The External Reform in China Mainland: Historical Review and Future Direction[*]

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Abstract

After nearly 30 year's openness and reform, China is at another turn point of further reform. In this paper, the author dress on the external part of the reforms mainly. We firstly give a brief introduction of the formation of China's external strategy. According to the performance of China's external strategy, we point out the mismatching in China's external reforms then. After analysis on the existed system, we discuss possible reforms in the future.

We discuss the possible path and timing for further external reform in China according to the current performance and future risk. Based on these, we think the first step for the government is to encourage capital outflow and pursuer higher margin for China's foreign asset. Then, provide more portfolio choice in domestic by developing a deeply-intensified capital market, and liberalize the price for Chinese Yuan in domestic and overseas. Finally, China can liberalize capital account and allow currency convertibility at proper timing.

At the end of this paper, we point out possible policy in public governance for the authority to match with the next round of reforms.

Key Words: *China Mainland* *External Reform* *Future Direction*

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I. INTRODUCTION

The discussion on China Mainland's (China as followed) external reform has existed for a long time. More and more economists joined this kind of discussion from inside and outside China, especially after China's accession to WTO. Recently, the external strategy of China draws more attention because of factors both from China and overseas. The inside factors include adjustment on taxation on foreign-invested enterprises, legislation on cross-border merger & acquisition, etc. RMB appreciation, Trade disputation caused by imbalance between China and U.S., Openness of financial sector also plays an important role during this kind of rethinking.

According to existed researches, history literatures follow in three categories: Firstly, capital controls in China and prospects on future reforms. Prasad & Wei (2005) and Zhang (2005) gave a nearly thorough summary of capital controls in China, the former focus on capital inflows and explanation. However, Zhang (2005) focus on the stat quo and future reform of capital controls in China. In plus, Groombridge (2001), Laurenceson and Tang (2005), Luo and Jiang (2005) also discussed the liberalization of capital control in China, especially the cost of such liberalization. In all the researches about China's capital controls and future reforms, papers by Prasad etc.(2005) is of high value, and provide deep insight on China's future reform, especially the risk and sequence in their advices. I think my paper maybe complement Prasad's research in some aspects with more detailed analysis. In their book recently, Walter and Howie (2006) do professional works on China's stock market liberalization.

The second category focuses on international experiences for capital account liberalization in China. The existed lessons in consideration include Thailand's (Gao, 2001), Japan's (Aramaki, 2006), and worldwide ones (MED, 2003). Though some of the lessons need revision according to China's market situation, all of them be helpful to consider the sequence and risk with China's financial liberalization.

In the above two categories, financial stability is discussed within the risk or cost of capital account liberalization. Also, the impact of RMB appreciation is one topic (Zhang and Fung, 2006).

This article, as I mentioned above, is only a complement for the existed researches on China's external reform. However, I consider not only capital account-related reforms, but the current account-related reforms also. To my opinion, the pressure on capital account liberalization comes exactly from the current account reforms after 1978. In this way, the rest parts of this paper are organized as following: firstly, we give a brief review of China's external reform, focusing on the formation of external strategy and mismatching in the reforms. Then, according to the problems (mismatching mentioned in part II) in China's external reforms, we'll discuss the direction for future reform in part III. We consider two basic aspects of future directions, one of them is the precondition for further reform, other are the possible path for future reform. In comparison with current account-related reform, capital account liberalization is backward somehow. So part III is mainly on the later. After discussion in Part II and III, part IV is concluding remarks. In this part, we'll also consider the role of Hong Kong during China Mainland's further external reforms.

II. CHINA MAINLAND'S EXTERNAL REFORM: HISTORICAL REVIEW

Before discuss the future direction of China's external reform. It's helpful to have a short review for China's history in external reform. In this part, we'll firstly introduce the formation of China's external strategy briefly. Then, we'll try to specify the mismatching in China's external strategy according to macroeconomic situation in China. In the next part, when consider the future direction for China, we'll take the mismatching into account.

A. the Formation of China's External Strategy

The formation of external strategy of any countries can't be described clearly in several paragraphs. We can give a brief introduction here only. At the turn of 1980s, external strategy is very heat topic among China's researchers and policy makers. Generally, the external strategy of China during that period serves two purposes: increasing foreign exchange reserve, and improving economic growth. To improve the economic growth with shortage of capital, China has to consider allowing capital inflow. According to experiences in Latin America, Japan, Korea, China Taiwan, and some other countries in Southeast Asia, foreign debt, FDI, and portfolio capital are three kinds of capital inflow mainly.

As we can judge afterward that China choose FDI, problem here is why? It's very difficult to trace back the formation of this kind of external strategy in China, especially for stander-by of policy-making. But apparently, three factors play very important role during this kind of formation:[1]

Shortage of foreign exchange and technology

China's foreign exchange reserve amounted to 1202 billion U.S. dollar in March, 2007. More and more peoples think it much more than what we need in reality. However, in 1978, it's absolutely another story. The foreign exchange reserve of that year is only 1.6 billion USD. In the mean while, demand for foreign exchange began to increase because of demand for technology import.

After 1978, economic development became the most important issue in China again. The policy makers and enterprisers, most of them in SOEs, all realized that the most needed import is technology. There're two ways to get it, we can buy it directly, or we have to accept the capital inflow with technology. In that case, it's impossible for China to import the technology directly. [2] So capital inflow, especially foreign direct investment is the only choice left. We'll discuss it later.

The debt crisis in Latin America around 1980s

In the 1960s and 1970s, many Latin American countries, notably Brazil, Argentina, and Mexico, borrowed huge sums of money from international creditors for industrialization, especially infrastructure programs. Between 1975 and 1982, Latin

[1] Because of history data absence, the discussion here begins from 1978.

[2] Even though, the government do try to import Whole Sets of Equipment, but it hard to get the updated technology through import of equipment.

America debt to commercial banks increased at a cumulative annual rate of 20.4 percent. The heightened borrowing let Latin America to quadruple its external debt to 50 percent of the regional GDP. (ILAS, 1986:89)

Partly because of world economy entering recession in 1970s and 1980s, and oil crisis, it became harder for borrowing countries to pay back their debts. In August of 1982, when Mexico's finance minister, Jesus Silva-Herzog declared that Mexico world no longer be able to service its debt, the debt crisis in Latin America broken.

Different countries can draw different lessons from the crisis in Latin America. Lesson for China is the difference between foreign debt and foreign direct investment. That is, you don't need to pay back the foreign direct investment as foreign debt. However, another difference is ignored is the cost of foreign direct investment is much higher than foreign debt. Countries pay interest rate for foreign debt, but profit for foreign investment.

The Asian financial crisis in 1997-1998

China opened the door for foreign direct investment (FDI), and closed it for enlarging foreign debt according to lessons from Latin America. After about 20 years' openness and development, China is more and more likely to open its capital account and allow portfolio capital inflows at the beginning of 1990s. However, the decade of 1990s seemed not a good period for financial system. Many kinds of financial crisis happened during this period, firstly the Peso crisis of Mexico in 1995 (Whitt, 1996), then the Asian financial crisis in 1997-1998. The Peso crisis should contribute to the imbalance of payment, especially after NAFTA taking effect at the beginning of 1994.

However, financial crisis in Asia shocked China and changed the attitude of government to portfolio capital, especially to short-term capital (also known as hot money). It detained the plan for further external reform in the same time. The delays in capital account liberalization and currency convertibility also partly caused by the crisis in 1997-1998.

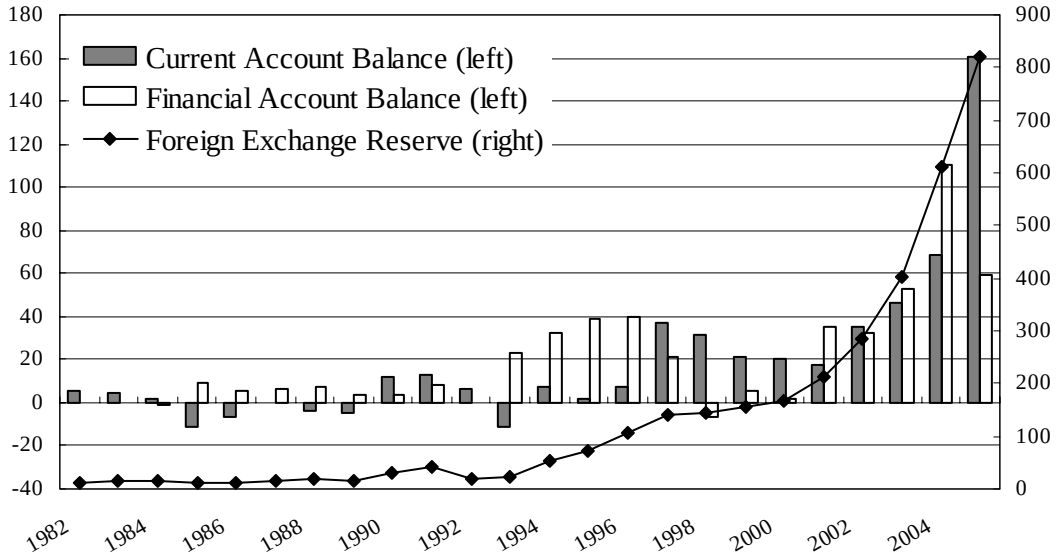
Three factors listed above is mainly the story of demand. The government want more foreign exchange, and think FDI is a reliable source of it, but how to increase supply? We have sound infrastructure and low cost labour to appeal more investment now. But it's not easy to transfer the investment from Hong Kong, Taiwan, Southeast Asia, and Japan to China Mainland. During this process, investors in Hong Kong and overseas Chinese play a important role. Even now, investment from Hong Kong still takes a big part in China's FDI. In 2005, total new-coming FDI is 60.3 billion USD, those from Hong Kong account 17.9 billion, as 29.8 percent.

Along with it, there're three pillars of policies in the basket of China's external strategy. That is, FDI-related preferential policies, export promotion, and foreign exchange control[1]. The preferential policies include partly-free land, taxation exemption, etc. And the joint result of FDI-related preferential policies and export promotion is processing trade. To accumulate more foreign exchange reserve, policy makers need to expand the gap between supply and demand in domestic. So, "loose

[1] Recently, many policies employed in that period is in revision, please see appendix III for details. And because of new policy orientation, the policy listed here is only for historical review.

inflow, tight outflow" strategy is employed. Of all policies in the basket, Foreign exchange control is the core component of capital account control in China. It consisted of two aspects, one is control on foreign exchange outflow, the other is control on the foreign exchange position of domestic enterprises, and on the foreign exchange access of the individual. Under this strategy, domestic enterprises can hold only part of their foreign currency earning as international position. And the individual can buy foreign currency only for reasonable purposes and at restrained quota.

Figure 2.1 Current account, financial account, and foreign exchange reserve in China 1982-2005 (In billions U.S. dollar)



Source: IMF, International Financial Statistics.

Currently, we can say than almost all objectives of the external strategy and related policies are attained. China keep twin surplus for more than fifteen years, and the foreign exchange reserve reached a history high level both in China and worldwide. And this is exactly what the policy makers have hoped for at the beginning of China's openness and reforms (figure 2.1).

B. the Mismatching of China's External Strategy

Things can never stop here, as China's integration into world economy accelerated, especially after accession to WTO. Appeal for further external reform become even strong. The attention focuses on capital account-related reforms this time. Different appeal from different regions/countries, and serve for different purposes. In the following paragraphs we'll discuss the importance of further reforms, especially those related to capital account, for China.

Of all benefits may bring by further external reforms, I think correcting mismatching as the most important one. After years' openness and reform, the structural problems become even apparent, and need correction in the near future. Most of the mismatching comes from the unparallel inside the reforms itself. And this kind of mismatching in external field now may cause risky result in the future. For a country without sound banking sector, the risk sometime turn out to be disaster, and

can harm the domestic financial system or macroeconomic badly. Of all the mismatching in external reforms, we think the following three is most important when consider the future reform direction:

Between capital inflows and outflows

The tradition of "loose inflow, tight outflow" still is in centre of external strategy and can't hope to change in short term. The reasonable result of this tradition is more and more foreign exchange accumulated inside China. The challenge of too much net foreign exchange inflow is apparent.

Firstly, it causes the inflation pressure in China. In recent years, the ratio of M2 and GDP increased fast and reach 163.2 percent in 2005. However, the ratio is only 81.9 percent in 1990. The percentage increased more than 80 percent, nearly doubled in the past 25 years. Though only part of increase in M2 is caused by net foreign exchange inflow, the percentage of net foreign exchange inflow varied between 20 and 40 percent in most of this period (table 2.1).

Table 2.1 Net foreign exchange inflow and money supply in China 1997-2005, in percentage

	1997	1998	1999	2000	2001	2002	2003	2004	2005
M2/GDP	115.2	123.8	133.7	135.7	144.4	153.7	162.9	158.9	163.2
FX inflow/△M2	32.3	15.4	14.1	12.6	18.2	21.0	22.5	45.1	41.1

Note: FX inflow is total value of current account balance, net inflow in capital account, and net inflow in financial account;
△M2 means increased amount.

Source: IMF, International Financial Statistics.

Secondly, the net foreign exchange inflow decreases the stability of China's financial system. As capital inflow in this period means outflow in next period. Undoubtedly macroeconomic will fall with withdrawal of foreign capital, even part of them withdraw from China (see appendix II). This is especially sensible with overheating in asset market and speculation of short-term capital.

Between development in commodity market and asset market

Mismatching also existed between the openness in commodity market and asset market. However, as the capital inflow into China is very large, this mismatching doesn't make sense. With the large amount of capital inflow, development in commodity market and asset market was mainly an external issue, though it sound like a internal one.

Because of high saving rate in China and large capital inflow, known as borrowed saving from overseas in some case, the demand for assets is big. However, because of underdeveloped asset market, the supply of assets seems can't accommodate the total demand. The result of symmetry in supply and demand side of asset market is over-heating, which we can judge from the performance of China's stock market and real estate market.

Overheating in asset market harms the economy in a different way of commodity

market. Overheating bring speculation both inside and outside the country, more and more long-term capital like FDI transferred into short-term capital and try to access the asset market. In the meanwhile, domestic investors and individual also crowded into the asset market. Overheating is enforced through this mechanism. The bad story begin when expectation disappeared, foreign capital turns back and become long-term capital, or outflows directly if China liberalizes capital account during this period. And domestic investors and individuals left on the falling market, economy may even fall into recession. As indicated in appendix II, it's much possible if more than 20 percent of the foreign capital withdraws.

Between investment income and revenue

For a developing country like China, the fundamental of external strategy is saving for the future income inflows. This process can be regarded as inter-temporal optimization. In the base period, China's saving caused trade surplus (or the contrary), we have two options in the next period, whether to consume or producing sustainable income inflows. The choice of individual varies, but those of a government will undoubtedly be the later (figure 2.2).

Figure 2.2 Options for China in inter-temporal optimization

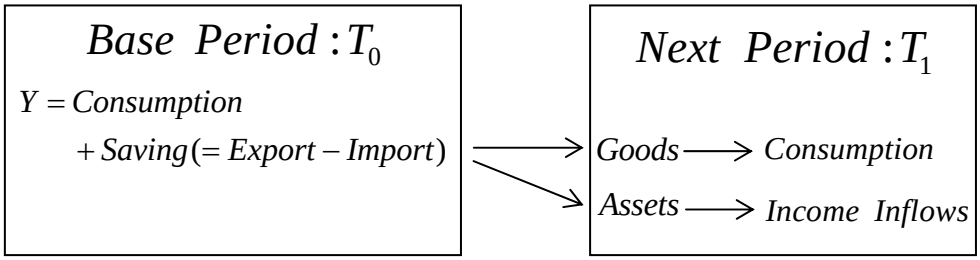


Table 2.2 Profit of foreign investment from and in selected countries 2004, in percentage[1]

	Mainland	Hong Kong	India	Japan	South Korea	U.S.
Investment Abroad	2.00	3.62	2.65	2.71	2.45	4.10
FDI	0.41	6.95	20.45	5.11	3.68	9.71
Non-FDI portfolio	2.10	2.24	1.69	2.48	2.32	2.11
Foreign Investment	2.82	4.86	4.07	1.15	1.90	2.95
FDI	3.24	8.38	15.32	6.53	2.68	6.09
Non-FDI portfolio	1.97	1.66	1.03	0.88	1.69	2.39

Note: values in row named as "Investment abroad" mean profit rate of host countries' investment abroad, and values in row named "foreign investment" mean profit rate of foreign investment in host countries.

Source: calculated by author using data from following sources: IMF, 2005 International Financial Statistics Yearbook; and statistical Yearbook of Japan, South Korea, and China. The data of India from IMF-DSBB bulletin system.

There's hardly anything we can count on as the current performance is concerned.

[1] We can judge from the result that there must be hided income for foreign investors in China. As estimation by World Bank and other institute shows the margin of investing in China is about 20 percent. However, It's difficult to analyze it and impossible to say more in this paper.

In 2004, the margin of China's investment overseas is only 0.41 percent for FDI, and 2.1 percent for non-FDI investment. As we know, many enterprises' overseas operation loses money in business. And it's really unacceptable that the non-FDI margin even lower than half of U.S. treasure bond, which is about 4.75 annually.

Table 2.3 Balance of Payment in Japan and China 2001-2005, in percentage

		Trade balance	Net investment income	Current account N.I.E.
Japan	2001	26.5	69.2	87.8
	2002	51.6	65.8	112.5
	2003	72.5	71.2	136.2
	2004	94.2	85.7	172.1
	2005	69.9	103.4	165.8
China	2001	28.1	-19.2	17.4
	2002	37.4	-14.9	35.4
	2003	36.1	-7.8	45.9
	2004	49.3	-3.5	68.7
	2005	124.8	10.6	160.8

Note: trade balance includes goods and services.
Source: IMF, International Financial Statistics.

As indicated in appendix I, transfer between trade surplus now and investment income then means much for the Balance of Payment (BOP). Good condition of BOP reduces the financial risk in open economy. The successful case happened in Japan, in 2005, more than 60 percent of current account surplus comes from net investment income. On the contrary, net value of investment income in China is negative before 2005, and the percentage of investment income in total current account surplus is less than 7 percent. To enhance the margin of overseas investment, it's really necessary to improve the efficiency of financial system in China, and that is exactly one of things which we should do in the next round of external reforms.

III. DISCUSSION FOR FUTURE DIRECTION

In part II, we give a historical review of China's external strategy. After introducing the formation of China's external strategy briefly, we point out three mismatching in China's external reforms. In this part, we'll discuss the future direction of China's external reforms. We will take the mismatching mentioned above into account. In this part, we'll firstly discuss the prerequisites for further reforms. We turn into timing and path of future reforms after it. When consider the timing and path of future reforms, risk aversion is of most concern. We'll analyze the possible risk for each possible sequence, and choose out the optimal path and timing for the next round of external reforms.

In the long term, the aim of external reforms is clearly full convertibility of RMB under capital account. As set in the eleven 5-years plan, the purpose of external reforms in the next five years includes: enforcing market-oriented reform of interest rate, improving managed floating exchange rate regime, and realizing convertibility of RMB under capital account gradually. The problems left are when, and how to liberalizing it? And what we can do now, and what we can't?

A. Prerequisites for Further Reforms

As specified in one publication by IMF, the important conditions for capital account liberalization includes:

> *1. a sound macroeconomic policy framework; in particular, monetary and fiscal policies that are consistent with the choice of exchange rate regimes;*
>
> *2. a strong domestic financial system. Including improved supervision and prudential regulations covering capital adequacy, lending standards, asset valuation, effective loan recovery mechanisms, transparency, disclosure, and accountability standards, and provisions ensuring that insolvent institutions are dealt with promptly;*
>
> *3. a strong and autonomous central bank; and*
>
> *4. timely, accurate, and comprehensive data disclosure, including information on central bank reserves and forward operations.*
>
> From: IMF Survey, Vol.27, No.6, March 23rd, 1998.

Based on China's stat quo of financial system, we regarded the followings as precondition for further external reforms, especially for capital account liberalization and currency convertibility:

Liberalizing the price of currency

China has done much to liberalize the internal and external price of Chinese Yuan in pursue of interest rate liberalization and more flexibility of exchange rate. But it's far from enough. Further external reforms, especially capital account liberalization and Chinese Yuan's convertibility require fully market-oriented determination of money's price. In plus, the authority must seek other ways to intervene into the market, rather than place control on price directly.

Firstly, let's consider the market-oriented reforms of interest rate. China has liberalized the interest rate to some extent (see appendix IV). The lending rate is more flexible than ever before. However, according to experience of countries with sound financial mechanism, the most important interest rate is those of inter-bank trading market. Based on the performance of inter-bank trading market, the operation of inter-banking correlated closely to the credit market (correlation coefficient at about 0.91), the same correlation happened between short-term credit and inter-bank interest rate (correlation coefficient at about 0.6).

Table 3.1 Checking for the efficiency of inter-bank trading market mechanism

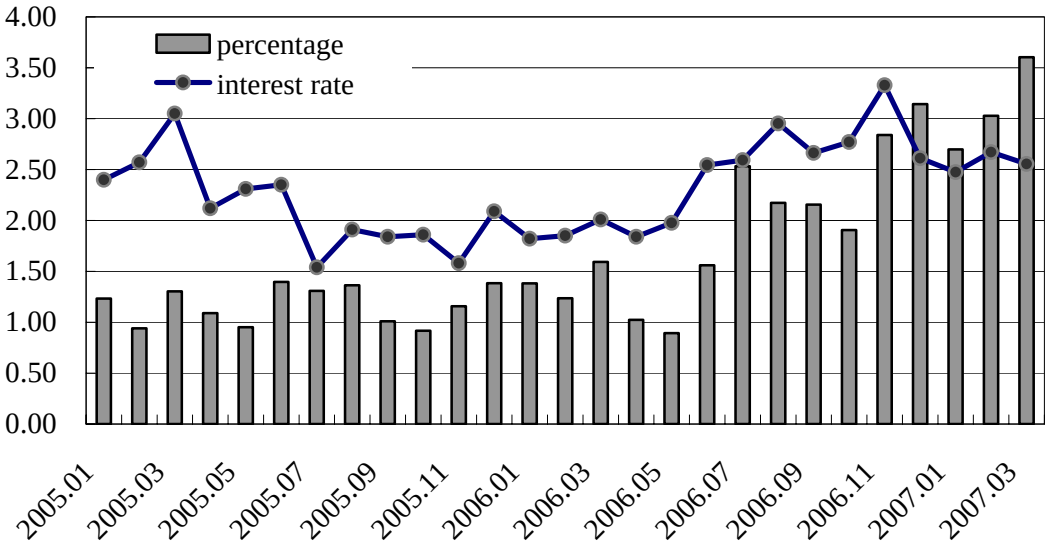
	correlation coefficient	
30 days' volume	-0.04	30 days' interest rate
total volume	0.91	short-term credit
30 day's interest rate	0.60	short-term credit

Source: calculated by author using data in appendix V.

However, the inner mechanism in inter-bank market seems don't work. The negative correlation coefficient is only -0.04 (table 3.1). Also, inter-bank trading

account for only a very small percentage of short-term credit of banking sector. In the past 3 years, the maximum ratio between total volume of inter-bank trading and short-term credit of commercial banks is only around 3.5 percent (figure 3.1). We think the low relationship between inter-bank interest rate and trading volume comes exactly from the low position of inter-bank trading in whole credit of commercial banks.

Figure 3.1 interest rate and percentage of inter-bank trading Jan. 2005-March 2007, in percentage



Note: the interest rate here is 30 days inter-bank trading rate, weighted average;
Percentage means the ratio of total volume in inter-banking trading and short-term credit in local currency.
Source: People's Bank of China, http://www.pbc.gov.cn.

There's only one solution to this problem, reducing the deposit money in commercial bank. Once this happened, the commercial banks will have to find other source for their short-term lending, that is, the inter-bank trading market. However, because of excess liability compiled with high saving and net capital inflow, it's impossible to reduce the deposit without more portfolio choice. So we can't hope this problem to be resolved inside the traditional banking sector. As it interacts with another factor, we'll discuss the solution in next paragraph.

For the exchange rate flexibility, the government should utilize the existed market like Non-Deliverable Forward (NDF) and border market around East Asia to search the right external price for RMB. However, it's risky to allow RMB convertibility without matched development in domestic financial market and short-term capital movement monitoring system.

Enlarging the basket for macro policy instruments in openness

Recently, "the seventh adjustment on reserve requirement ratio in the past eleven months" became the headline of different kinds of media. It's seems confused that the monetary authority use the instruments of interest rate and reserve requirement ratio so frequently. However, think about what's other thing we have in the instrument box. We really don't have more choice.

Traditional instruments are not behind the times, and will never. But they're far from the demand in open economy. In an open economy, a well-developed financial market is the best policy basket for authorities. With bonds market, derivatives market, stock market, foreign exchange market, and all kinds of markets, the authority can do much more than they can currently. These provide operation room for the authority in risk aversion, transfer between short-term and long-term capital, transfer between saving and other portfolio, and between domestic market and overseas. On the contrary, countering the global liability with only traditional instruments is very difficult and don't make sense.

Beside develop deeply-intensified financial and capital markets. One of the most import things is to establish Monitoring system for capital movement. Undoubtedly, intensifies capital market bring risk aversion with speculation. In a developed capital market, task of monitoring become heavy. China needs efficient and fast-reacted monitoring mechanism to pursue financial stability, it's seems critical especially when China take action in further reforms without opening capital account.

Legislation on illegal operation in financial system

In Sep. 2, 1993, the National People's Congress (NPC) passed Anti-Unfair Competition Law. And the draft of anti-monopoly law is under auction. There're also many other legislation on business field and financial system. However, government need to enforce the implementation of related laws. China paid more attention on money laundry recently, in the same time, more emphasis should put on legislation in financial system. Money laundry harms economy in one way, but illegal operations harm in other way. It can hardly determine which is more harmful, for example, money laundry can cause incompetence in local currency, but illegal operation in financial system may bring recession to macroeconomic.

Also, the situation of macroeconomic is an important factor to determine liberalizing capital account or now. As a sound macroeconomic condition increase the ability to counter risk brought by openness, over-heating cause speculation, so the best condition is stable macroeconomic growth with small expectation on RMB appreciation.

Here, I want to point out that all the prerequisites I mentioned above is those for liberalizing capital account and allowing currency convertibility. It absolutely doesn't mean that we can do nothing now. We'll discuss the possible measures in the short term and long term next. Also we consider the optimal scenarios for capital account liberalization and RMB convertibility based on risk analysis.

B. Path and Timing for the Reforms in Next Round

Firstly, let's think about what we can do before fundamental steps taken in further reform. As the analysis in part III have showed, possible and necessary policy now include promoting capital outflow, improving margin of foreign exchange reserve, and searching for the right price for RMB domestically and overseas.

In all above three, the authority has started the experiments. I just want to mention some most-needed policy for these kinds of experiments. Firstly, the restraint for QDII should be removed. Until now, QDII was permitted to buy fixed income asset

only, this restriction reduce the capital outflow dramatically and is not a good deal for China. As we mentioned, higher margin is very important for China's capital outflow. It's reasonable to consider the risk of this kind of outflow at the beginning, but we can try some better ways out. For example, after remove the restraint of fixed income asset-only policy, we can encourage establishment of joint equity company between Mainland enterprises and Hong Kong investment bank, and let them to operate the QDII. We can count on much more large capital outflow and higher margin at the same time.

As the reform orientation of foreign exchange reserve is hopeful and we can count on higher margin after the ongoing reforms, so I don't want to say anything about it. I think a stable exchange rate is very important for China during capital account liberalization and currency convertibility. It's far from enough to hold a managed floating regime in the long term. I think the best way is to search the right price through existed NDF market and border circulation.

Another thing we can do in the short term is providing more portfolio choice by developing a deeply-intensified capital market in China. It's critical to calm down the over-heating currently. According to reports in January 2007, some foreign capital has accessed China's A-share through informal channels[1]. This happened because high margin brought by RMB appreciation, increasing asset price together. If over-heating can not be calm down in a short time, the situation will worsen ever. Also a deeply-intensifies capital market in domestic will be helpful for healthy development under capital account liberalization and currency convertibility.

Now we come to the sequence and timing of capital account liberalization and currency convertibility. We have to discuss the relation between openness and speculation, being more open will attract more capital inflow undoubtedly, the problems left to policy makers is the narrow the space for speculation.

Table 3.2 short-term margins and mechanism for speculation in China

Short-term margins	Mechanism for speculation
RMB appreciation	Illegally convertibility through underground banks, without currency convertibility. Policy hole in cross-border currency circulation and monitoring of underground banks.
Increasing asset price	Illegally convertibility through underground banks, informal access to stock market through domestic securities company without currency convertibility. Illegally convertibility through underground banks for withdrawal without capital account liberalization. Policy hole in stock market and underground banks monitoring.

All speculation happens only if there's opportunity for speculating, especially when the margin is higher than expected. In the short term, there're two kinds of possible margin for speculation: RMB appreciation and increasing asset price. The mechanism

[1] "Foreign-funded Equities' Manipulation in China's A-share", China Business, 2007.01.22.

of speculation for both is listed in table 3.2. According to analysis in the whole paper and table 3.2, I think the best sequence and timing for the next round external reform as follow:

Firstly, encourage capital outflow and pursue higher margin for China's foreign asset. This policy can reduce the pressure of inflation and possibility of over-heating, in the meanwhile, it also improve the future situation of China's balance sheet.

Then, provide more portfolio choice in domestic by developing a deeply-intensified capital market. And liberalizing the price for Chinese Yuan internally and externally through interest rate liberalization and search for right price for RMB in existed NDF market and border circulation.

Finally, allow currency convertibility and liberalize the capital account. In the short term, exchange rate appreciation induces hot money inflow, and increase the risk of financial market. However, in the long term, it's uncertain whether RMB will appreciate or depreciate as RMB is still not widely accepted by traders and brokers. So in the long term, it's less possible to cause large short-term bidirectional transfer between China Yuan and other currencies. Also, If China can calm down the asset market through developing a deeply-intensified capital market in domestic, the asset price will stabilized at a certain level, and margin for speculation will decrease. In this case, capital account liberalization will not be appealing for short-term capital.

In the process of above reforms, capital legislation and implementation should be enforced to guarantee fair competition in the capital markets.

IV. CONCLUDING REMARKS

After almost 30 year's openness and reforms, China's external meet more challenges that can solved only by further reforms. In this paper, we give a historical review of China's external strategy and discuss the consequence and timing of next round reform, especially those for capital account liberalization and currency convertibility. In the advices proposed in this paper, I think further external reforms are much more complicated than what I have state here. During the next round of reforms, the government should pay some attention to public governance to maximize the positive and minimize the negative effects:

Firstly, enforce governance on local government. During the reforms, especially in developing capital market in domestic, it's very important to form an integrated internal capital market in China rather than provincial level capital market. Otherwise, the new developed capital market in China will not be competitive. Also, it will loose attractive for possible investment to transfer from existed asset market. This means failure of the policy destination.

Secondly, give a right price for financial talents. During the next round of external reforms, demand for financial talents is very big for efficiency and risk aversion. It's necessary to establish incentive mechanism in China to appeal more financial talents entering into financial sector.

Thirdly, pay attention to the priority during the reform[1]. Reform is some kind of structural change, it benefit some, hurt some in the same time. As we can imagine, there're two kind of situation than may harm some individuals and enterprises. The first one comes from the reform because of structural change it brings forth. In this case, most of the individuals at stake are the priority. It's important to improve the social security network to reduce this kind of negative effects. Another kind of risk comes from possible failure of reform, in this case, the authority should prepare counterpart strategies before policy employed.

Finally, I want to discuss about the role of Hong Kong in this round of reform. There have been a huge number of papers and books on relationship between China Mainland and Hong Kong (Sung, 2005; Takeuchi, 2006; Cheung, etc., 2006). I don't think I can add any useful result in it. I only give some advices according to analysis in this paper. Firstly, if China Mainland removes the fixed income asset-only restraints on QDII, there will be large space for cooperation between Mainland company and investment bank in Hong Kong. Also, with RMB settlement arrange between Mainland and Hong Kong and following development, Hong Kong can play important role in searching right price through RMB's border circulation. Meanwhile, Hong Kong's participation in this round of reforms can improve the efficiency of Mainland financial system in the long term, and enhance the margin of Mainland's foreign exchange reserve in the short term.

[1] Enterprises may also be harmed in the reforms, but it may benefit them also. Competition pressure compels enterprises to improve TFP, accelerate technology innovation, etc. So in this part, we discuss mainly the impact on individuals.

Appendix I. Inter-temporal Optimization of Current Account[1]

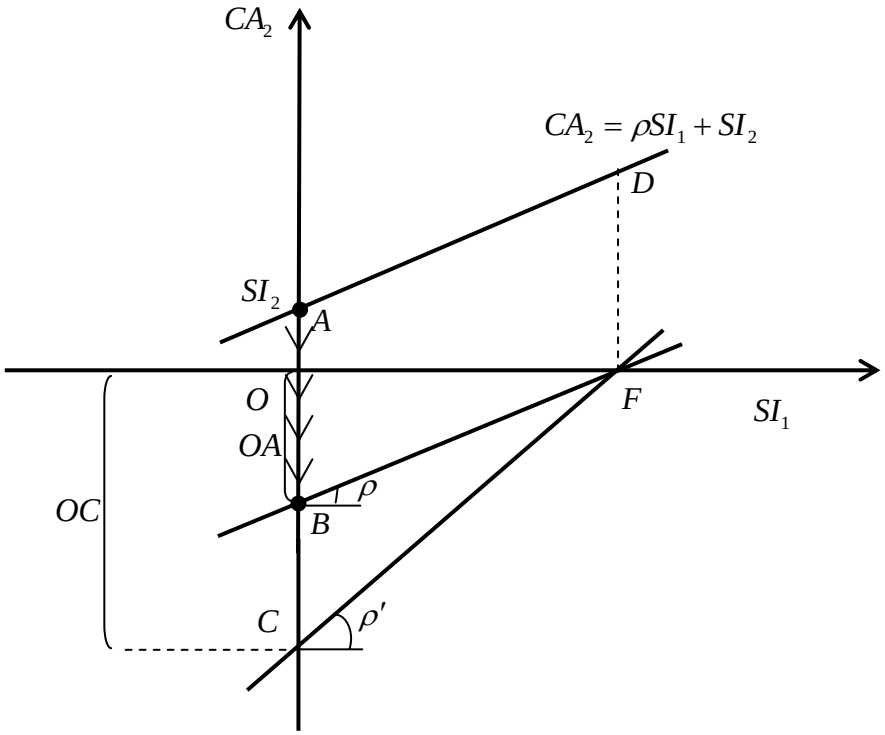
In brief, the current account balance is consisted of two parts, trade balance and investment income. And the investment income is depended on the accumulated trade balance. So the current account balance in period t can be described as follow:

$CA_t = \rho \int_0^{t-1} SI + SI_t$, here $SI_t = S_t - I_t$

And CA, S, I, ρ represent current account balance, saving, investment, and investment margin. SI is calculated by saving minus investment, and means trade balance at the same time.

To simplify it, we consider the case of two periods, period 1 and 2. In this case, the current account balance in period 2 is determined by:

$CA_2 = \rho SI_1 + SI_2$



As show in figure above, as soon as SI_1 and SI_2 is determined, the slope of line AD is meaningful for the value of CA_2. As China is concerned, though with current account surplus in recent years, China may also change into a current deficit because of aging and economic maturity. Then if we have a higher margin in China's foreign investment, for example, from ρ to ρ', then we can afford a larger volume of trade deficit in the future, from OA to OC in the graph, while keep current account balance at the same time.

[1] The idea of current account inter-temporal optimization comes from professor YU, Yongding from Institute of World Economics and Politics, Chinese Academy of Social Sciences. I want to show my appreciation for professor YU here. As the related article of YU is forthcoming, I'm sorry that I can't specify the reference here.

Appendix II. The Risk of Capital Inflows Withdrawal[1]

As mentioned in parts above, the negative impact of foreign investment withdrawal on China economy have pointed out by many researchers. In this appendix, we'll simulate the impact quantitatively.

According to the international position of China in 2005, the debt item of China's international position is about 930 billion dollar. In the same period, capital formation account for 38.1% of total GDP, about 870 billion dollar. So we can calculate the impact of foreign capital withdrawal on China's capital formation. We assume three scenarios here and simulated the effect specifically (all in percentage).

	Scenario A	Scenario B	Scenario C
Withdrawal of foreign capital	10.0	20.0	30.0
Impact on China's capital formation	10.7	21.4	32.0
Impact on China's real GDP	-3.8	-7.6	-11.6

Note: Please see analysis on this in the related parts above.

[1] Simulation here is done by Global Trade Analysis Project, a comparative static CGE model designed by Purdue University. For more information about the model, please see Hertel (1997).

Appendix III. Capital Account Liberalization Progress in China[1]

Date	Policy Introduced
March 6, 1990	State Administration of Economic Cooperation announced procedures governing Chinese direct investment abroad.
Feb., 1992	B Shares opened in Shenzhen and Shanghai.
July 29, 1993	Tsingtao Beer completes the first SEHK IPO, beginning of H shares.
April, 1994	Foreign exchange (quota) trading allowed in China, with it the establishment of China Foreign Exchange Trade System.
Feb. 19, 2001	Domestic investors permitted to buy B shares.
April, 2002	Beginning in 2002, Experiments in Zhejiang, Shandong, Fujian, Guangdong, Jiangsu, and Shanghai province: allowing domestic qualified enterprises to buy foreign exchange for overseas investment. In plus: 1. No requirement for caution money to make sure that the profit of investment transferred back into China. 2. And no requirement to pay back exist foreign debt in priority after buying foreign exchange. In 2003, experiments expanded to 14 provinces, total volume amounted to 1.9 billion U.S. dollar.
Dec. 1, 2002	QFII introduced. The total QFII volume attained 9.545 billion U.S. dollar in Jan. 31, 2007.
June, 2003	Peony International Card by ICBC is allowed to pay back in RMB for overseas consumption in foreign currency.
Oct. 1, 2003	Bidirectional trade allowed in inter-bank trading.
Nov., 2003	Settlement arrangement introduced between China Mainland and Hong Kong SAR.
Dec. 31, 2003	Citigroup and HSBC are allowed to issue dual-currency credit card in China Mainland by China Banking Regulatory Commission (CBRC).
July 21, 2005	Managed floating exchange rate system introduced.
April 13, 2006	QDII Introduced. The total volume of QDII attained 1.7988 billion U.S. dollar in Jan. 31, 2007.
Sep. 8, 2006	Regulation on foreign capital merger & acquisition. Note: the private equity like Carlyle Group is not blocked in such regulation.
Dec. 11, 2006	Openness for and regulation on foreign-funded banks.
Feb. 1, 2007	Quota for purchase of foreign exchange for personal usage increased from 20 thousand to 50 thousand U.S. dollar. Before April 12, 1999, the allowance amount is 1 thousand for travellers to Hong Kong, Macau, and 2 thousand for other places.

[1] As you may find well-organized chronology of China's capital controls in Prasad and Wei (2005), Zhang (2005), and Prasad etc. (2005). I listed the milestones during China's capital account liberalization progress here only. Main of this appendix is adapted from Prasad and Wei (2005), Zhang (2005), Prasad etc. (2005), HSBC (2002), and Walter and Howie (2006). Update is done according to new progress after above literatures.

Appendix IV. Market-Oriented Adjustment of Interest Rate in China

Inter-Bank Trading Rate

June 1, 1996 Liberalization of inter-bank market trading rate.
June, 1997 Liberalization of interest rate of inter-bank treasury bonds market.

Loan Rate Liberalization

March, 2002
Experiments in Rural Credit Cooperatives in 8 counties for deposit rate floating over no more than 100 percents. In Sep., 2002, experimental area expanded to all provinces and counties but the Municipalities.

Jan. 1, 2004
Floating area enlarged to [0.9, 1.7] for commercial banks and Urban Credit Cooperative. And floating area in [0.9, 2] for Rural Credit Cooperative.

Oct. 29, 2004
Cancel of loan rate ceiling for all financial institutes but Rural Credit Cooperative, with the bottom line still at 90% of benchmark loan rate. The floating area for Rural Credit Cooperative unchanged.

Nov. 18, 2004
Liberalization of loan rate for foreign currency fixed deposit more than 2 years.

Deposit Rate Liberalization

Oct., 1999
Allowance for rate negotiated and decided by domestic commercial banks and domestic insurance companies for wholesale time deposit no less than 30 millions Yuan, with the deposit period more than 5 years.

March, 2002
Experiments in Rural Credit Cooperatives in 8 counties for deposit rate floating over no more than 50 percents. In Sep., 2002, experimental area expanded to all provinces and counties but the Municipalities.

July, 2003 Liberalization of petty foreign currency deposit

Nov. 7, 2003
For commercial banks and Rural Credit Cooperative, Liberalization of postal saving rate for wholesale time deposit no less than 30 millions Yuan, in case that the deposit period more than 3 years.

Dec. 10, 2003 Liberalizing interest rate for middle-term and long-term deposit.

Oct. 29, 2004 Reset the bottom line of interest rate for deposit to zero.

Appendix V. Volume and Interest Rate of Inter-bank Trading

2005 Jan.-2007 March

In 100 million Yuan and percentage

	(1) Total Volume	interest rate	(2) short-term credit	(1)/(2)*100%
2005.01	1080.27	2.40	87601.34	1.23
2005.02	828.23	2.57	88025.35	0.94
2005.03	1165.33	3.05	89437.51	1.30
2005.04	975.26	2.12	89549.76	1.09
2005.05	842.74	2.31	88551.46	0.95
2005.06	1212.04	2.35	86853.05	1.40
2005.07	1129.10	1.54	86281.06	1.31
2005.08	1181.91	1.91	86660.46	1.36
2005.09	884.00	1.84	87523.88	1.01
2005.10	800.60	1.86	87379.35	0.92
2005.11	1017.66	1.58	87890.53	1.16
2005.12	1210.54	2.09	87449.16	1.38
2006.01	1236.39	1.82	89423.62	1.38
2006.02	1110.92	1.85	89921.32	1.24
2006.03	1462.39	2.01	91773.75	1.59
2006.04	947.82	1.84	92586.68	1.02
2006.05	833.89	1.98	93441.83	0.89
2006.06	1483.13	2.54	95126.70	1.56
2006.07	2429.92	2.59	95938.05	2.53
2006.08	2099.98	2.95	96654.33	2.17
2006.09	2109.52	2.66	97846.32	2.16
2006.10	1870.27	2.77	98112.73	1.91
2006.11	2802.47	3.33	98667.50	2.84
2006.12	3096.99	2.61	98509.53	3.14
2007.01	2728.10	2.47	101096.00	2.70
2007.02	3125.15	2.67	103193.91	3.03
2007.03	3788.24	2.55	105135.77	3.60

Note: interest rate here is the weighted average rate of 30 days trading.
Source: People's Bank of China, http://www.pbc.gov.cn.

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