With its bond holdings also fairly small, the PBC has had to focus its open market operations on central bank bills, as noted earlier. One positive from the issuance of central bank bills is that it helps in the development of short-term money markets, but a negative is that they increase interest rate costs. Of course, the central bank need only issue additional currency to cover the interest payments, but if the current account surplus persists for an extended period, both the quantity of bills issued and the interest rate burden will continue to mount. As of the end of August 2007, central bank bills outstanding totaled approximately Rmb4 trillion (Figure 2), and assuming an interest rate of 4%, generated annual gross costs (ignoring investment gains on foreign exchange reserves) of Rmb160 billion. Although it is not yet at the crisis stage in which further growth in liquidity caused by the central bank's interest rate payments starts to spin out of control, this may become an issue in the future if outstanding issuance and interest payments continue to increase.

2) Malfunctioning of the interest rate mechanism

Second, the interest rate transmission mechanism, the fundamental indirect macroeconomic control mechanism of monetary policy, has never functioned very well in China.

At present, there seems to be a dichotomy between interest rate formation and the quantitative control of the monetary base, M2, and bank lending. China has a long way to go before it reaches a stage in which open market operations have an impact on interbank cash positions and interbank interest rates, which in turn impact bank lending behavior and other market rates of interest, which ultimately impact economic activity. Specifically, there is a fairly weak correlation between the formation of interbank interest rates and the lending rate set by the PBC.

Looking back at the history of interest rate liberalization in China, interest rates in the interbank market were fully liberalized in the 1990s, and the focus of interest rate liberalization since 2000 has been on bank deposit and loan rates. This liberalization has proceeded on the basic principles of (1) foreign currencies first, and then the yuan, (2) the lending rate first, and then the deposit rate, (3) rural areas first, and then the cities, and (4) long-term and large accounts first, and then short-term and small accounts. Liberalization has proceeded in stages, initially through a widening of the band of fluctuation around the legal deposit and lending rates set by the PBC, and

¹⁰ In Japan, outstanding JGB issuance amounted to 130% of GDP in FY 2006.

then in October 2004 by eliminating the maximum lending rate and minimum deposit rate. The next step on the road to the complete liberalization of interest rates is to steadily lower the minimum lending rate and raise the maximum deposit rate.

Interbank interest rates have already been liberalized, but the undeveloped state of short-term money markets and bond markets has made the market formation of benchmark interest rates difficult. Both the repo market and interbank borrowing market are focused on transactions with terms of seven days and less, and include few transactions maturing in more than seven days. This has created a problem of instability in longer-term interest rates. Some observers note that the interest rate formation is inherently unstable especially in the interbank borrowing market because it is less than 1/10 the size of the repo market, and most of the funds are provided by a small subset of banks.¹¹ There was an attempt to create a benchmark interest rate in 2004 based on rates in the repo market, but it was not very successful.

Although both lending rates and deposit rates now move with some degree of freedom, the lending rate has not been very sensitive to interest rates in the interbank market. In 2005, for example, an increase in central bank bill issuance caused the yield on those bills to rise in the second half, and although money market rates mimicked that increase, the average bank lending rate actually declined.¹² In addition, the issuance of bonds by the corporate sector, which relates directly to actual economic activity, has effectively been restricted in terms of both issuance amount and interest rates, and these restrictions have hampered the functioning of the interest rate transmission mechanism.

As evident from the trend over the past few years, rate hikes by the PBC have been ineffective in suppressing economic overheating. Although this is partly due to the small rate hike increments, another possible reason is the large number of corporations that are insensitive to interest rates. If there are a large number of corporations insensitive to interest rates, whether it be owing to the continued involvement of regional governments in the decision to make corporate loans or for other reasons, the result will be a disconnect between interest rates and economic trends. For the interest rate mechanism to function, it is critical that market principles operate throughout the economy.

¹¹ Peoples Bank of China (2007)

¹² Li Yang (2007)

IV. Recent trends and future direction

1. Enhancing short-term money markets

Although China's monetary policy is hampered by the problems noted above, the situation is steadily improving.

Short-term money markets, although still small in size, are becoming more developed. First, there is a growing number of participants in the interbank market. The number of companies participating in the interbank borrowing market increased from 490 in 2001 to 703 (of which 359 were banks) in 2006. In the interbank bond market, the number of participants increased from 482 in 2001 to 6439 (of which 4450 were nonfinancial firms) in 2006.

Second, transaction volume in short-term money markets is increasing. Repo transaction volume in the interbank bond market totaled Rmb26.6 trillion in 2006, 6.6x the level in 2001, and had already reached Rmb26.2 trillion in January-August 2007. Transaction volume in the interbank borrowing market totaled Rmb2.2 trillion in 2006, 2.7x the 2001 level, and had already reached Rmb3.8 trillion in January-July 2007 (Figure 3). The commercial bill market, meanwhile, had transactions totaling Rmb5.4 trillion in 2006, 4.2x the 2001 level.

Figure 3: Transaction value in short-term money market

(Rmb billions)

Year	Interbank market			Government bond market (in Stock Exchanges)	
	Interbank borrowing	Bonds spot	Bond repos	Spot	Repos
2000	672.8	68.3	1578.2	365.7	1314.7
2001	808.2	84.0	4013.3	438.3	1534.3
2002	1210.7	441.2	10188.5	638.1	2441.9
2003	2411.3	3084.8	11720.3	550.0	5298.2
2004	1455.6	2521.5	9436.8	296.2	4408.6
2005	1278.3	6013.3	15893.2	277.4	2326.1
2006	2150.3	10258.7	26590.8	154.1	1541.3
2007	3805.8	9634.2	26232.9	71.7	-

Note: Figures for 2007 are through August for the interbank market and through July for the exchange. Figures on spot and repos for 2007 come from separate data source (ChinaBond).

Source: People's Bank of China (2007) and ChinaBond.

Third, the issuance of short-term government bonds has been increasing since 2005. Issuance of Rmb139.8 billion in 2004 was followed by Rmb419 billion in 2005 (including Rmb139.7 billion in the interbank market that is related to open market operations), Rmb636.5 billion (Rmb212.2 billion in the interbank market) in 2006, and Rmb398.6 billion (Rmb114.2 billion in the interbank market) in January-August 2007 (Figure 4). The issuance of short-term financing bills,¹³ which began in 2005 with Rmb145.4 billion in issuance, increased to Rmb292 billion in 2006 and stood at Rmb211.9 billion in January-August 2007 (Figure 4).

Fourth, the Chinese government has started pushing the issuance of corporate bonds. There are currently various reforms underway in China to encourage the corporations to more actively use the corporate bond market.¹⁴ Specifically, on 14 August 2007 the Pilot Rules on the Issuance of Corporate Bond went into effect. The measures provide rules on domestic corporate bond issuance by joint stock companies and limited companies governed by the Company Law. Previously, corporate bond issuance required approval by the National Development and Reform Commission, but under the new rules all that is required is a resolution at a shareholders meeting or general shareholders meeting and approval by the China Securities Regulatory Commission (CSRC). In addition, the issuance price is now determined through a book building process, and the issuance amount and yield is no longer regulated.

Fifth, on the market liquidity front, money broker activities in the interbank market were officially allowed in July 2006. In January 2007, the PBC also announced its Administrative Rules on Market Makers in the Interbank Bond Market. The rules included a lowering of criteria for the participation of bond market makers in the interbank bond market.

¹³ "*Duanqi rongzi zhaiquan*" (short-term financing bills) These are bills maturing in less than a year that are issued by corporations in the interbank bond market, generally referred to as commercial paper.

¹⁴ The trend in China is to distinguish between enterprise bonds and corporate bonds. In China, there are a large number of enterprise bonds issued by business entities that are not companies as defined in the Company Law, for the purpose of financing state projects. Enterprise bonds remain under the control of the National Development and Reform Commission, whereas the issuance of corporate bonds is becoming more flexible.

Figure 4: Bond market issuance

(Rmb billions)

Year	Government bonds				Policy bank bonds	Short-term financing bonds	Central bank bills	Bank bonds (non-policy)	Corporate bonds	Total
	Registered	Bearer bonds	Total	(Including short-term)						
2000	269.2	190.0	459.2	20.0	164.5	0	0	0	7.5	631.2
2001	308.4	180.0	488.4	0	259.0	0	0	0	14.0	761.4
2002	446.1	147.3	593.4	26.5	317.5	0	193.8	0	32.5	1137.2
2003	543.9	250.5	794.4	59.5	452.0	0	785.0	0	32.4	2063.8
2004	441.4	251.0	692.4	139.8	434.8	0	1507.2	74.9	30.7	2739.9
2005	504.2	200.0	704.2	419.0	603.2	145.4	2788.2	112.9	65.4	4419.2
2006	653.3	235.0	888.3	636.5	865.0	292.0	3657.4	69.5	99.5	5911.6
2007	1032.7	110.0	1142.7	398.6	663.5	211.9	3409.1	-	53.6	-

Note: Figures for 2007 as of August. Bearer treasury bonds are mainly for individuals, and registered bonds are related to open market operations. Short-term government bonds mature in one year or less. Bank bonds (non-policy) include commercial bank bonds, subordinated bonds, and bonds from international development agencies.

Source: People's Bank of China (2007) and ChinaBond.

2. Special government bonds

It appears that the problem of the PBC having insufficient bond holdings has been somewhat alleviated with the issuance of special government bonds that began in August 2007. These bonds are issued by the Ministry of Finance to provide funding for the investment company that the Chinese government established in 2007 to manage its foreign exchange reserves. The initial issuance of these special government bonds was on 29 August 2007 for Rmb600 billion. The new investment company will use this Rmb600 billion to purchase foreign exchange reserves from the PBC for investing. Because the PBC is unable to directly underwrite bonds, the Ministry of Finance issued the special government bonds in August to the Agricultural Bank of China, which in turn sold the bonds to the PBC.¹⁵ At this point, there has been no change in the Agricultural Bank of China's deposit reserves at the central bank, nor in the level of deposit reserves in the entire banking system.

This Rmb600 billion of special government bonds now held by the PBC are meant for use in open market operations, and Rmb10 billion of the bonds have already been sold to the market. Currently two different approaches are being debated, (1) selling operations that absorb additional liquidity and (2) the replacement of maturing central bank bills. The Ministry of finance plans to issue a total of Rmb1.55 trillion in special government bonds.

¹⁵ The second issuance of special government bonds, totaling Rmb200 billion, was sold by the Ministry of Finance directly to the interbank market, with reserves reduced at time of issuance.

3. Improved functioning of interest rates

The development of short-term money markets is improving the functioning of interest rates. The bill discount rate, which has a direct impact on corporate activity, is starting to show a stronger correlation with the interbank borrowing rate, repo rate, and central bank bill rates, and monetary adjustments are consequently starting to correlate with the real economy.¹⁶

The Shanghai interbank offered rate (Shibor) was introduced as a benchmark interest rate for the short-term money market. It is announced by the National Interbank Funding Center. Shibor is a weighted average of the offered rates of 16 banks, and is declared for overnight, one-week, two-week, one-month, three-month, six-month, nine-month, and one-year maturities. The PBC is promoting the use of Shibor as a benchmark rate. In practice, however, it is the actual interbank borrowing rate rather than Shibor that is used, and since most of the transactions in the interbank borrowing market are for maturities of 7 days or less, longer-term interest rates are still unstable.¹⁷ It therefore looks like further time is required before a genuine market-based interest rate regime can be established.

One new product for the interbank bond market, introduced on a trial basis in February 2006, is yuan interest rate swaps. These swaps are offered as a way to lower interest rate risk, and should provide a platform for further interest rate liberalization. Swaps between floating and fixed rates have been introduced on a trial basis, and 21 institutions had traded such swaps as of the end of 2006.

V. Conclusion

The short-term money market, which provides a platform for the open market operations that are the key component of indirect macroeconomic controls, is growing in size, while another area of improvement is the trend toward formation of a benchmark interest rate. Given the growth in China's foreign exchange reserves, however, conditions still make it difficult for the PBC to manage monetary policy. Special government bonds have been added as a new method of open-market operations for the PBC, but these will also probably turn out to be insufficient if the current account surplus continues growing for a sustained period. The Chinese government should implement wide-ranging policies aimed at blocking unlawful fund inflows, suppressing exports, increasing imports, and establishing a safety net against a revaluation of the yuan. In addition, unless the elements contrary to market principles, typified by the administrative involvement of local governments, can be rooted out, China could find itself in a no man's land in which it has gone too far to return to direct controls but is not yet ready for indirect controls. Improvements in monetary policy are directly related to other structural economic reforms, and progress must be made on both at the same time.

¹⁶ Peoples Bank of China (2007)

¹⁷ Based on interviews of market participants.

[References]

Dai Xianglong, editor, "*Lingdao ganbu jinrong zhishi duben*" (Financial knowledge textbook for leaders), China Financial Publishing House, 1997 (Chinese)

Guo Tian-yong, "*Zhongguo huobi zhengce tixi de xuanze*" (Systematic choices for China's monetary policy), China Financial Publishing House, 2006 (Chinese)

Xia and Chen, "*Zhongguo liudongxing baogao*" (Report on China's excess liquidity), the Development Research Center of State Council, 2007 (Chinese)

People's Bank of China, "*Zhongguo huobi zhengce zhixing baogao*" (China monetary policy report), all years (Chinese)

People's Bank of China, Shanghai Branch, "*2006 zhongguo jinrong shichang fazhan baogao*" (China financial market development report), China Financial Publishing House, 2007 (Chinese)

Li Yang, editor, "*Zhongguo jinrong fazhan baogao 2006 (No.3)*" (Report on China's financial development 2006 (No. 3)), Social Sciences Academic Press, 2006 (Chinese)

Li Yang, "*Zhongguo jinrong fazhan baogao 2007*" (Report on China's financial development 2007), Social Sciences Academic Press, 2007 (Chinese)