Financial deepening and regional economic growth—Analysis on Circum-Bohai-Sea Region*

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Abstract: Financial deepening can improve economic growth by facilitating capital liquidity and promoting efficiency of allocating resource, which has played an important role in the development of the Pearl River Delta and the Yangtze River Delta in China. As a new economic growth pole, Circum-Bohai-Sea Region should focus on internal financial deepening. In this paper, SWOT analysis is used to observe the level of financial deepening in Circum-Bohai-Sea Region, and some related policy suggestions are given in the end.

Key words: financial deepening (FD); economic growth; Circum-Bohai-Sea Region (CBSR); SWOT

1. Introduction

In 1973, McKinnon and Shaw put forward the theory of financial deepening. It points out that in order to achieve economic development, the developing countries should abandon Financial Repression Policy, relax the control on interest and exchange rates and promote the efficiency of resource allocation in the financial system. In subsequent literature, FD is considered to promote economic growth in two ways: On one hand, it facilitates financial liquidity and decreases the costs of investment transaction, which finally increases investment flows (Merton & Boide, 1995); On the other hand, it promotes the efficiency of allocating financial resource and capital return rate, which eventually improves the total productivity.

Initially, the theory of financial deepening was used to instruct developing countries to carry out financial reform. However, it also has great directive significance for China's regional economic development. In the process of regional economic development, the different provinces and municipalities should strengthen inter-regional financial cooperation to facilitate financial liquidity and even attract capital inflows from outside. Generally speaking, the efficiency of China's financial system, especially the bank-based indirect financial system, is not high. Promoting reforms on ownership structure and corporate governance further onwards will be good for more efficient resource allocation. Of course, it may contribute to enhancing regional productivity and strengthening the positive effect of regional financial cooperation.

The cases of the Pearl River delta (PRD) and the Yangtze River delta (YRD) have proved this. PRD is the forefront of China's reform and open, where FD plays an important role in regional economic development. As China's earliest regional joint-equity commercial banks, Shenzhen Development Bank (SDB) established in 1987

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and Guangdong Development Bank (GDB) in 1988 have provided great financial support for the economic development of PRD. The following Shenzhen Stock Exchange facilitates local business financing. Till the end of 2004, 118 of the total 540 enterprises listed at Shenzhen Stock Exchange were from Guangdong, accounting for 21 percent, and 72 of the 118 Guangdong enterprises were from Shenzhen. So a fairly sound financial system helped to attract numerous foreign-funded financial institutions, intensify the competition within local financial industries and promote the efficiency in the use of funds for local non-state-owned enterprises. Among others, SDB and GDB are the ones of Chinese earliest listed joint-equity banks. These changes not only optimized these two banks' equity structure, but also provided valuable experiences for China's banking reform.

In the YRD, Shanghai fully plays the core role as a financial center, which promotes the development of the whole YRD by strengthening regional financial cooperation. To some extent, local integration is achieved here on banking consolidation, open market operations, stock and forward exchange transactions, Central Bank financial services and financial regulation and supervision. Taking banking for instance, by the end of 2007, all kinds of remote loans of home-funded banks in Shanghai had accounted for about 60 percent of the total, which were issued to Jiangsu province and Zhejiang province. Up until the end of August in 2004, the number of the enterprises listed at Shanghai Stock Exchange from Shanghai, Jiangsu and Zhejiang was respectively 144, 632 and 62, accounting together for 32 percent of the listed in all. Even the second headquarter of Central Bank was settled down at Shanghai in August 2005, which was greatly positive for the YRD financial cooperation.

If qualifying FD of the PRD and the YRD with M_2 /GDP index proposed by McKinnon, we may know better why these two regions became two engines of China's economic growth. Although M_2 data of each province and municipality is unavailable, the loan is still a useful signal transmitting central currency policy. So the ratio of bank loans to GDP (Levine & Zeros, 1998), should be a good alternative indicator measuring target FD. Table 1 show that the FD levels in the PRD, the YRD and CBSR all exceed the national average level. The PRD took the first step and reached the highest FD level, and the YRD had achieved remarkable improvement on FD, thus brought a rapid economic growth as a whole. FD index of the YRD in 2001 was 0.97, which was less than that of CBSR. The situation changed in 2003, 2005 and 2007. Of course, FD index of CBSR is higher than the national average in the same period.

Loan/GDP Region	2001	2003	2005	2007
the PRD	1.24	1.50	1.37	1.47
the YRD	0.97	1.35	1.20	1.33
CBSR	1.11	1.27	1.19	1.30
National average	1.02	1.17	1.14	1.16

Table 1 Financial deepening level in different regions

Data source: *China Financial Statistics Yearbook*. The PRD refers to Guangdong province, the YRD includes Shanghai, Zhejiang province and Jiangsu province, and CBSR includes Beijing, Tianjin, Shanxi province, Shandong province and Liaoning province, the same hereinafter.

2. Financial deepening of CBSR: SWOT analysis

CBSR is another economic growth pole following the PRD and the YRD. It's at the east to Japan and Korea and west on Chinese hearty lands, covering prosperous coastal municipal groups. Shandong as a developed province, Tianjin as the most important port in North China, the capital—Beijing which has abundant financial

resource and human capital advantage, the whole CBSR maintains very strong economic competitiveness. Nevertheless, there is still a gap on FD compared CBSR to the PRD and the YRD. Therefore whether we can promote FD effectively will be the key determining if CBSR economy can grow fast.

Hereon, SWOT analysis will be used to see the current FD of CBSR objectively. SWOT is the abbreviation of strengths, weakness, opportunities and threats. It could help us know the target thoroughly, systematically and accurately, in order to find out its strengths and weakness, understand external opportunities and challenges and then clear future development strategy. Applying SWOT to analyze FD can contribute to understanding the present FD in this region and finally determining the regional FD strategic choice dynamically.

2.1 Strengths

2.1.1 Rapid regional economic development

Steadily increasing economy creates good condition for financial deepening. CBSR serves as the engine of economic development in the northern part of China. GDP of this area in 2007 exceeded that of the PRD and the YRD, accounting for 28 percent of the national GDP in total. Its year-average growth rate, 13.3 percent, was more than the national average 9.9 percent. Apart from this, CBSR coastal municipal group is still developing vigorously and continuously. In "2005 rank of Chinese city competitiveness", Beijing, Tianjin, Dalian and Shenyang ranked forward. Altogether, there are 8 cities ranked in top 30, surpassing the PRD (7) and the YRD (7). According to 2005 Yearbook of China's Development Zones, the economic and technical development zones in Tianjin, Dalian, Qingdao, Yantai and Shenyang were named on the top 10 list out of 33 zones nationwide.

2.1.2 Abundant financial resources

CBSR is fairly rich in financial resources. Up to 2007, the balance of deposits and loans had constituted 27 percent of the national sum, while that of the YRD and the PRD was separately 23.16 percent and 14.09 percent. There are numerous foreign-funded and state-owned financial and non-financial institutions here as well, especially, four state-owned commercial banks, three state-owned insurance companies and headquarters of large securities firms. At the end of 2007, the number of CBSR foreign-funded banks accounted for more than 30 percent of the total, second only to the YRD but exceeding the PRD. It is worth mentioning that the foundation of Bohai Bank in 2005 was an important sign in strengthening CBSR inter-sub-regional cooperation. Without historical burden, it has distinct property right and good governance, whose late-developing advantage is becoming strong driving force to push on regional FD and economic development.

2.1.3 Rich human resource and promising innovation

Human resource is a key factor for industry development. Apart from financial resources, CBSR is also rich in human resource, which is at a leading position of knowledge-economy. *Regional New Economy Indicators in China* manifests that the intellectual density of Beijing is 6.06 times of the national average and 2.83 times of Tianjin. Additionally, CBSR possesses over 300 universities and 400 thousand researchers, one quarter of the whole, where it is full of skilled talents and senior personnel, even high integrated degree of production, teaching and research. The above mentioned together provides strong intellectual insurance for regional financial deepening.

2.2 Weakness

2.2.1 Lack of financial center like Shanghai

In the layout of regional financial cooperation, center city, like Guangzhou and Shenzhen of the PRD and Shanghai of the YRD, is urgently needed to be a leader to collect internal resources and construct FD platform. By contrast, CBSR is a little weak in this part. Though the capital—Beijing is rich in financial resources, it is usually

positioned to be the political and cultural center which may weaken its economic function. Tianjin stands on CBSR center and borders Beijing. Despite of its predominant geographical location, it is limited in the influence and coverage. It is a difficult issue that how to develop Tianjin to be a regional financial center. In addition, Shandong peninsula and Liaotung peninsula have not yet possessed enough strength to become regional center. In this area, the lack of central power may hinder its FD and increasingly become an obstacle for the regional economic development.

2.2.2 Administrative system hindering financial cooperation

Administrative system is another disadvantage for CBSR financial cooperation. The municipal groups of the PRD are all under Guangdong province's jurisdiction, which makes unified coordination much easier. However, CBSR covers a vast area composed of three provinces and two municipals; Even its coastal line stretches 5800 kilometers. This doubtlessly leads to inconvenience in communication and information exchange. Insufficient vertical communication between internal financial institutions and trans-provincial or trans-municipal financial business makes FD much more difficult for CBSR than the PRD and the YRD.

2.3 Opportunities

2.3.1 Central government's great attention and policy support

Central government attaches great importance to CBSR, the third pole of China's economic growth. *Promoting the development and opening-up of Tianjin Binhai New District* was listed into *the Eleventh Five-Year Plan*, indicating that it entered the calculation of the country's overall development strategy. Then it should be another testing area of Chinese reform and open following Special Economic Zone and Putong New Area. We may also regard it as a breakthrough point of CBSR development. It was such direct policy which promotes the establishment of Binhai Industrial Fund and Bohai Bank. Moreover, a series of policies reviving Northeastern Old Industrial Basis brought many opportunities for Liaotung peninsula development.

2.3.2 Accelerating reform of state-owned banks

Comparing with financial cooperation, it is more important to promote the efficiency of the capital allocation for FD. Indirect financing is the main stay of China's financial system, so the operating efficiency of banks, especially state-owned commercial banks, can impact the efficiency of the whole financial system. At present, there are some problems in the state-owned banks, such as unclear property right, overweight historical burden, local interference and soft constraint from state budget, which all induce low efficient capital allocation in our banking system.

To solve these problems above, the government has hastened the reform of state-owned banks since the beginning of this century. Certain amount of capital from central foreign reserve was injected into Bank of China, China Construction Bank and Industrial & Commercial Bank of China in 2004 and 2005 so that capital abundance rate was promoted. State-owned banks actively introduced strategic investors to perfect corporate governance structure at the same time. As state-owned banks are still the main of regional financial system, these changes may create many good opportunities for CBSR's FD.

2.3.3 Competition from foreign-funded financial institutions

More competition can promote the efficiency of capital allocation. According to the WTO promises, China would have cancelled the restriction on the ownership, set-up and management of foreign-funded banks. We also would endow them with national treatment including RMB business to Chinese clients and so on. The fierce contest between the internal and the external would improve the overall efficiency. As a developed economic area, CBSR is a place of strategic importance all the time. At the end of transitional period, foreign-funded banks will

enter China successively. The more competition is, the higher efficiency is .

2.4 Threats

The challenge in SWOT refers to potential threats outside. The formidable challenge for CBSR's FD comes from the competition with the PRD and the YRD. As we know, the characteristic development models of the PRD and the YRD come into being early, thus they two have taken the lead in the competition. Taking the capital market for instance, only two stock exchanges in China are respectively located in these two regions, which provide persistent financial support for them. This advantage certainly stays long. In human resource, *City Rank Based-on Personnel Synthesized Competiveness* from *China Talent Development Report 2005* told that Beijing, Shanghai, Shenzhen, Guangzhou and Hangzhou occupied top 5; Wenzhou and Nanjing in the YRD also kept relatively forward. So, such kind of challenge in the starting stage reflects the "later-development disadvantage" of CBSR.

3. Future strategy and specific measures

There are both superiority and constraint for FD in CBSR. Facing opportunity and challenge, it is very essential to discuss the future strategy that how to promote regional FD. As a useful tool, SWOT method not only helps to clear internal conditions and external circumstances that influences one object, but also provides us a train of thought to study its development. On the basis of preceding analysis, there are three strategic acts to promote FD in CBSR: adjusting regional financial layout, constituting more efficient financial system and improving financial ecological environment.

3.1 Adjusting regional financial layout

The abundant financial resource of CBSR is unevenly distributed and there is no core city as a strong cohesion, so it is necessary to optimize the regional financial structure to facilitate capital liquidity. There are three parts to be considered: allying Beijing and Tianjin, establishing sub-center cities and strengthening inter-regional financial cooperation.

3.1.1 Allying Beijing and Tianjin

This part is an embodiment of WO strategy. Combining Beijing's rich financial resource and Tianjin's superior location can realize complementary advantage. Actually, there has been frequent cooperation between Beijing and Tianjin all the time. Taking billing service for example, Beijing, Tianjin and some districts of Hebei put up Beijing-Tianjin-Hebei clearing system in June, 2000. Then in May of 2005, Beijing-Tianjin-Langfang clearing system was put into practice formally, that is to say, you can use checks freely in Tianjin, Beijing and Langfang of Hebei Province. Such close association laid a good foundation for enhancing cooperation.

Beijing and Tianjin should work harder in two ways to become finance-central cities. One is to communicate and collaborate more, including stronger financial market and easier talent exchange. The other is that Tianjin should raise its financial competitiveness, optimize the finance market system and foster diversity of the market for more efficient currency market, stock market, forward market and property market. Among that, Binhai New District can be regarded as financial cooperation testing zone. Learning from Shenzhen and Putong, it is helpful to introduce more investment banks, foreign-funded banks, intermediary organs and venture capital companies for the development of financial infrastructure and financial creativity in Binhai New District.

3.1.2 Establishing sub-financial-center cities like Shenyang and Jinan

CBSR covers a broad area where Beijing and Tianjin's influence is limited in Beijing, Tianjin and Hebei

Province, not the whole area. Hence, we can turn Shenyang and Jinan into sub-finance-center cities according to their geographical position. Beijing, Tianjin, Shenyang and Jinan should contact with each other to build a point-to-surface financial collaboration network, which is similar to the YRD. Shanghai is only finance-center of the YRD while Nanjing and Hangzhou are the sub-center cities. Furthermore, as provincial capital where Central Bank branches stand, Shenyang and Jinan take unique advantages on each provincial overall planning and interior coordination. Besides, as joint-equity banks were set up in PRD Bohai Bank branch in Jinan coordinates Qingdao, Yantai and cities in Shandong peninsula. Of course, Shenyang branch may be put onto the agenda for Liaotung peninsula regional financial collaboration.

3.1.3 Strengthening inter-regional financial collaboration

(1) Set up inter-regional coordination mechanism

"CBSR financial development committee" can be tried which is made up of relevant financial administrative sections around Beijing and Tianjin. This organization is in charge of strategic program for regional financial development and coordination in the conformity to national planning. Additionally, this steering committee can employ the way of holding the regional financial development forum in turn where some professionals may be invited to discuss and decide regional financial arrangement together.

(2) Promote the collaboration among financial institutions

It is very necessary to promote the communication and collaboration of different finance institutions. So we should encourage the financial institutions to carry out syndicated loan service and recognize mutual authorization of agency business, which contributes to developing equity cooperation between regional financial institutions and making up for the unbalance of capital allocation. In some developed places, financing agency service and joint business innovation between commercial banks and outside financial institutions need to be encouraged to strengthen the initiative effect of finance-center cities.

(3) Strengthen the collaboration among finance administrations

Central Bank can fully play the role as bridge and media to set up an effective platform for the cooperation among the financial institutions. On the one hand, facilitating information exchange and sharing provides strong support for the cooperation. On the other hand, while optimizing the Bejing-Tianjin-Hebei clearing system, it ought to expand the business bound in a planned way which accomplishing check interchangeability, retaining local bill, transferring instant fund, smoothing cross-section settlement and shortening transit time of funds. Additionally, the more inter-regional contact is, the more financial risk is. Therefore, it needs to establish a series of mechanisms on risk prevention, coordination system and consultation on momentous issues in order to maintain stable regional finance.

3.2 Promoting the efficiency of financial system

Another important part of FD is to promote the efficiency of regional capital allocation, which should contain two aspects: releasing the competition among financial institutions and boosting property right reform in financial market.

3.2.1 Cultivating diverse market subjects and accelerating the reform of market economy

CBSR can actively introduce stock, insurance and foreign-funded financial institutions as it is carrying out the reform of state-owned banks. Intensifying regional competition will push the financial institutions to improve service level and promote the efficiency continuously. In current, Bohai Bank serves as a pioneer that may benefit the whole district's FD. Without institutional barrier and historical burden and with complete equity structure and corporation governance, Bohai Bank can choose to list at proper time just as SDB and GDB, which will collect more money, constantly raise its managerial level and promote its efficiency of capital allocation.

3.2.2 Clearing government position and reducing administrative intervention

The reason for excessive non-performing asset and low efficiency existing in Chinese banking, especially state-owned banks, may be administrative intervention from local governments. To realize FD promotion, it is requested to avoid administrative intervention in the early stage of CBSR development. In this way, local governments are required to make their own positions clear, update their management theory, build public service-oriented government, deal with their relationship with enterprises and banks well, and thus create favorable environment for the financial development.

3.3 Improving finance ecological environment

Finance ecology (XU, 2005) refers to dynamic equilibrium system which comes into being in the process of long-term close interaction between financial organizations and their external circumstances, as well as among different financial institutions. The situation which influences finance ecology is called finance ecological environment, whose essence is a kind of contract including mainly legal system, credit environment, enterprise regulation and political system. Seeing regional finance, the healthy regional finance ecological environment can not only be helpful to the continuously rapid development of local economy, but also increase the attractiveness of financial resource. Finally, it successfully sets up unique FD advantage.

SWOT analysis indicates that the PRD and the YRD make CBSR to be in hot water for CBSR late-developing disadvantage in financial resource and professionals, and improving inner finance ecology environment as soon as possible can change the present. Because finance ecological environment involves law, credit and system, CBSR can make use of own policy advantage to change institutions and improve finance ecological environment.

3.3.1 Reform social credit system

Deficient social credit system impedes regional cooperation and reduces the attraction to the outside. As a result, it is important for CBSR to accelerate creating interior credit database based on perfect credit regulations covering business loans, business credit and personal comprehensive credit. Consequently, regional open share on all data can be realized. At the same time, positive incentive and negative punishment help to contribute to forming healthy credit culture and bumping up social credit level.

3.3.2 Deepening reform of the enterprise

Different from the PRD's FDI-driven and the YRD's private capital oriented, state-owned enterprises hold a large proportion in CBSR. Therefore, we must deepen state-owned enterprise reform furthermore to construct favorable bank-enterprise relationship and thus improve finance ecological environment. Specifically, what is needed is to regulate the remanufacture of state-owned and collectivity-owned enterprises, clarify property right, and practically improve inner governance structure according to modern corporation institution. Of course, CBSR also pays a little attention to bankruptcy regulation to prevent enterprises from escaping bank debt by malicious bankruptcy.

3.3.3 Ensuring law enforcement and implementing financial claims

So far, legal-support system included in regional finance ecological environment ignores the protection for creditor's interest. Accordingly, CBSR should work harder to crack down dishonest behaviors, in particular to enhance the efficiency implementing cases for favorable legal environment in regional financial industries. Local governments may also actively embrace new ideas, overcome local protectionism and maintain the justice.

4. Summary

The positive impact of finance development on economic growth has been confirmed both theoretically and empirically. In developing countries, the government's mandatory intervene into financial activities leads to low efficiency of the financial system and segmentation of the financial market, from which financial restrain eventually hinders the economy from developing rapidly and steadily. As the largest developing country, China needs to further advance financial reforms, therefore improving the FD level, and purposefully promotes regional economic growth, which has been proved by the development process of the PRD and the YRD.

Currently in China, CBSR is not only another economic growth pole but also the key implementing economic development strategy. SWOT method is used in this paper to analyze the FD in CBSR. The result shows that, there are both superiority and constraint, both opportunity and challenge for CBSR's FD. On this basis, relevant suggestions are put forward to promote regional FD, that is setting up finance-center cities, adjusting regional financial layout and strengthening financial cooperation, transforming the government functions, improving competition structure and the property right in financial market, promoting the efficiency of capital allocation, completing social credit system and legal institution to create a good ecological environment for the finance development.

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