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Macro-financial Linkage and Financial Deepening  
in China after the Global Financial Crisis

**Kumiko Okazaki\* and Tomoyuki Fukumoto\*\***

**Abstract**

As China's economic integration with the global economy deepens, the amount of capital flow to/from China has been increasing significantly, especially since it joined the WTO. In spite of such environment, the recent global financial crisis has not severely affected the Chinese financial markets because of China's relatively strict control of cross-border capital transactions and its strong economic and financial fundamentals. The government's stimulus policies worked effectively to realize a quick recovery of the country's economic growth. However, on the horizon, the factors that protected the Chinese economy during the crisis also seem to carry with them substantial risks and challenges to its sustainable growth. This paper reviews the factors that have kept the Chinese economy and financial markets relatively stable and analyzes the recent changes in China's macro financial linkage overseas, and highlights the challenges that China faces in realizing a sustainable and efficient economic development.

**Keywords: Macro-financial Linkage; Financial Deepening; Cross-border Capital Flow; Bank Lending**

**JEL classification: F36, O53, P34**

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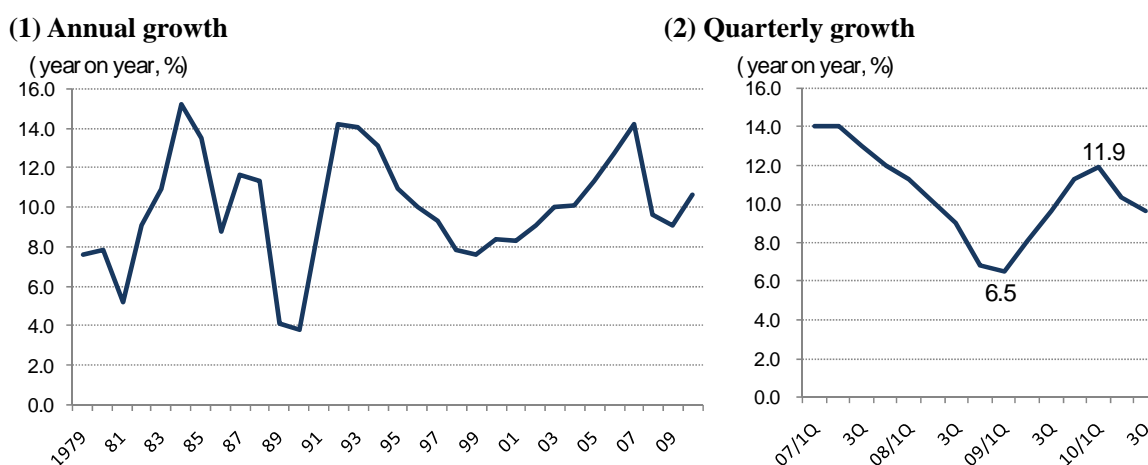
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## 1. Introduction

During the recent global financial crisis, the Chinese economy demonstrated a tolerance to shocks from overseas or a potential power to continue its high growth. Although the economy displayed a rapid slowdown in the latter half of 2008, with a severe decline in the demand from its major international trading partners, it escaped from falling into a deep recession. Boosted by the government's stimulus policies, it picked up quickly from the second quarter of 2009 (Figure 1).

**Figure 1: Changes in China's real GDP growth**



Source: National Bureau of Statistics (NBS)

Several conditions enabled China to keep its economy less vulnerable and realize a quick recovery. Few domestic financial markets were directly affected by the turbulence in the foreign financial markets. The relatively strict control of cross-border capital transactions, the large accumulation of foreign exchange reserves, and the recapitalized banking system acted as bulwarks against the shock of the crisis that originated outside of the country. The sound fiscal position and abundant domestic savings became sources of the government's aggressive stimulus policies. To date, the domestic banks, as a whole, functioned well and mobilizing the savings for the country's strong economic recovery.

However, the factors that protected and stimulated China's economic growth seem to carry with them substantial risks and challenges to the economy. Too much reliance on the banking sector and less developed capital markets distorts the efficient usage of domestic funds. The dominance of the state-owned sector in formal financial markets drives private enterprises into informal financial markets in the country. The extremely high domestic savings rate is largely the result of a disproportionately high capital share and insufficient

public support for health care, education, and pensions; it also raises a serious discussion about the global imbalance among major countries. As economic globalization continues to develop in China, the volume of cross-border capital transfer also grows significantly. In addition to the huge current account surplus and massive foreign direct investment (FDI), capital inflows through securities and other investment accounts are growing substantially. It has become increasingly difficult for the Chinese authorities to manage the rapidly accumulating foreign exchange reserves safely and efficiently.

In this study, we first review the factors that have made the Chinese economy and financial markets less vulnerable to the global financial crisis and analyze the recent change in China's macro-financial linkage overseas, by focusing on the movement of cross-border capital transactions. Then, we discuss the challenges that the Chinese financial system reform faces in furthering the sustainable development of the economy.

## **2. Underlying conditions that have made the Chinese economy less vulnerable**

### **1) Similarities and differences between the Asian financial crisis and the recent crisis**

During the Asian financial crisis, China possessed some advantages that shielded it from the negative effects of the crisis. Lardy [1998] pointed out that the inconvertibility of the Chinese currency for capital account transactions, massive inflow of FDI, lower dependence on short-term borrowings, sizable trade surpluses, and increased foreign exchange reserves helped to maintain a relatively stable Chinese financial market in 1997. In addition, the Chinese government's guarantee on bank deposits as well as its intervention in the decision-making process of banks largely eased the credit crunch in the second half of 1998 (Fernald and Babson [1999]). Many of these factors continue to be relevant.

On the other hand, there is a significant difference between the periods of the Asian financial crisis and the recent global crisis. Today, private capital flow has become larger and more volatile (as discussed in the next chapter). A larger capital flow implies that China is subject to larger external shocks. Hence, it would have been more difficult for China to maintain a stable economy without the following fundamentals.

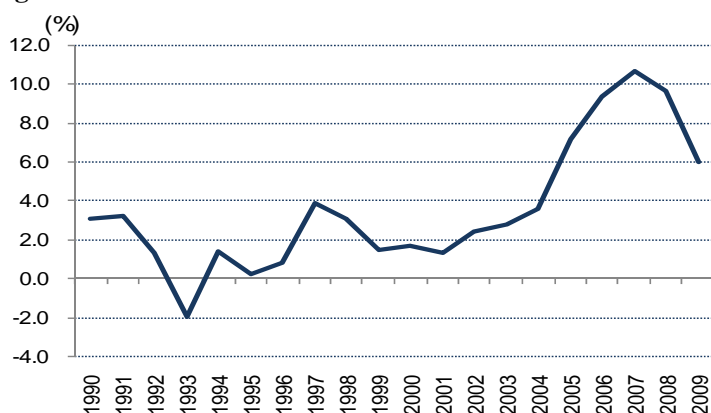
### **2) Strong economic and financial fundamentals**

During the recent global financial crisis, some factors worked favorably in keeping the Chinese economy relatively stable. Among them, (a) the favorable external position, (b) healthy fiscal position, (c) modest leverage, (d) high amount of domestic savings, and (e) stable banking system were especially effective, although they were not in a perfect condition for a sustainable economic development in a longer perspective.

**a) Favorable external position**

China's external position has improved remarkably since the late 1990s. Its dependence on external debt declined and its foreign exchange reserves surged, while its current account surplus expanded rapidly until 2007 (Figure 2). Regarding its international investment position, China is a net surplus country. The outstanding of the current Chinese foreign exchange reserves is about five times as large as its external debt (Table 1). Affluent amount of foreign exchange reserves is widely regarded as a kind of guarantee for external debt payment.

**Figure 2: Current account balance to nominal GDP in China**



Source: International Monetary Fund (IMF), World Economic Outlook Database, October 2010

**Table 1: Outstanding of China's external debt and foreign exchange reserves**

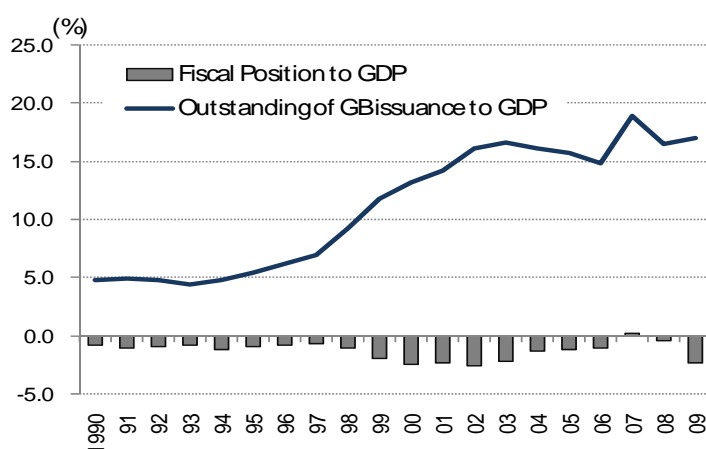
	(US\$ billion)				
	1998	2007	2008	2009	June 2010
External debt	146.0	389.2	390.2	428.7	513.8
Foreign exchange reserves	145.0	1,528.2	1,946.0	2,399.2	2,454.3

Source: *China Statistical Yearbook 2010* and State Administration of Foreign Exchange (SAFE)

**b) Healthy fiscal position**

As the recent examples of some European countries have shown, market participants regard the health of a fiscal position as a final backstop to support the country's financial system. As for official statistics, China has kept its fiscal position in good shape. Both the ratios of the fiscal deficit to China's GDP and the government debt to its GDP are much more moderate than the ratios of other emerging countries (Figure 3 and Table 2). So far, the Chinese government has been successful in appealing its fiscal health to market participants.

**Figure 3: Proportion of fiscal position and outstanding of government bond (GB) issuance to GDP in China**



Note: As to the fiscal position to GDP, the government revenue does not include the receipts of domestic and foreign debt, while the government expenditure since 2002 includes the interest payment on domestic and foreign debt.

Sources: *Almanac of China's Finance and Banking* and People's Bank of China (PBOC) "China Monetary Policy Report, Quarter Four 2009"

**Table 2: Fiscal balance and government debt of ASEAN 4 and BRICs in 2009**

	China	India	Indonesia	Malaysia	Philippines	Thailand	Brazil	Russia
Fiscal balance to GDP	-3.0	-9.6	-1.6	-5.5	-3.9	-3.2	-3.3	-6.2
Government debt to GDP	18.6	74.2	28.6	55.4	48.9	45.2	68.9	10.9

Note: The fiscal balance to GDP shows the proportion of the general government net lending/borrowing to GDP, and the government debt to GDP shows the proportion of the general government gross debt to GDP (national currency base).

Source: IMF World Economic Outlook Database, October 2010

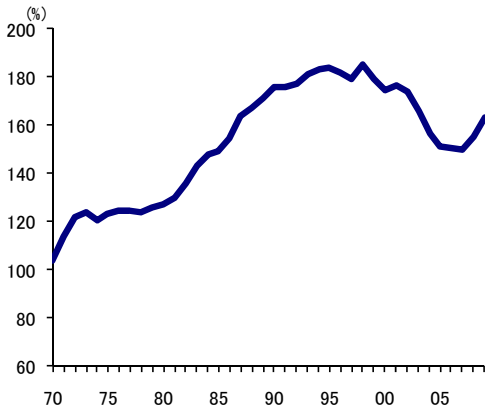
### c) Modest leverage

The recent global financial crisis shows that a financial turbulence is likely to become catastrophic with the high leverage of economic entities. In this regard, investment and consumption in China are modestly leveraged (Figure 4). Although bank loans soared in the first half of 2009, the proportion of bank loans as a source of funds was still low compared to that of past investment booms (1985 and 1993; Figure 5). Since the leverage of Chinese households and enterprises have been modest, the negative impact of the global market turmoil, which is a shrinkage in external demand, was not as fatal as those in other countries with high leverage.

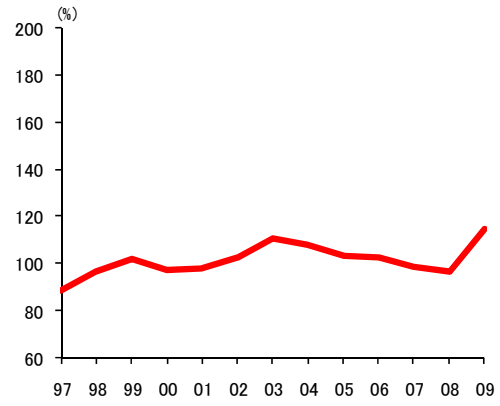
**Figure 4: Comparison of leverage between Japan and China**

**(1) Loans to nominal GDP ratio**

**Japan**

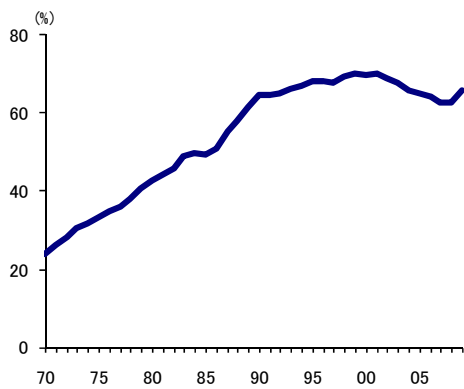


**China**

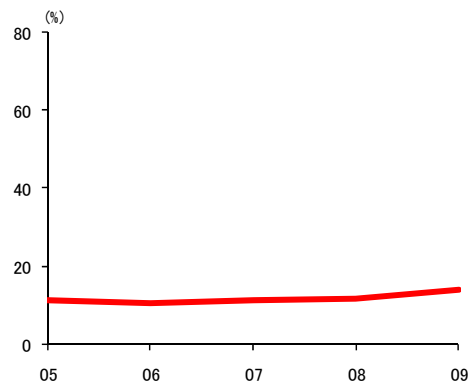


**(2) Loans for households to nominal GDP ratio**

**Japan**

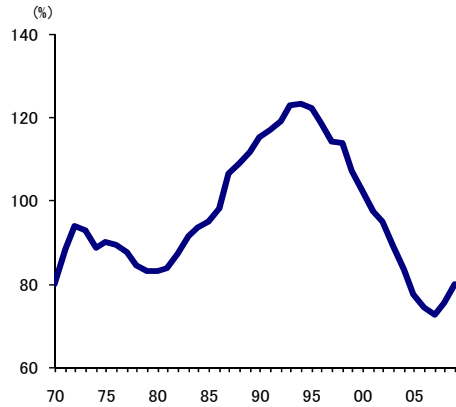


**China**

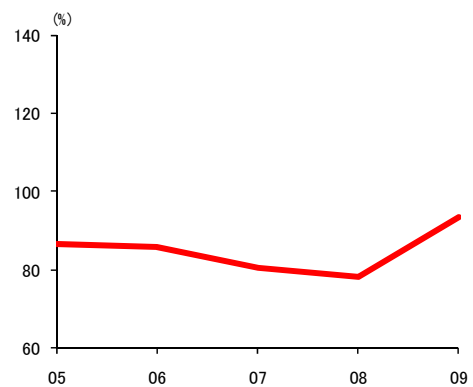


**(3) Loans for enterprises to nominal GDP ratio**

**Japan**



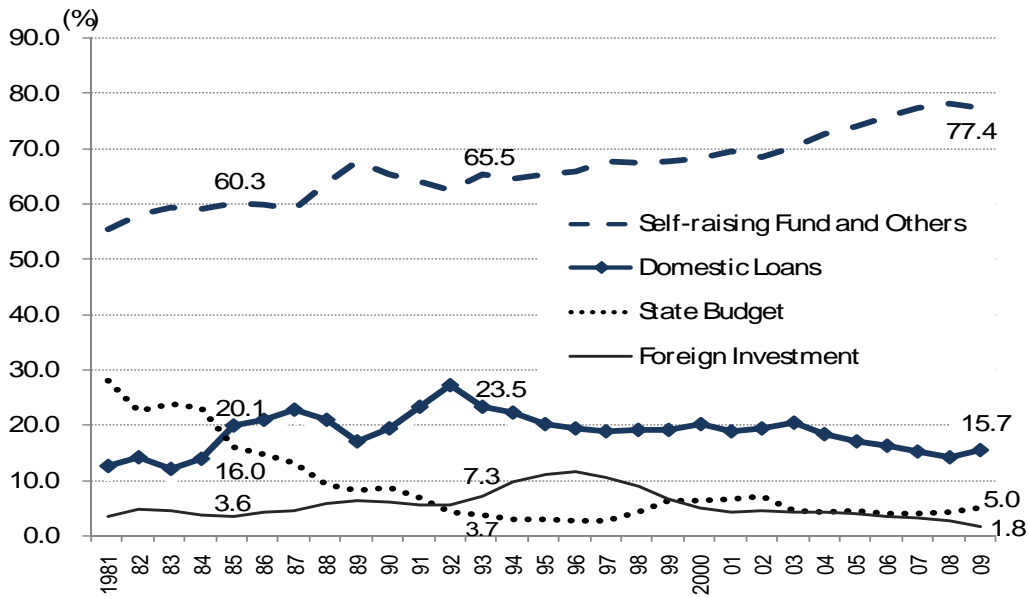
**China**



Sources: Bank of Japan, Ministry of Finance of Japan, Cabinet Office of Japan, NBS and PBOC



**Figure 5: Sources of funds for fixed asset investment in China**

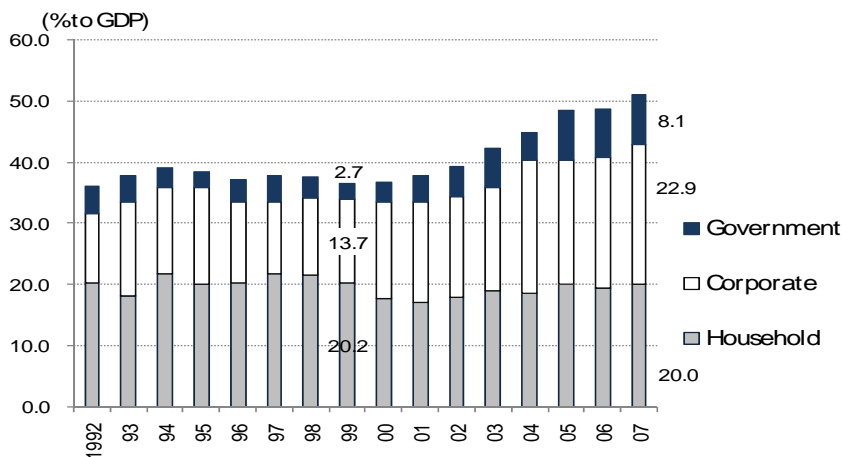


Sources: *China Statistical Yearbook 2009* and *China Statistical Abstract 2010*

**d) High domestic savings**

Behind the aforementioned factors lies a more essential factor. China's savings rate is extraordinarily high. China's gross savings to the GDP ratio stood at more than 50 percent in 2007, the highest among the world's major countries (Figure 6 and Table 3).

**Figure 6: China's savings rate**



Source: Zhou Xiaochuan [2009]

**Table 3: Comparison of gross savings ratios (2007)**

(%)

China	India	Asian NIEs 4	ASEAN 4	Japan	Advanced Euro Area 16	Central & Eastern Europe 13	Russia	Brazil	USA
52.3	36.1	35.0	30.1	28.7	20.5	16.7	30.0	17.7	12.8

Note: "Asian NIEs 4" includes Hong Kong, Korea, Singapore and Chinese Taipei. "ASEAN 4" includes Indonesia, Malaysia, Philippines and Thailand. "Advanced Euro Area 16" includes Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia and Spain. "Central & Eastern Europe 13" includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Macedonia FYR, Poland, Romania, Serbia and Turkey.

Sources: World Bank and the Statistic Bureau of the Chinese Taipei

The high savings rate has lessened China's dependence on external debt. It has also resulted in excess domestic savings (savings minus investment), which seem to have been partly responsible for its large current account surplus. In order to offset the pressure of the currency appreciation arising from the current account surplus, the Chinese Central Bank has been buying massive amounts of foreign currencies. As a result, China has accumulated the world's largest foreign exchange reserves. The relatively low leverage is also the result of China's high savings rate. Kujis [2006] argues that high enterprise savings and capital transfers from the government generally play a much larger role in enterprise financing than borrowings from financial institutions.

#### **e) Stable banking system**

The Chinese banking system in 2008 was more stable than in the 1990s. During the Asian financial crisis, many Chinese banks were widely suspected to be technically insolvent. Being afraid of the detrimental effects that the crisis would have on some countries in the region, the Chinese leaders realized the importance of financial stability. In late 1997, they decided to promote the banking system reform more intensively. China's accession to the World Trade Organization (WTO) in 2001 also accelerated the reform, since the Chinese government committed to completely opening the banking market to foreign competitors within five years from the accession.

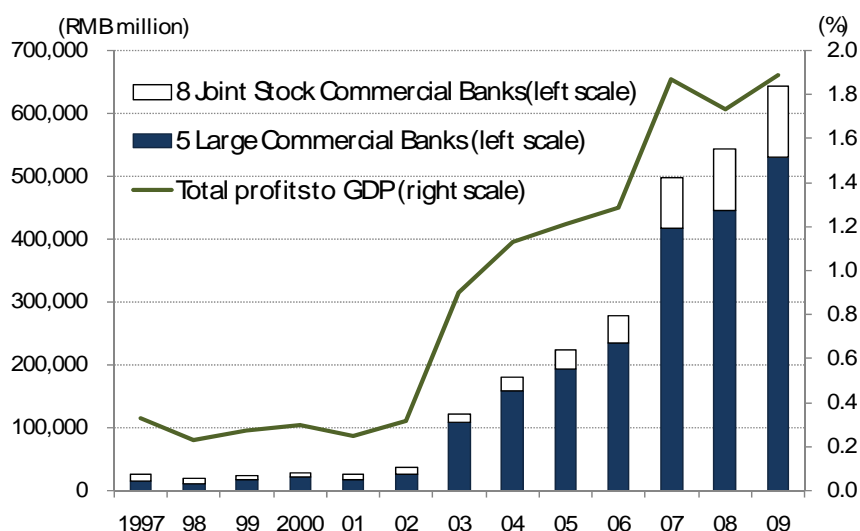
In order to help or urge banks to improve solvency and governance, the government introduced a series of measures such as capital injections, tax exemptions, special arrangements on disposal of nonperforming loans (NPLs), introduction of foreign funds, and enforcement of transparent disclosure rules<sup>1</sup>. By September 2007, four out of the five

<sup>1</sup> For detailed information on the Chinese banking system reform from 1997 to 2007, see Okazaki [2007].

state-owned commercial banks (SOCBs)<sup>2</sup> had finished restructuring and listed their shares in the Hong Kong and Shanghai stock exchanges, before the influence of the US subprime loan crisis expanded to a global scale<sup>3</sup>.

After the reform, Chinese commercial banks have maintained relatively good performances without suffering serious damages from the global financial crisis. The major listed commercial banks<sup>4</sup> enjoyed favorable operating results in the last three years (Figure 7). The NPL ratios of the major banks have largely declined (Figure 8), and their capital adequacy ratios have remained at 10 percent or higher. The banks were less subject to the negative effects of the crisis, and willingly provided loans for foreign trades and infrastructure construction in the country (while the surge in loans raises new concerns, in the market, over the loan quality).

**Figure 7: Profits of major listed commercial banks in China (before income tax)**



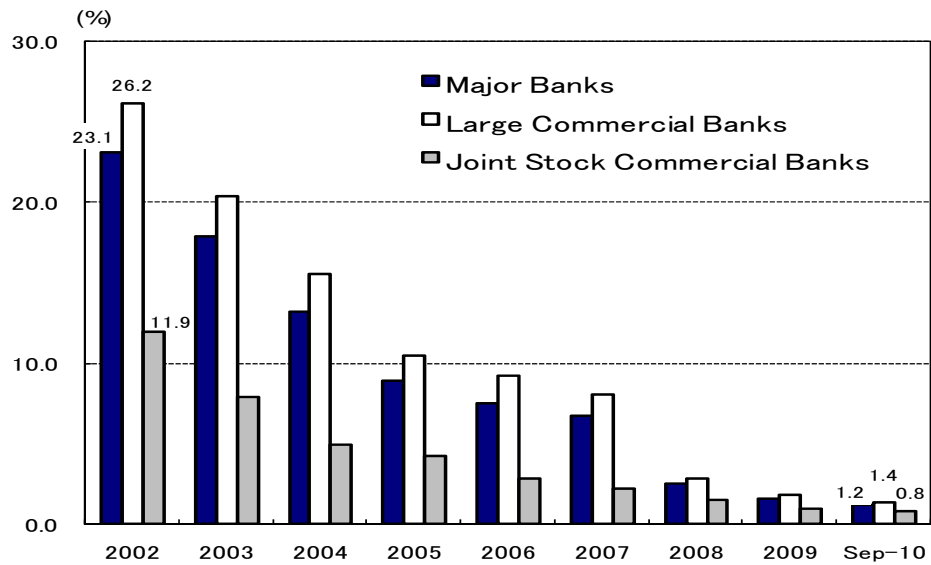
Sources: Annual report of each commercial bank and *Almanac of China's Finance and Banking*

<sup>2</sup> In the 1990s, the "SOCB" category included four banks, namely, the Industrial Commercial Bank of China (ICBC), Agricultural Bank of China (ABC), Bank of China (BOC), and China Construction Bank (CCB). Under the 2002 reform plan, the Bank of Communications (BOCOM) was frequently called an SOCB, and was provided similar government support as the other SOCBs.

<sup>3</sup> The Agriculture Bank of China was the last SOCB to list its stocks in the Hong Kong and Shanghai stock exchanges in July 2010.

<sup>4</sup> The Chinese regulatory authority, the China Banking Regulatory Commission (CBRC), defines the five SOCBs and twelve JSCBs as "major commercial banks." From among them, the SOCBs and eight JSCBs are listed. Currently, the CBRC defines an SOCB as a "large commercial bank."

**Figure 8: NPL ratios of major commercial banks in China**



Source: China Banking Regulatory Commission (CBRC)

### 3. The recent cross-border capital flow to/from China

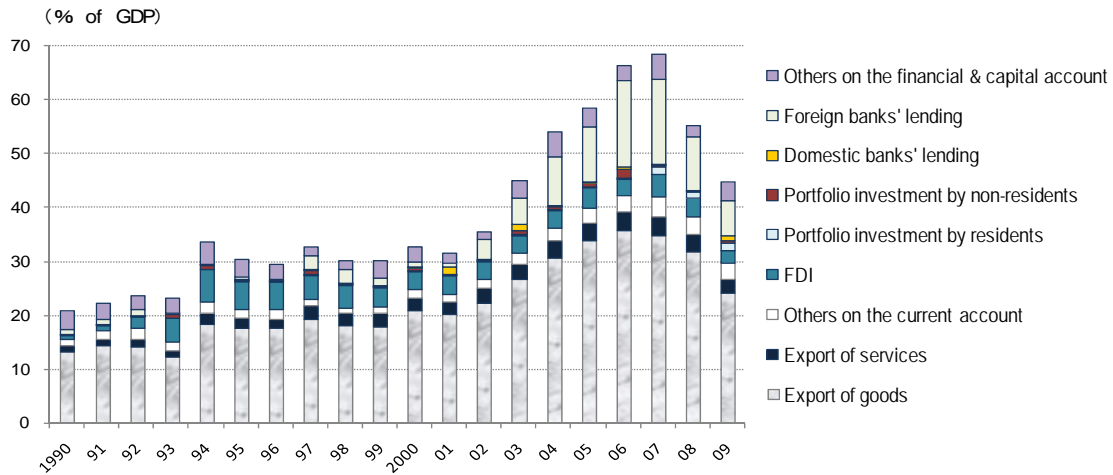
#### 1) Overall capital flow

Figure 9 chronologically shows China's cross-border capital flow. On the whole, capital flow other than transactions on current accounts and direct investments to/from China had been relatively small owing to the strict control of foreign exchange on capital account transactions<sup>5</sup>. However, the volume of capital transactions related to foreign bank loans increased after China joined the WTO. The movements of portfolio investments also showed a certain number of changes since 2002. In addition, the fluctuations of international financial markets brought substantial impacts to Chinese markets, especially in the latter half of 2008.

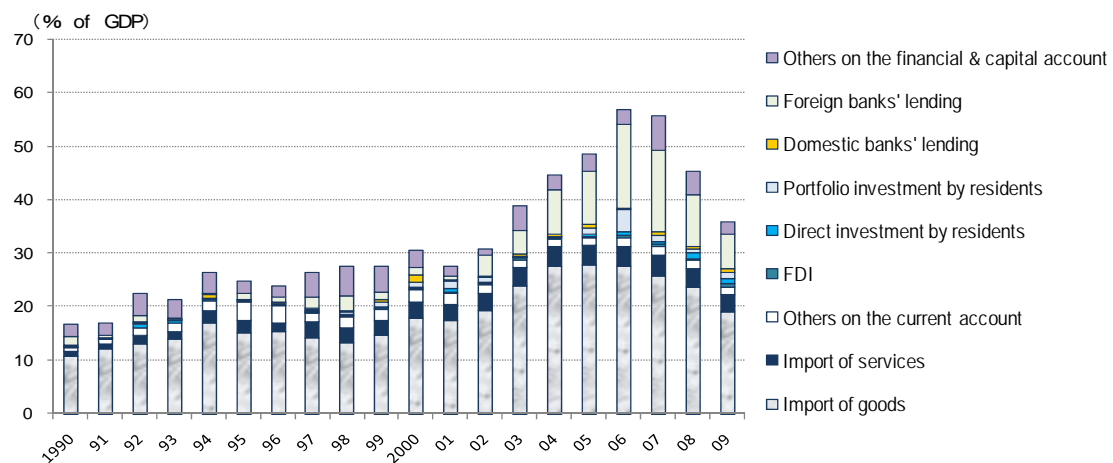
<sup>5</sup> In 1996, China notified the International Monetary Fund that it was in full compliance with the Fund's Charter Article VIII, confirming the full convertibility of the domestic currency on the current account transactions. China still strictly controls transactions on the capital and financial accounts, except that it has actively invited FDI into China.

**Figure 9: Trend of balance of payments of China**

**Capital inflow**



**Capital outflow**

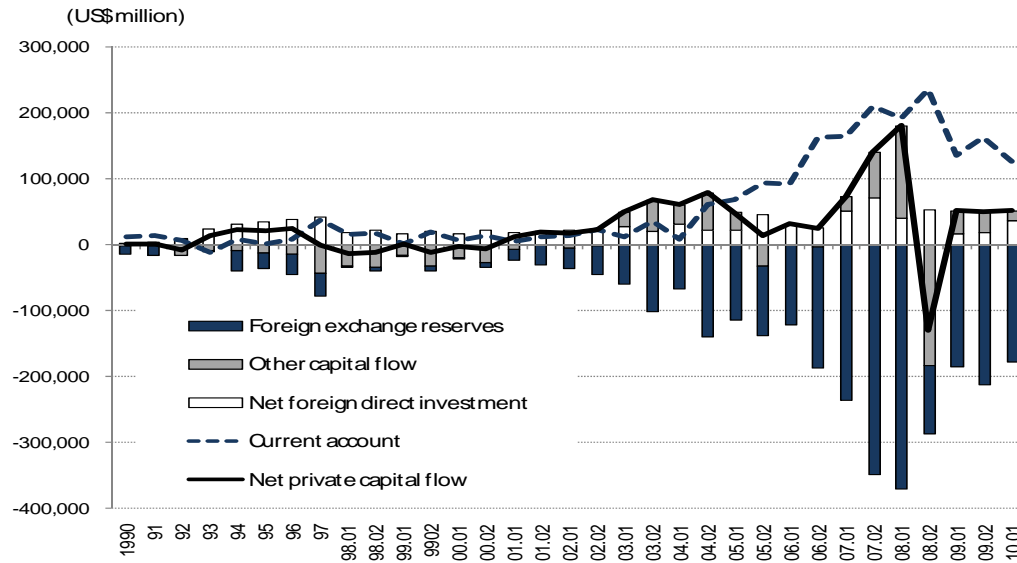


Source: SAFE

In order to see the fluctuations of private capital flow, we recompose the balance of payments statistics as shown in Figures 10 and 11. In these figures, the private capital flow consists of the net direct investment and "other capital flow". We simply calculate "the other capital flow" by deducting the amount of current account surplus and net FDI from the increase of the foreign exchange reserves<sup>6</sup>.

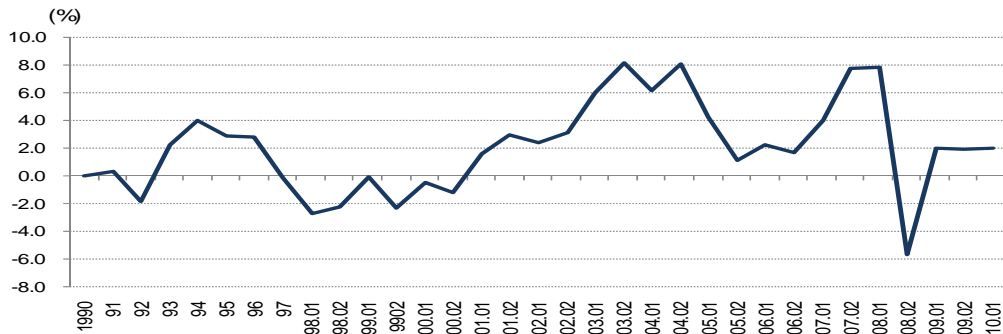
<sup>6</sup> We adjust the amount of the increase of foreign exchange reserves according to Tsuyuguchi [2009]. In his analysis of the recent movements of foreign exchange reserves in China with the balance of payments statistics, he adjusts the following three factors: the influence of the Central Bank's currency swap trade, movement of the commercial banks' reserve requirement of foreign currency, and capital injection into the China Investment Corporation using foreign exchange reserves.

**Figure 10: Trend of international capital flow into China**



Note: 01: the first half of the year  
02: the second half of the year  
Source: SAFE

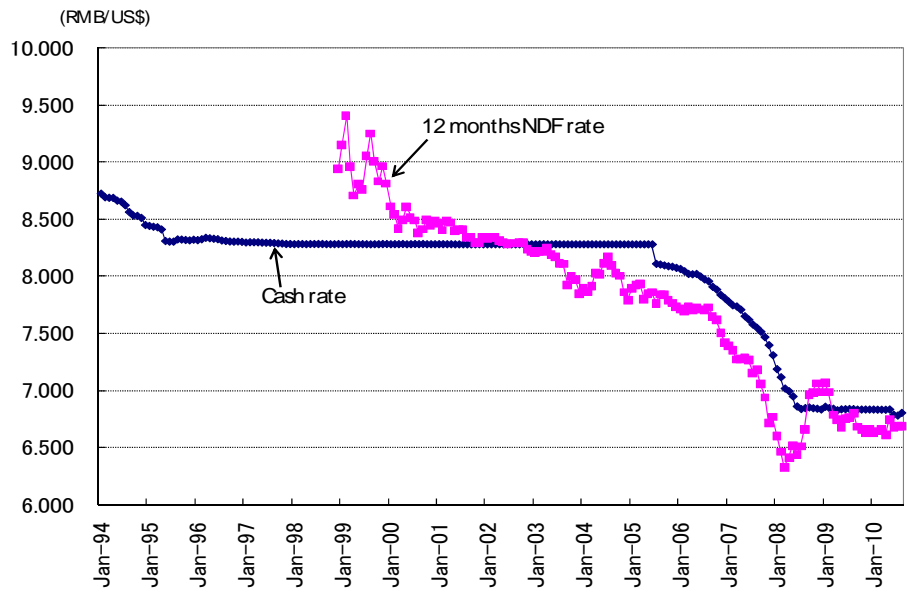
**Figure 11: Proportion of net private capital flow to GDP in China**



Source: SAFE

When the Asian financial crisis occurred in 1997, there was a growing anticipation of China's currency depreciation. The non-deliverable forward (NDF) rate of the Renminbi (RMB) was lower than the cash RMB rate in the late 1990s (Figure 12), and private capital outflow was seen from 1997 to 2000. In 2001, the tide turned. Private capital flow became positive in China, and the NDF rate became higher than the cash RMB rate. In the first half of 2008, the net private capital flow surged to US\$ 180 billion, which was 7.8 percent of the country's GDP. As the global financial crisis became more severe, the second half of 2008 showed a sudden net private capital outflow of nearly 6 percent of the GDP. However, in the first half of 2009, the private capital flow became positive again. In sum, the impact of the crisis was substantial, but China was capable of absorbing it.

**Figure 12: Trend of RMB exchange rate to U.S. dollars**



Source: Bloomberg

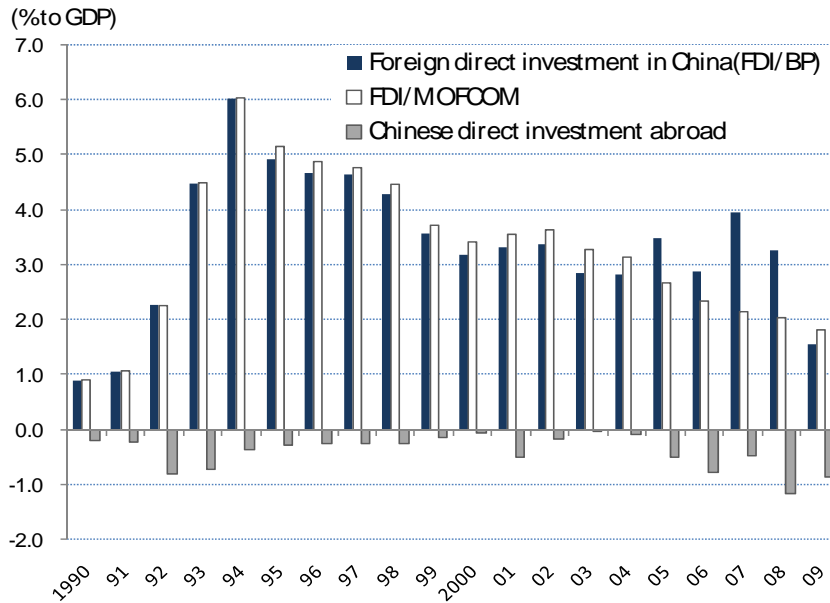
Although the Chinese government is still cautious about the further liberalization of capital transactions, the amount of cross-border transactions in recent years is not negligible, and certain movements have been affected by the global financial crisis. Hereafter, we investigate the details of the shifts of cross-border capital transactions affected by the crisis.

## 2) Direct investment

China has kept attracting FDI, making it one of the largest destinations for FDI in the world in recent years<sup>7</sup>. Figure 13 shows the trend of direct investment to/from China shown in the balance of payments statistics published by the State Administration of Foreign Exchange (SAFE, FDI/BP) and the statistics by the Ministry of Commerce (FDI/MOFCOM). The amount of FDI into China was significant in the 1990s and continued to increase after China joined the WTO (while the proportion to the nominal GDP had been decreasing). The pace slowed down from 1998 to 2000 (mainly because of the Asian financial crisis), in 2003 (influenced by the Severe Acute Respiratory Syndrome in China), and in 2009.

<sup>7</sup> According to the UNCTAD *World Investment Report*, China has been among the world's top five destinations for FDI since 2002, except in 2007 (when it fell to the sixth place); it was the second largest in 2009.

**Figure 13: Direct investment to/from China**



Sources: SAFE and the Ministry of Commerce (MOFCOM)

The difference between the FDI/BP and FDI/MOFCOM grew from 2005 in comparison to the previous periods. As for the difference from 2005 to 2009, the official report only explains that the disparities reflect the differences in reporting sources and definitions. We suppose that behind the data for 2007 and 2008, there might have been some movements in the service sector where the reporting system was not yet sufficient. The net inward direct investment dropped by 47 percent on the FDI/BP in 2009. The SAFE official report shows a few reasons for this, such as the foreign banks' withdrawal of their investments from Chinese banks and foreign non-financial enterprises' withdrawal of loans from their subsidiary companies. The amount of US\$ 10.4 billion was counted as capital outflow because of the foreign banks' withdrawal of direct investment from Chinese banks (SAFE [2010a]). According to the FDI/MOFCOM statistics, the inward direct investment decreased by only 2.6 per cent in 2009, and it has recovered, showing a 20.1 percent increase during the first seven months in 2010. To date, it has been widely regarded that the majority of foreign enterprises still maintain a strong willingness to invest in China.

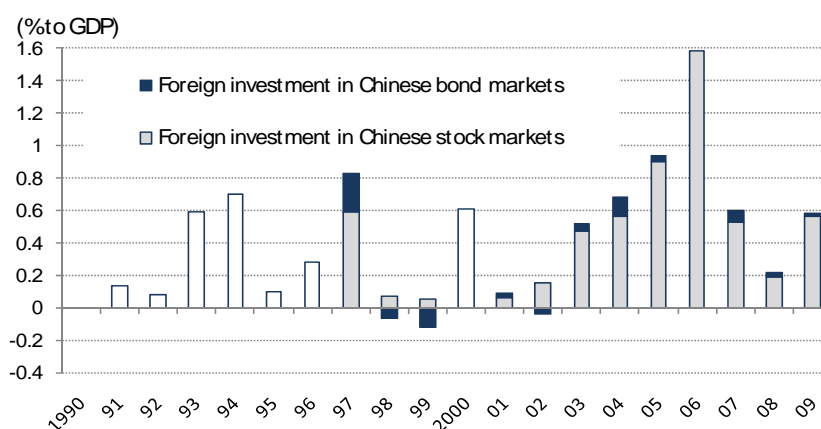
Meanwhile, Chinese direct investment abroad has been increasing rapidly since 2005, in accordance with the policy change to encourage Chinese enterprises to "go global" and pursue energy resources, high technology, and popular global brands. In recent years, Chinese enterprises have become more aggressive for M&A abroad, supported by bank lending.



### 3) Portfolio investment

The Chinese bond market is small and closed especially to foreign investors (an issue to be discussed later), and portfolio investment into China is carried out mainly through stock markets (Figure 14). In the 1990s, both foreign individuals and institutional investors could invest only in the so-called B shares: special foreign currency denominated shares for non-residents. In order to develop stock markets, China launched the Qualified Foreign Institutional Investors (QFII) scheme in November 2002. The scheme allowed foreign institutional investors to trade RMB-denominated A shares listed in the Shanghai and Shenzhen stock exchanges, T-bills, and convertible bonds, so long as the investment size did not exceed the quotas primarily approved by the China Security Regulatory Commission (CSRC) and SAFE. As a result, the amount of capital inflow through stock markets has been increasing. However, its overall impact on the capital flow to/from China has been limited. In 2009, US\$ 31.2 billion of inflow and US\$ 2.4 billion of outflow were seen in the non-residents' portfolio investment account. The shares of the total capital flow in the financial account were 4.2 percent and 0.4 percent, respectively.

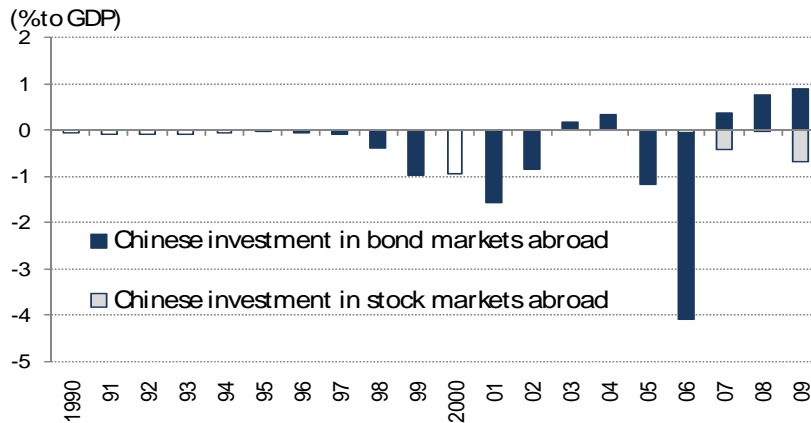
**Figure 14: Portfolio investment into China**



Note: The data from 1990 to 1996 and of 2000 are the aggregate amount of the inward portfolio investment.  
Source: SAFE

The amount of Chinese portfolio investment abroad is also small, but activities have been developing, motivated by the government's "go global" policy (Figure 15). However, in the wake of the global financial crisis, Chinese banks exercised caution in holding foreign bonds. When the global bond markets shook heavily in 2008 and 2009, the Chinese banks sold foreign bonds, and instead, increased foreign currency loans to domestic customers (SAFE [2009 and 2010a]).

**Figure 15: Chinese portfolio investment abroad**



Note: The data from 1990 to 1996 and of 2000 are the aggregate amount of the portfolio investment abroad.  
Source: SAFE

#### 4) Other capital transactions

Capital movements through other channels are still limited. However, the paths fluctuated largely during the global crisis. In the latter half of 2008, a large amount of withdrawal occurred in the foreign trade finance and bank loans (on the liability side of China's balance of payments statistics), which caused a sudden net capital outflow in China. This was a clear influence of the global crisis on China. The trend did not last long, and the flow became positive in the latter half of 2009 (Table 4).

**Table 4: Capital account transactions in China under the global crisis**

		(US\$ billion)			
		1H/2008	2H/2008	1H/2009	2H/2009
Direct investment	Net	40.8	53.6	15.6	18.7
	Outward	(33.3)	(20.1)	(13.3)	(30.6)
	Inward	74.1	73.7	28.9	49.3
Portfolio investment	Net	19.8	22.8	20.2	18.5
	Assets	14.8	18.0	7.7	2.2
	Liabilities	5.1	4.9	12.5	16.3
Other investment	Net	9.7	(130.8)	23.9	44.0
	Assets	(83.1)	(23.0)	29.1	(19.7)
	Liabilities	92.7	(107.7)	(5.2)	63.7
<b>(Breakdown)</b>					
Trade Credit	Net	11.2	(24.4)	(23.0)	0.7
	Assets	(4.2)	10.1	(16.3)	(38.1)
	Liabilities	15.4	(34.4)	(6.7)	38.8
Loans	Net	47.6	(62.4)	0.4	16.4
	Assets	(5.4)	(13.1)	6.4	6.6
	Liabilities	53.0	(49.3)	(6.1)	9.8
Errors and omissions	Net	17.1	(43.2)	(9.5)	(34.0)

Note: The number with parenthesis means negative.

Source: SAFE

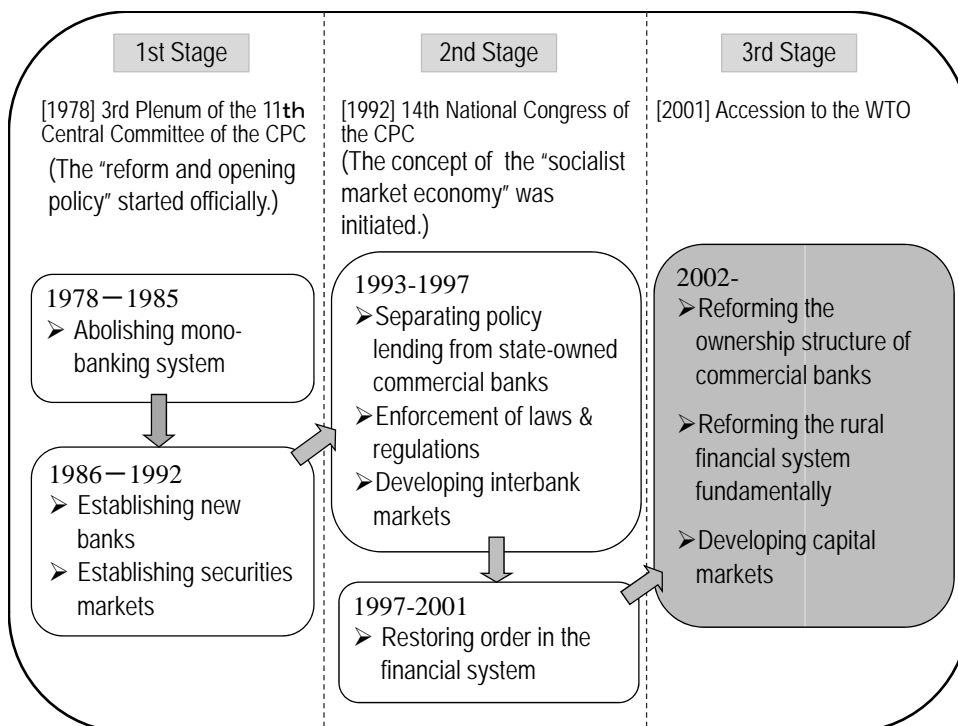
Chinese bank loans abroad had been growing until 2008, but in 2009, the channel showed a net capital inflow. This was primarily because the Chinese banks withdrew overseas short-term interbank lending, in accordance with the increasing credit risks and the decline of interest rates in the markets abroad (SAFE [2010a]).

#### 4. Challenges for a more market-oriented economy

##### 1) Current stage of the financial system reform

The Chinese government has gradually implemented the financial system reform bearing in mind the economic development and social acceptability of the country (Figure 16). China took a large step toward a more market-oriented economy after it joined the WTO in 2001. A wide range of reform showed the rudimentary but significant successes before the recent global financial crisis<sup>8</sup>. These efforts resulted in establishing such strong financial fundamentals as those explained in Chapter 2.

**Figure 16: Outline of the banking system reform in China**



Source: Okazaki [2007]

<sup>8</sup> In addition to the commercial banks' reform (briefly mentioned in Chapter 2-e), Chinese authorities promoted various reforms on the rural financial system (rehabilitating more than 40 thousand rural credit cooperatives and establishing new types of financial institutions), stock market (unifying the non-tradable and tradable shares), foreign exchange market (implementing a new floating exchange-rate mechanism), corporate bond market etc.

However, the current situation of the Chinese financial system is far from ideal. The reform process is still to establish a more market-oriented economic system. Worse still, some areas of the reform seem to be suspended or reversed, as an attempt to overcome the global financial crisis. In addition, some of the favorable factors that protected the Chinese economy during the crisis currently pose substantial risks and challenges to the country's sustainable growth.

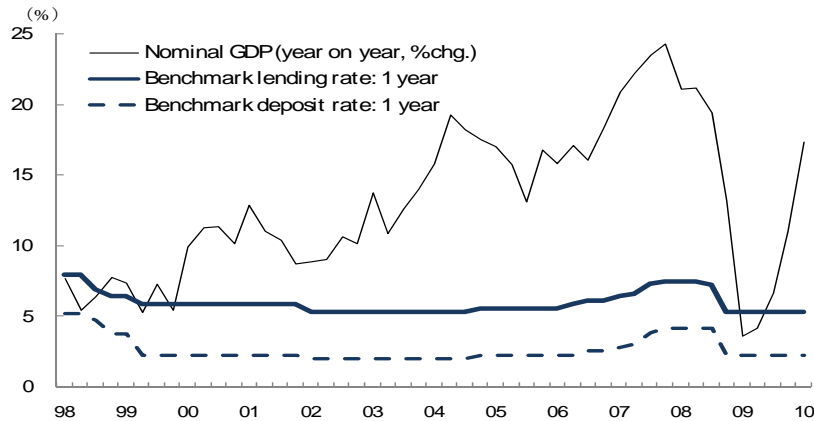
The Chinese financial system as a whole is not deep and diversified enough to allocate funds effectively and thus to guarantee long-term sustainable economic growth. In the following sections, we discuss several challenges that China will have to face to promote further economic development and cope with global economic integration.

## **2) Toward efficient fund allocation**

The fact that bank loans hold a dominant position in the external funding of the corporate sector does not always mean that fund allocation is inefficient. If bank governance is healthy and the market mechanism works well, banks can act as superb financial intermediaries to realize efficient fund allocation. However, at least currently, Chinese banks do not seem to allocate funds very efficiently. Although the Chinese banks' governance has improved remarkably since inviting foreign strategic investors and enhancing transparency through listing bank shares, the banks are still subject to the government's *de facto* interventions in terms of the increasing of the pace of lending and allocation of loans.

The presence of window guidance enabled the government to control the increase of bank loans without flexibly modifying the interest rates. Figure 17 shows that the lending and deposit rates stayed relatively unchanged compared to the fluctuations of the nominal GDP. Window guidance is a useful tool to control the amount of credit where financial markets are underdeveloped and interest rates do not function well. However, the government's "visible hand" does not always lead to efficient fund allocation (Fukumoto, Higashi, Inamura and Kimura [2010]).

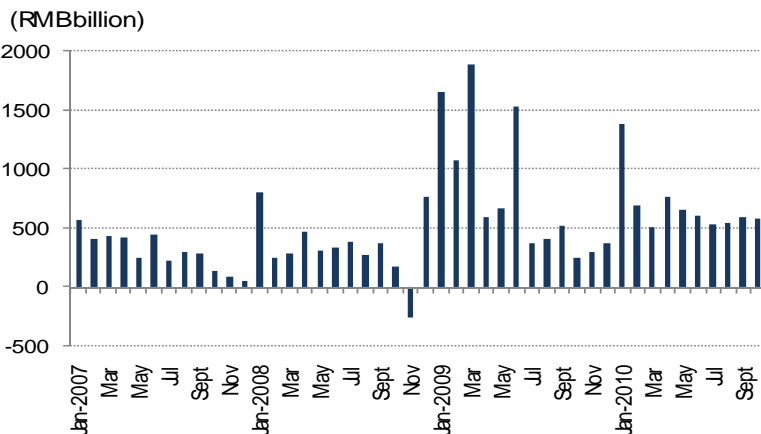
**Figure 17: Nominal GDP growth and interest rates in China (1Q/1998-1Q/2010)**



Source: CEIC

When the Chinese government decided to stimulate the economy in the fourth quarter of 2008, commercial banks quickly responded and provided loans very actively. In the first quarter of 2009, the net increase of bank loans amounted to 4.6 trillion RMB, which was nearly the equivalent of that for the whole year of 2008 (Figure 18). Medium- and long-term loans made up 41 percent of the total loans. This was because the banks followed the government's guidance to support infrastructure investment and technological innovation. The increase in infrastructure loans constituted 50 percent of the total medium- and long-term loan increases. Such a rapid increase in infrastructure loans helped the economy to recover quickly. Nevertheless, now that bank loans to local-government investment vehicles, which are responsible for the funding of infrastructure construction, have become an issue, many suspect that some of the bank loans were used in inefficient projects.

**Figure 18: Net increase of RMB bank loans (monthly) in China**



Source: PBOC

In China, the difficulty for small and medium sized enterprises (SMEs) to access bank loans has been a serious problem since the 1990s. As of mid-2006, less than one percent of all loans extended by SOCBs went to private businesses, which employ over 200 million people in total and account for about 50 percent of the country's GDP (Tsai [2006])<sup>9</sup>. The private sector, which is replete with SMEs, has largely relied on informal finance. The government has been encouraging banks to supply lending to profitable private enterprises, and the PBOC relaxed the commercial banks' lending rate ceiling in October 2004. However, the loan pricing environment has not yet changed because of the following reasons: the slow implementation of changes in sizable SOCB operations, low priority of interest rate differentiation under the environment of abundant liquidity, and the banks' decision to avoid charging higher interest rates when it would worsen the clients' conditions (Podpiera [2006]).

Under the recent global crisis, a lending bias toward state-owned enterprises (SOEs) seems to have exacerbated again. When we analyze the changes in the corporate lending sector, we find that the percentage of lending to infrastructure sectors such as transportation and utilities increased rapidly from 2003 to the first half of 2009. Large-size SOEs play a dominant role in these sectors. In addition, when the PBOC strictly limited the increase in bank lending in the fourth quarter of 2007, SMEs were crowded out by commercial banks. According to Li Zishan, Chairman of the SMEs Association, the proportion of bank loans for SMEs to the total outstanding of loans dropped from 22.5 percent to 15 percent after the central bank tightened the monetary policy<sup>10</sup>. The Zhejiang Office of the CBRC reported that according to survey results from the Wenzhou enterprises financing sources, the proportion of bank loans declined from 24 percent in 2006 to 18 percent in 2008<sup>11</sup>.

We recommend several policy measures to improve fund allocation.

First, promote the build-up of financial market infrastructure. In particular, it is advisable to expand and deregulate corporate bond and commercial paper markets. As shown in Table 5, bank loans play a dominant role among the sources of external funding for Chinese enterprises. The growth of Chinese capital markets has been relatively slow (Figures 19, 20 and 21). The Chinese authorities have been cautious about the enterprises' repaying abilities, and the permission for bond issuance is still very limited. Although corporate bond issuance

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<sup>9</sup> It should be noted that, in China, there are various definitions of SMEs. On the basis of the official definition, the PBOC announced that loans for SMEs accounted for 53 percent of the total corporate loans in 2009. However, the official definition of an SME denotes an enterprise with less than 2,000 employees in the case of manufacturing, whereas that number is 500 in the US and 300 in Japan.

<sup>10</sup> <http://news.hexun.com.2008-11-21/111513025.html> (The original news source is a CCTV interview.)

<sup>11</sup> According to the PBOC, the amount of bank loan for SMEs increased by 31 percent in 2009, led by the government's strong guidance.

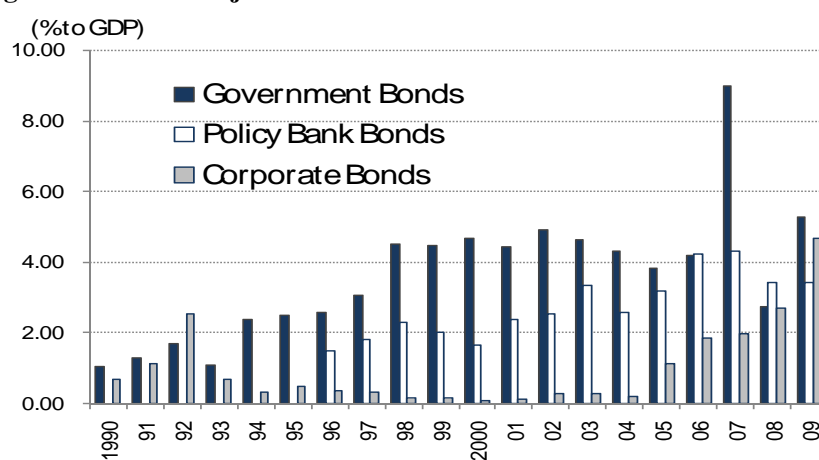
has been surging over the past five years, most short-term and medium-term corporate bonds are issued in inter-bank markets where limited investors, such as banks and institutional investors, can purchase them. The issuance of corporate bonds that various investors can buy is desirable. In addition, to better the function of corporate bond markets, it is imperative to establish a reliable credit-rating system and a more transparent accounting system.

**Table 5: Proportion of external funding sources by domestic non-financial corporations in China**

	(%)			
	2006	2007	2008	2009
Bank Loan	87.9	81.6	83.8	85.9
Stock	6.0	13.6	5.9	4.1
Bond etc.	6.1	4.8	10.2	10.1

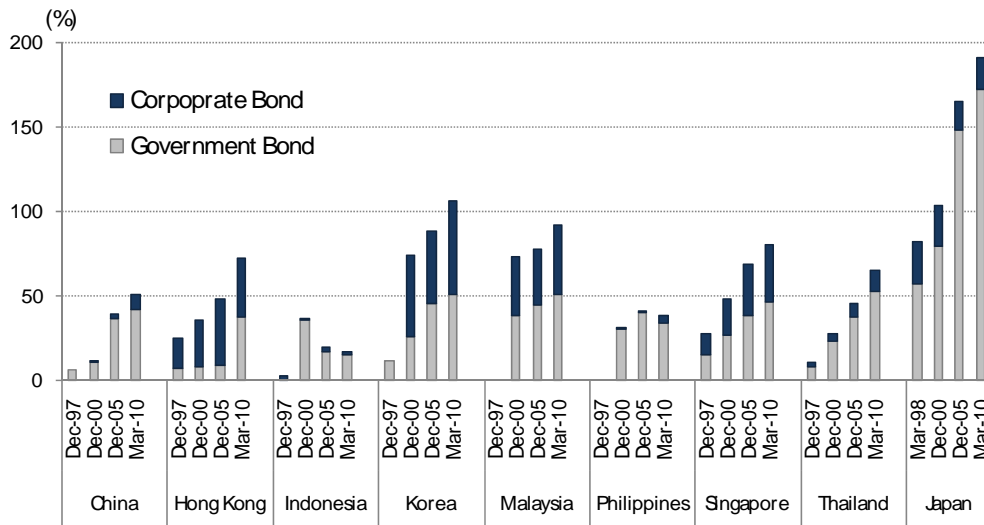
Source: PBOC, *China Monetary Policy Report*

**Figure 19: Size of major bond issuance markets in China**



Source: *Almanac of China's Finance and Banking*, PBOC *China Monetary Policy Report*, and *China Statistical Abstract 2010*

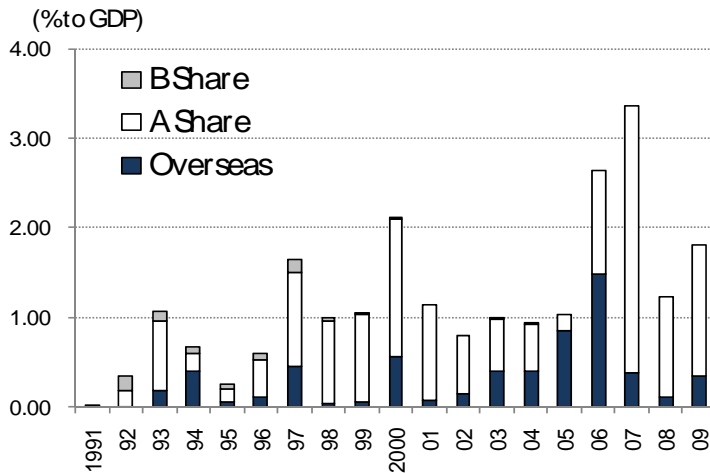
**Figure 20: Proportion of outstanding of bond issuance to nominal GDP in Asia**



Note: In this figure, the "government bond" consists of bonds issued by central government, other government entities, and central bank.

Source: ADB Asian Bonds Online

**Figure 21: Size of stock issuance by Chinese corporations**



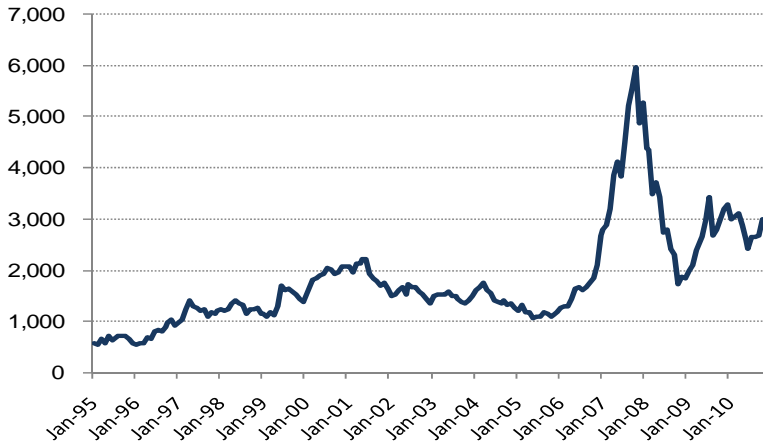
Source: China Securities Regulatory Commission (CSRC)

Second, diversify financial products. This point is closely related to the first one. In China, the financial products that people can invest in are still very limited, and stocks and properties are the few choices that people can consider for investment. More often than not, both domestic and foreign investors rush to invest in stocks and properties, resulting in the bubbles and bursts of these markets (Figures 22 and 23). For instance, in recent years, concerns over asset bubbles especially in the property market in China have increased. We



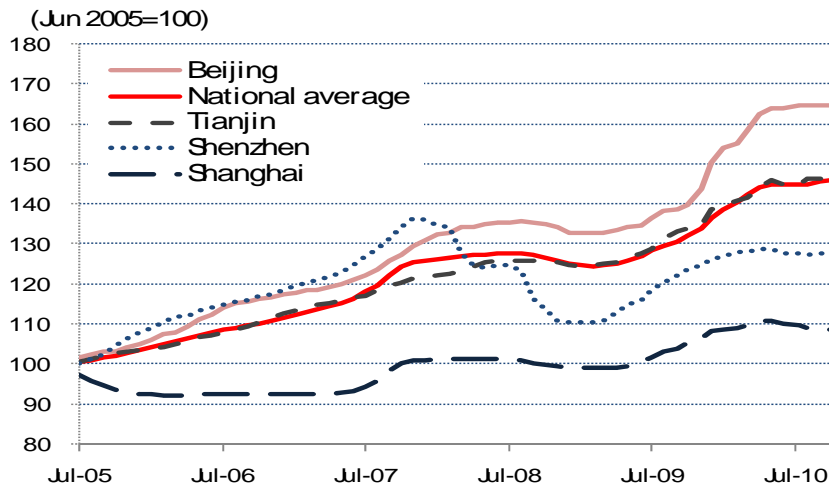
do not think that China's property price will undergo serious adjustments in light of China's long-term growth potential. Nonetheless, high property prices have become a social issue that might eventually weaken political stability. To avoid the extreme concentration of investment in limited products, we recommend that the government should carefully advance the diversification of financial products. These financial products might include money market funds, mutual funds, real estate funds, corporate bonds, and local government bonds. The government can also carefully introduce asset-backed securities. Securitization itself is a good idea to enhance the efficiency of finance.

**Figure 22: Trend of price index of Shanghai stock exchange**



Source: Shanghai Stock Exchange

**Figure 23: Trend of property prices in major cities in China (primary residence)**



Source: NBS

Third, gradually liberalize deposit and lending rates. Even though the PBOC is conducting open market operations, the inter-bank rates have a small influence on deposit and lending rates due to the presence of strict regulations. The government might consider other factors such as negative impacts on bank profits. However, we think that gradual liberalization in tandem with the improvement of bank management and governance would be feasible.

Fourth, further improve bank governance. We recommend the further diversification of bank ownership. In order to support private businesses, it is advisable to establish privately owned banks. In addition, it is worth allowing private enterprises to own part of state-owned or state-controlled banks so that these banks act as strategic investors. In any case, the prerequisite is that the decision-making process is fair and transparent with a more developed disclosure system.

### 3) Reasonably lower savings rate

As shown in Figure 5, the proportion of external funding (bank loans, government budgets, and FDI) as a source of fixed asset investment is low and self-funding is on the rise and by far the largest source in China<sup>12</sup>. The high percentage of self-funding is in line with China's high corporate and household savings rate. In particular, large-size SOEs have accumulated a huge amount of reserves throughout the 2000s, largely owing to the governments' preferential treatments. Table 6 indicates that corporate investment is increasingly funded by corporate savings. In addition, Table 7 shows the reasons for China's increase in savings since the late 1990s.

**Table 6: Proportion of investment and savings to GDP in China**

(% to GDP)

		1996	2000	2004	2005
Households	Investment	6	5	6	6
	Savings	20	15	16	16
<b>Corporations</b>	Investment	<b>29</b>	<b>26</b>	<b>32</b>	<b>31</b>
	Savings	<b>13</b>	<b>15</b>	<b>19</b>	<b>20</b>
Governments	Investment	2	3	3	4
	Savings	5	6	6	6
Total	Investment	38	34	41	40
	Savings	37	35	41	44

Source: Kuijs [2006]

<sup>12</sup> Because of some technical reasons on the statistics compilation, the self-funding includes a certain amount of bank loans and funding in capital markets. Nevertheless, on the basis of our rough calculation using the Central Bank's other bank lending statistics, we assume that the proportion of bank lending to the total fund resources for fixed asset investment is not very high either (less than 30 percent at the maximum in 2009).

**Table 7: Reasons for China's increasing savings rate since late 1990s**

Savings sectors	Reasons for increasing savings rate
Enterprises	<ul style="list-style-type: none"><li>✓ The government reduces SOEs' responsibilities for employee's health care, education, pension and housing, which allowed them to keep larger liquidity in their own accounts.</li><li>✓ The government allowed SOEs to retain their profits, leaving their own dividends at nearly nothing.</li></ul>
Government	<ul style="list-style-type: none"><li>✓ The government's income from taxation increased largely, and the percentage of fiscal income to GDP rose significantly.</li><li>✓ However, the government's consumption has been relatively restrained.</li></ul>
Household	<ul style="list-style-type: none"><li>✓ The anticipation for future expenditure of education, health care, and housing keeps the households to increase savings.</li></ul>

Sources: Zhang Ming [2007], Kuijs [2006], Chamon and Prasad [2008]

Considering the current developmental stage and the country's growth potential, China has good reasons to maintain a reasonably high savings rate to finance domestic investment, especially infrastructure investment. However, the downside risks of keeping such high savings rates in the current manner should not be underestimated. The high proportion of self-funding does not always promise efficient fund allocation. For example, it is often pointed out that cash-rich SOEs sometimes invest their reserves in areas that are not their strengths, such as real estate and end up making losses. In addition, the high corporate savings have been accompanied by a drop in the labor share to the national income, which has made China's long-term economic growth less sustainable. Externally, China's savings rate has created a massive number of global imbalances and thus enlarged China's capital inflow.

The Governor of the Central Bank explains that the Chinese authorities have a clear policy intention to reduce the savings rate but that in-depth studies are needed to identify the factors influencing the savings rate, its elasticity with respect to these factors, and the specific adjustment measures to assume ([Zhou 2009a]). The measures include expanding the government's expenditure on public support for education, health care, and housing; improving employees' wages and labor conditions; and decreasing capital transfers to SOEs, requiring higher dividends from the SOEs. Some of these measures have already been planned or partly implemented. The government began to require higher dividends from the

SOEs, though they were still very low. In addition, 14 percent of China's recent 4 trillion RMB economic stimulus package is to be spent on assistance for health care, education, and housing. It would be better for China to promote these policies further.

#### **4) Effective foreign exchange reserves management**

In addition to the need for domestic financial reform, China has to tackle other challenges owing to the deepening of its macro-financial linkage overseas. Promoting an effective foreign exchange reserves management would be one of the primary tasks of the Chinese government.

China's large foreign exchange reserves act as a buffer to absorb external shocks. However, holding large amounts of foreign currency implies that the Chinese government is subject to large currency fluctuation risks. Currently, more than 80 percent of the Central Bank's assets are foreign currency assets. The SAFE explains that one of the tough challenges for them today is reducing the imbalance among the foreign currency assets holders. It admits that an excess of foreign currency assets are concentrated in the government account and not in the private "reservoir" (SAFE [2010b]). Against this background, the central government is gradually easing the control of cross-border capital transactions in recent years.

The Chinese government realized that its excessive dependency on the US dollar in foreign trade, international capital flows, and foreign exchange reserves management carries huge risks, and therefore, ideas about the internationalization of the RMB, regional monetary cooperation, and the reconstruction of the international monetary regime have become issues for discussion (Zhang [2009]).

Although the definition is not very clear, the idea of the "internationalization of the RMB" has become a hot topic in China. Gao and Yu [2009] introduced the framework by Chinn and Frankel [2005], explaining that an international currency has to be capable of storing value, acting as a medium of exchange, and serving as a unit of account for both residents and non-residents. The internationalization of the RMB is expected to decelerate China's foreign exchange reserves accumulation and thus mitigate the risks of its management.

In December 2008, the Chinese government announced a pilot project permitting the use of the RMB in cross-border trade settlements. The government has been gradually expanding the number of provinces where companies are permitted to settle international trade and services transactions in RMB instead of US dollars. In addition, with regard to the internationalization of the RMB, Hong Kong is expected to work as a place for offshore RMB settlements.

Meanwhile, the government is still very cautious about the influences of a wide usage of the national currency globally, and it is yet to officially use the phrase "the internationalization

of the RMB". As Gao and Yu [2009] pointed out, the internationalization of a currency needs low-inflation credibility, a reasonable interest and exchange rate, and full convertibility of the currency. It would take time to establish the ideal environment for a wider usage of the RMB, even if the Chinese government becomes more willing to promote it.

As for regional monetary cooperation, China joined the 10+3 (ASEAN countries plus China, Japan and Korea) currency swap framework (the Chiang Mai Initiative) in 2001. Among China's six bilateral currency swap agreements based on the Chiang Mai Initiative, on three agreements (China-Japan, China-Korea, and China-the Philippines) China commits to provide RMB, on the other three agreements (China-Indonesia, China-Malaysia, and China-Thailand) it commits to provide US dollar to make up liquidity shortage in the counterpart country.

Responding the recent global financial crisis, China has newly committed to bilateral local currency swap agreements with Korea, Hong Kong, Malaysia, Belorussia, Indonesia, Argentina, Iceland, and Singapore. The Central Bank explains that these new practices will promote bilateral trade and direct investment, and drive economic growth (PBOC [2009]). The local currency swap agreement is expected to promote the use of the RMB as a payment currency.

While the reconstruction of the international monetary regime seems to be a medium- or long-term issue, China is trying to strengthen its voice in the global financial community, backed by its rising economic power and large foreign exchange reserves. In March 2009, the governor of the PBOC published a note entitled, "Reform the International Monetary System" [Zhou, 2009a], in which he proposed a wider usage of SDRs, the creation of financial assets using its denominations, and changes in its valuation and allocation. This was followed by a speech by the Chinese President Hu Jintao at the Group of 20 (G20) Financial Summit held in London in early April 2009. President Hu did not talk about the issue in detail, but he called for the advancement of reform in the international financial system. Kwan [2009] analyzes the aims of Zhou's note as follows: China is appealing its willingness to establish a new international financial order in which the dominance of a certain country's currency would be corrected, and it wants to reorganize its structure of foreign exchange reserves.

As for the SDR, there are still many hurdles in using it as a reserve currency. Zhou pointed out the issues to be improved upon as follows: setting up a settlement system between the SDR and other currencies, promoting the use of the SDR in international trade, creating financial assets denominated in the SDR, and improving the valuation and allocation of the SDR.

## **5. Concluding remarks**

The Chinese financial system is more robust than it was a decade ago. It has worked as a bulwark for China to stand the external shocks caused by the recent global financial crisis. The relatively strict control of cross-border capital transactions has also protected the Chinese financial markets from the contagion of the negative effect of the crisis. However, the factors that have supported the economic growth also carry with them substantial risks, and China faces several challenges for the further development of its economy. The primary tasks should be to change the market dominance of the state-owned sectors, weaken government intervention in commercial banks, develop capital markets, adjust extremely high savings ratios, and reduce the risks of foreign exchange reserves in the Central Bank's account.

The widening and deepening economic integration between China and the world is bringing about a massive pressure of cross-border capital transactions even under strict capital control. For example, when the expectation of the RMB appreciation is strong, a number of overseas investors attempt to make their money flow into China through official and/or unofficial routes. Since China has significantly benefitted from the economic globalization and is willing to continue pursuing overseas markets to sell their products and to gain natural resources, higher technologies, and worldwide brands, cross-border capital transactions to/from China will significantly increase in the future. For sustainable economic development, it is important for the Chinese government to grasp movements of international capital flow and adjust the financial markets with more market-oriented measures.

Having witnessed the recent financial debacle and its ramifications on Western countries, China seems to be much more cautious about utilizing market mechanisms in the domestic financial markets in the short term. However, to improve the economic structure or introduce fair competition, the establishment of market mechanisms is critical.

On the other hand, because of the differences in the extent to which the economy is transformed from a planned one to a market-oriented one, there are huge differences in the economic development condition among business sectors and regions in the country. The implementation of a financial market reform requires a well-considered sequence. Moreover, the reform process should be followed up and revised carefully. It is true that China's gradualism in the economic reform process has worked very well thus far. However, gradual reform does not imply slow reform. The pace of the reform should be checked frequently, and necessary reform measures should be carried out consistently and should not be delayed.

In accordance with the economic development, China is increasing its economic influence

over other countries in the world. The policy changes introduced by the Chinese government greatly influence the world's financial markets. The market participants already consider the Chinese economy to be one of the most important contributors to the world economy. The successful development of the Chinese financial system is integral to the stable growth of the world economy.

With these situations in mind, we would like to expect China to act as a responsible country, implementing the necessary economic reforms in order to enhance its economic structure, thereby enhancing the robustness of the global economy as a whole. At the same time, we expect market participants outside China to understand the economic and financial conditions of China more carefully, without any prejudice and bias. Information sharing, exchanges of opinions, and mutual understanding are growing in importance.

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