

## Analyzing China's Banking System as One of its Economic Rise Factors

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### ABSTRACT

*In 2013, China's GDP grew at an average annual rate of nearly 10% than 1979. Many economists provide that China's economic will take a key position in international trade map and a major place with the world leaders at beginning of second quarter of current century. Generally, economists attribute China's growth to two major factors: the financial system and the increasing of productivity. This paper tries to examine the role of China's financial system in supporting the economic growth. Through giving, firstly, a short review of the history of China's banking system by presenting it through 5 main periods: from 17th century until 1949, from 1949 to 1978, the first reform period from 1978 to 1984, the second reform period from 1984 to 1994, the third (present) reform from 1994. Secondly, it presents a brief view on the Structure of China's Banking System that can be resuming in 4 main characteristics: (1) The Huge Size, (2) The State-owned, (3) The "BIG FOUR", and (4) The Foreign Banks Operating in China. Then, it shows a short literature background about the relationship between financial and economic growth. Moreover, it discusses theoretical study of the influence of banking system on economic growth. Finally, this paper will analyze the role of banking system in supporting some indicators of China's economic growth: GDP, Unemployment Rate, SME ... etc.*

**Keywords:** China; Economic Reform; Economic Growth; Banking System; Economic Policy

**JEL Classification:** O4, O5, N00, P4

### INTRODUCTION

China's economy has grown radically and quickly since 1978, when the new government launched its "reform and opening-up" strategy. Currently, Chinese economy is the world's second-largest economy. In 2013, China's Real Gross Domestic Product (GDP) grew at an average annual rate of nearly 10% than 1979, and many researches provide that China's economic will take a key position in international trade map and a major place with the world leaders at beginning of second quarter of current century.

The economic powerful did not come from empty; it was a logical result of long and dim reforms, which planed since the end of 1979's under the leadership of Chairman Moa Zedong. According to some economists, the facts are astonishing from relatively poor beginnings three decades ago; China's economy is currently the second in size after the United States. GDP has grown by about 10% annually, implying a doubling every 7 to 8 years. The resulting 16-fold increase in a major economy's national income during a single generation is unprecedented (Arora& Vamvakidis, 2010). And the following figure "1" shows the growth rate of GDP in China from 1978 to 2010.

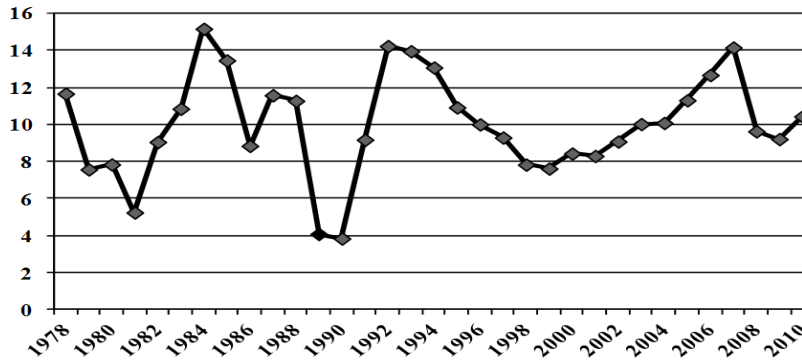


Figure 0. China's GDP Growth Rate 1978/2010 (%)

Source: National Bureau of Statistics of China (2011)

Generally, economists attribute China's growth to two major factors: the financial system and the increasing of productivity. This paper tries to examine the role of China's financial system in supporting the economic growth. And the table "1" below represents the macroeconomic indicators of China in 2009, 2010 and 2011.

Table 1. China's macroeconomic indicators in 2009/2011

Indicators	2009	2010	2011
Nominal GDP (In billions USD)	4.814	5.745	6.989
Real GDP growth (%)	8,7	10,3	9,2
Unemployment rate (%)	4,3	6,1	6,5
Exports (in billions of USD)	1.194	1.506	1.898
The growth rate of exports (%)	-16,8	25	20,3
Import (in billions of USD)	921,5	1.307	1.743
The rate of growth of imports (%)	-14,2	30	24,9
Foreign exchange reserves and gold (U.S. \$ bn)	2.206	2.622	3.236

Source: Updated by authors based on National Statistical Office of the PRC, World Bank. Ministry of Commerce of the PRC (2012).

### Brief History of China's Banking System

Historically, the growth of Domestic banking assets for China and the most important actual position of China's banking system in internal economic and in international financial system is a result of long reforms march started from the end of last century forties. And the increasing of domestic banking assets in China is shown in the figure "2".

Generally, we can present the history of China's banking system through a review divided in stages extracted and adapted from some modern studies as follows:<sup>1</sup> Firstly, Jose (2012) presented the history of China's banking industry through five main periods started from the 17th century:

<sup>1</sup>In general, that history can be subdivided into two main periods: The Mao Era (1949 to 1978), and The Post-Mao Era or Deng Era (1978 onwards).

1. From the initial forms of banking in China in the 17th century until 1949.
2. The banking system during the centrally planned economy from 1949 to 1978.
3. The first reform period from 1978 to 1984.
4. The second reform period from 1984 to 1994.
5. The third (present) reform from 1994.

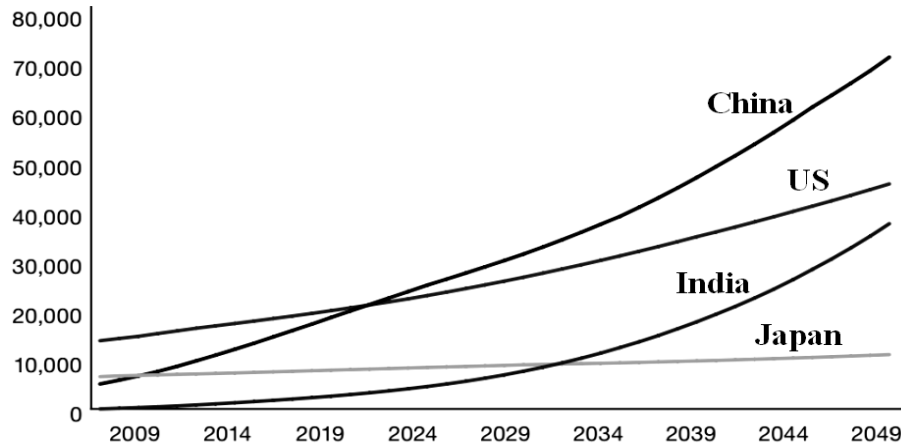


Figure 2. Domestic banking assets for China, US, India and Japan 2009/2049 (Domestic credit: \$bn 2009 prices)

Source: John & Douglas (2011)

In the same way, according to Ting (2009), modern banks landed in China shortly after the First Opium War in which this ancient Middle Kingdom was defeated for the first time by the west. Since then, China has been on its way towards the establishment of a modern banking system. We can divide the whole development history into 3 periods:

- I. **Period (1) 1845 – 1949:** The first half of this period from 1845 to 1896 can be characterized as a foreign dominated banking system. The second half between 1896 and 1949 can be characterized as a mixed but undeveloped modern banking system.
- II. **Period (2) 1949 - 1978:** This period can be characterized as a typical socialist banking system.
- III. **Period (3) 1978 – Present:** This can be characterized as a gradually reforming banking system.

As a result, China’s banking system has grown considerably, and it is essential to the performance of Chinese economic growth, being the main economic channel through which savings are allocated to investment opportunities. And the table “2” represents China’s banking industry in 2009 and 2010.

**Table 2. Data of China’s Banking industry in USD billions 2009/2010**

	Total assets	Client loans	Bond portfolio	Other	Liabilities and capital	capital	Client deposits	Other
2009	11,626.9	6,175.3	1,342.7	4,111.9	11,626.9	331.8	8,883.0	2,412.1
2010	14,384.6	7,488.6	1,562.4	5,333.9	14,384.6	0.0	10,940.8	0.0
Change	24%	21%	16%	30%	24%	- 100%	23%	- 100%

Source: Business Monitor International (2011)

In comparison with other countries, for example, total loans outstanding as a percentage of nominal GDP reached 125%. This level is higher than most other Asian countries (Jose, 2012). And the Chinese loans have reached 97% as percentage of nominal GDP comparing with other Asian countries (see figure “3”).

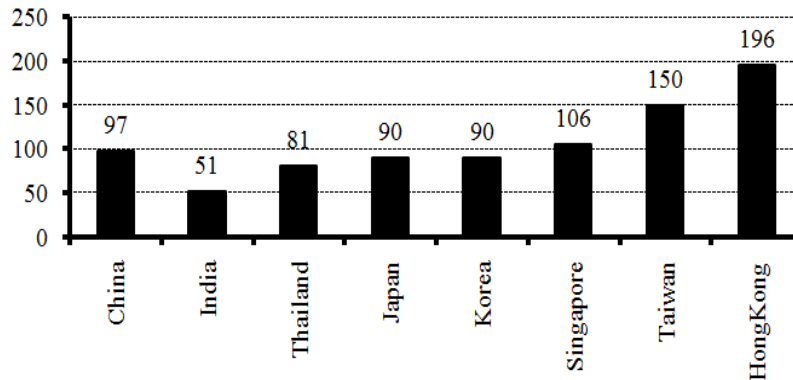


Figure 3. Chinese Loans as percentage of nominal GDP in comparison with other countries (%)  
Source: Werner & Chung (2010)

### The Structure of China’s Banking System

As all, the China’s banking system is a part of the financial system in the economy. In this section, we review the most important features characterizing China’s banking system, which can be resume in 4 main characteristics : (1) The Huge Size, (2) The State-owned, (3) The “BIG FOUR”, and (4) The Foreign Banks Operating in China.

#### The Huge Size

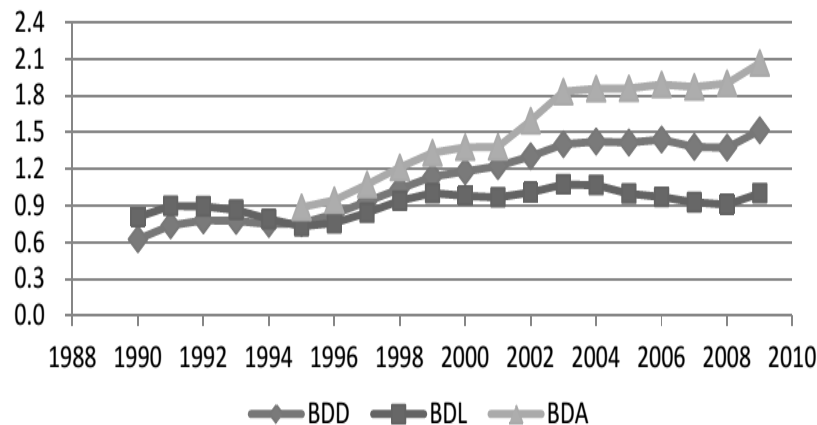


Figure 4. The Size of Chinese banking sector 1988/2010  
Source: Lin et al (2012)

The first striking characteristic of China’s banking system is its large size. Between 1990 and 2004, China ranked seventh, worldwide, in terms of bank credit to the private sector as a percentage of GDP and sixth in terms of bank credit in United States Dollar (USD). And the increasing of the size of Chinese banking sector is shown in the following figure “4”.

**Note:** BDD: deposits held by all banking institutions as a share of GDP. BDL: loans outstanding held by all Banking institutions as a share of GDP. BDA: assets of all banking institutions (no central bank) as a share of GDP.

Furthermore, bank credit continues to grow at a brisk rate, pushed by buoyant economic growth (Alicia et al, 2006). In 2013, The Four initial banks in the list of top 50 Chinese banks ranked between the first and the tenth top world banks ranked (see table “3”).

**Table 3. Rank of China’s Banks in 2013**

R. China	World Bank		Tier 1 Capital (\$m)	Change (%)
01	01	Industrial and Commercial Bank of China	160,646	14.72
02	05	China Construction Bank	137,600	15.50
03	09	Bank of China	121,504	9.29
04	10	Agricultural Bank of China	111,493	15.64
05	23	Bank of Communications	57,613	37.78

Source: Addison et al (2014)

Between 2000 & 2013, trading on the interbank borrowing market grew sharply, as the full-year trading volume gained 39.3% from the previous year, hitting 46.7 trillion RMB. Overnight and 7-day interbank borrowing dominated the interbank borrowing market, both together accounted for 95.2% of the total. Among it, overnight borrowing totalled 40.3 trillion RMB, taking up 86.3% of the total, while 7-day borrowing amounted to 4.2 trillion RMB, comprising 9.0% of the total. Bond repurchases jumped 42.4 % year on year to 141.7 trillion RMB cumulatively (People’s Bank of China, 2012).

**The State-Owned**

The most important character of China’s banking sector is the nature of its instrument’s ownership; more than 99 % of largest commercial banks are state-owned (it was 100% in 1970). The following figure “5” shows national and foreign banks as percentages of total banking assets in China from 2004 to 2012.

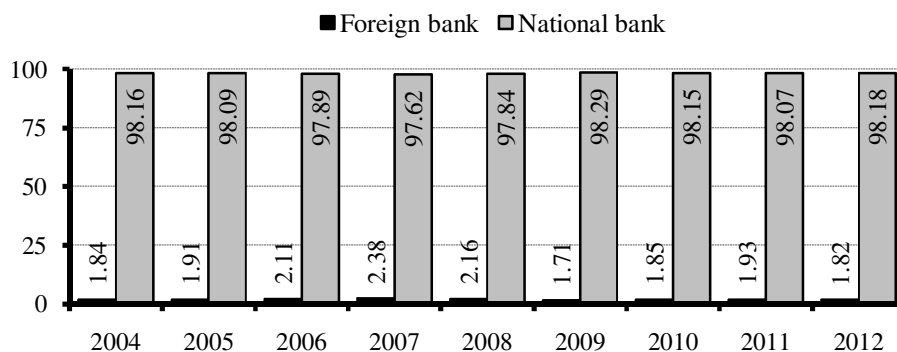


Figure 5. National and Foreign banks as % of total banking assets in China 2004/2012

Source: China Banking Regulatory Commission “CBRC” (2013)

In 1995, the government owns 99.45% of the 10 largest commercial banks in China (it was 100% in 1970), and this ownership level is one of the highest in their sample of 92 countries. The dominance of the “Big Four” banks (ICBC, BOC, CCB, and ABC) also implies the degree of competition within the banking sector is extremely low. China’s concentration ratio of 91% is the highest; however, China’s concentration ratio has been falling sharply since 1997 (see table “4”) with the entrance of many non-state banks and intermediaries (Jun et al, 2005).

**Table 4. Comparison of the Five-bank Concentration Ratios in Asia 1990/2001**

<i>Year</i>	<i>China</i>	<i>Japan</i>	<i>South Korea</i>	<i>Taiwan</i>
1990	0.84	0.23	/	0.52
1991	0.91	0.22	0.58	0.49
1992	0.91	0.20	0.32	0.46
1993	0.91	0.20	0.26	0.41
1994	0.90	0.20	0.26	0.39
1995	0.90	0.20	0.25	0.37
1996	0.87	0.23	0.25	0.37
1997	0.91	0.25	0.27	0.35
1998	0.72	0.18	/	/
1999	/	/	/	/
2000	0.51	0.19	0.23	0.37
2001	0.54	0.25	0.22	/

Source: Updated by authors based on collecting information from many sources.

**The “BIG FOUR”**

Structurally, the simple approach to understand China’s banking system begins from that called: The “Big Four”, which they still dominate the China’s Banking Industry. And the table “5” represents the number of units and financial data of the “Big Four” in 2009.

**Table 5. The number of units and financial data of the "Big Four" in 2009**

<i>Bank Name</i>	<i>Units</i>	<i>Total assets (billions\$)</i>	<i>Loans (billions\$)</i>	<i>Deposits (billions\$)</i>	<i>Net profit 2009 (billions\$)</i>
Industrial and Commercial Bank	16.232	1.726,5	839,3	1.431,5	19,0
China Construction Bank	13.384	1.409,8	706,1	1.172,2	15,7
Agricultural Bank of China	23.624	1.301,4	606,2	1.098,5	9,5
Bank of China	9.988	1.282,2	719,3	979,4	12,5
Total	63.228	5.719,9	2.870,9	4.681,6	56,7

Source: Updated by authors based on collecting information from ICBC, CCB, ABC and BOC.

Firstly, it’s important to know that the “Big Four” are largest state-owned banks. Secondly, the market share of the “Big Four” has been declining since 1980s, but his process has been very slow. After 10 years of reforms, Big Four banks held 91% of total deposits and 90% of total loans of the whole banking system in 1990. After another 20 years of financial reforms, as of the end of 2009, the market share of Big Four banks was

still 52.1% in terms of deposits, 46.5% in terms of loans, and 50.3% in terms of total assets (Lin et al, 2012). These percentages are shown in the following figure “6”.

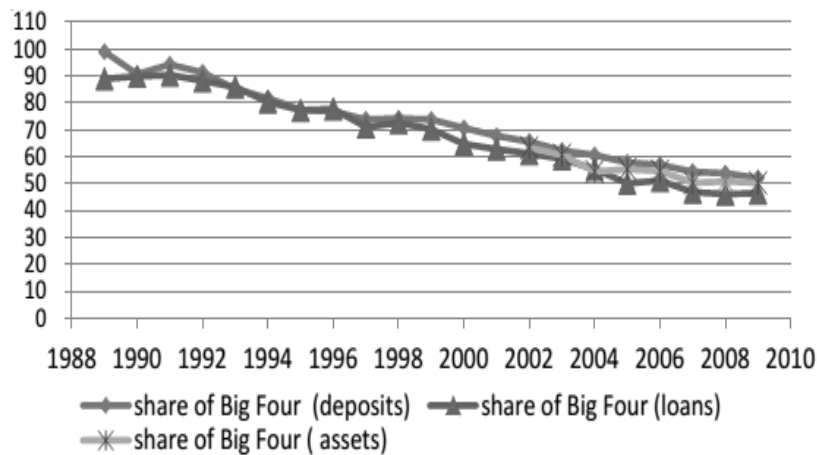


Figure 6. Market share of the Big Four banks (%)

Source: Lin et al, 2012.

### Foreign Banks Operating in China

In 2012, more than 412 foreign banks were operating in China, they have grown their total number twice compared to 2004 (188 banks). And their aggregate total assets amounted to RMB 2.3 trillion, which represented just 1.82% of the total banking assets in China (see table “6”).

**Table 6. Number and Assets Foreign bank operations in China 2004/2012**

	2004	2005	2006	2007	2008	2009	2010	2011	2012
No. of institutions	188	207	224	274	311	338	360	387	412
Total assets (100 million RMB)	5,823	7,155	9,279	12,525	13,448	13,492	17,423	21,535	23,804
As % of China total banking asset	1.84	1.91	2.11	2.38	2.16	1.71	1.85	1.93	1.82

Source: The China Banking Regulatory Commission (CBRC) (2013)

Forty foreign banks have now become locally incorporated. Data from China Banking Regulatory Commission (CBRC) indicates that, at the end of 2010, they accounted for 87% of all foreign banking assets. The 42 banks interviewed collectively expect to grow employment by 53% to over 52,000 people by 2014 (*Foreign banks in China, 2011*). And the increasing of total banking assets of foreign banks in China is shown in following figure “7”.

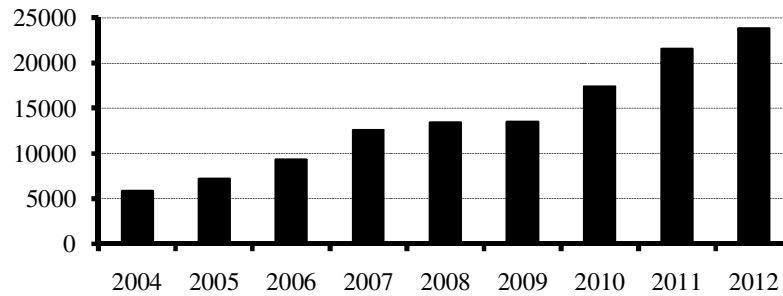


Figure 7. Total banking assets of foreign banks 2004/2012 (100 million RMB)

Source: China Banking Regulatory Commission “CBRC” (2013)

The top five major drivers of change cited by the foreign banks are: regulatory changes, funding constraints, liquidity, developments in the capital market, and economic cycle.

**Table 7. Operating data for foreign banks 2008/2012**

	2008	2009	2010	2011	2012
Total Assets (RMB 100m)	13,448	13,492	17,423	21,535	23,804
Total Liabilities (RMB 100m)	12,028	11,818	15,569	19,431	21,249
Total Shareholder’s Equity (RMB 100m)	1,420	1,674	1,854	2,104	2,555
Profit after Tax (RMB 100m)	119.2	64.5	77.8	167.3	163.4
Liquidity Ratio	70.48%	58.83%	61.49%	69.53%	68.77%
NPL Ratio	0.83%	0.85%	0.53%	0.41%	0.52%
CAR (Locally Incorporated banks)	18.45%	21.22%	18.98%	18.83%	19.74%
Core CAR (Locally Incorporated banks)	17.83%	20.76%	18.56%	18.83%	19.25%

NPL: Non-Performing Loan. CAR: Capital Adequacy Ratio

Source: China Banking Regulatory Commission “CBRC” (2013)

According to China Banking Regulatory Commission, foreign banks maintained presence in 59 cities of 27 provinces in China as of the end of 2012. That is 39 cities more than the number at the beginning of 2003 (China Banking Regulatory Commission “CBRC”, 2012).

**Table 8. Foreign banking establishments in China as of 2012**

	Foreign Banks	Wholly Foreign Owned Banks	Joint Venture Banks	Wholly Owned Companies	Foreign Finance	Total
Locally Incorporated Institutions (LII)	/	38	3	1		42
LII Branches and Subsidiaries	/	267	8	/		275
Foreign Bank Branches	95	/	/	/		95
Total	95	305	11	1		412

Source: China Banking Regulatory Commission “CBRC” (2013)



And in the 2011 survey, the 42 banks interviewed employ 34,166 people. In last year's study, the total was 29,739. The pool of survey participants is marginally different, but this change did not have a significant impact on the overall number of employees. The group of 42 banks plan to increase employment by 53% to 52,312 by 2014. The top six banks by employment size all have a retail presence. In alphabetical order they are The Bank of East Asia, Citibank, DBS Bank, Hang Seng Bank, HSBC and Standard Chartered Bank. This group has a combined total number of 23,900 staff. And it is estimated that the number will reach 36,700 by 2014 (Foreign banks in China, 2011).

## **A REVIEW ON THE RELATIONSHIP BETWEEN FINANCIAL & ECONOMIC GROWTH**

According to Laura et al (2013), the study of the relationship between financial development and economic growth can be traced back to Schumpeter in 1912, who argued that banks facilitate financial intermediation and promote economic growth by selecting those entrepreneurs with the most innovative and productive projects. Several decades later, in 1952, Robinson suggested instead that financial development passively follows growth: "Where enterprise leads, finance follows". Later, in 1955, Gurley and Shaw showed, without the use of modern statistical tools, that the development of the financial system has positive effects on the real economy, while Lewis in the same year argued that the relationship between financial development and economic growth runs in both directions. The modern empirical literature in this area developed in the 1990's, following King and Levine in 1993, who used data on 77 countries to analyze the effect of financial sector development on growth in real per capita GDP, the capital stock per person, and total productivity. They found consistent positive effects; for example, an increase of 4% in financial sector size led to 1% higher rate of economic growth.

Other studies generally found a positive effect of financial development on economic growth, however often depending on certain conditions. For example, in 2002, in a cross-sectional study, Rousseau found that the effect is significantly positive only when inflation is below 5-6%, with the largest effect taking place during periods of disinflation. Indeed, in 2003, as Levine pointed out, economists often had diverging positions regarding this relationship, from ignoring its existence altogether, to arguing that the role of finance has been exaggerated in the growth literature, to stating that the contribution of financial markets to financial growth is so obvious and it does not even warrant discussion. In 2004, Rioja and Valev suggested that the effects of financial development might be non-linear or dependent on exceeding certain thresholds. In their work, significant and positive effects are observed for countries situated in the middle and high range of financial development, but not as consistently for countries in the low range. In 2011, Rousseau found that in a panel study for 84 countries over the period 1960-2004, the relationship between financial deepening and growth may be weaker for developing countries and may have weakened more generally in the past decade.

## **BANKING SYSTEM AND CHINA'S ECONOMIC GROWTH**

Since the reform started, the degree to which loan growth has fuelled GDP growth is significant. The bank loan growth has been a driver of GDP growth in China. Between 2003 and 2012 China Banking Loans have grown by 16.8 % (see figure 8).

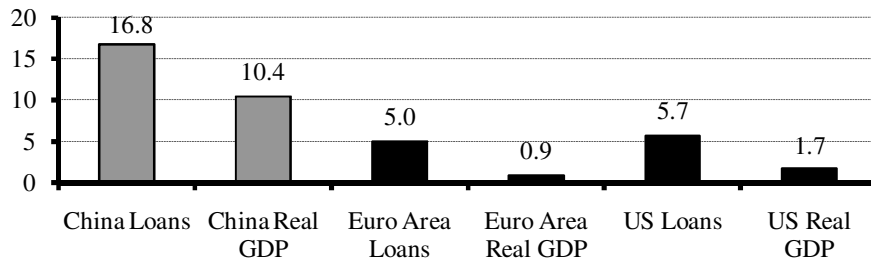


Figure 8. Bank Loan Growth Vs Real GDP 2003 – 2012 (%)

Source: Updated by authors based on collecting information from Central Banks data base of every area, 2013.

In This section we will try to examine the role of China’s banking system in supporting the growth of Chinese economy. Because it is very difficult to analyze all the indicators, we will focus on the most important: GDP, Unemployment Rate, and SME.

### China’s Banking System and GDP

In February 2013 report of "China: Shadow Banking: Road to Heightened Risk," Credit Suisse stated: China saw the biggest credit expansion relative to GDP over the past decade than any other country in modern history. China's M2 GDP ratio now stands at 187%, its gross capital formation GDP ratio at 48%, and its credit (based on total social financing) GDP ratio at 176% (Susan, 2013).

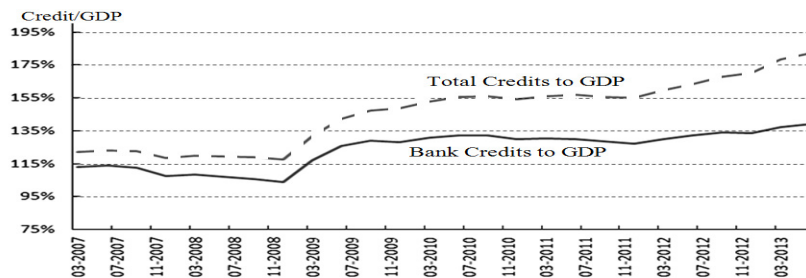


Figure 9. Credit/GDP Growth in China (2007/2013)

Source: Credit Suisse (2014)

On the one hand, measured by the size of banking sector relative to GDP, Chinese banking sector is very large. In 1999, Chinese banking sector’s total deposits as a share of GDP was 1.14, the ratio of total loans to GDP was 0.94, and the ratio of total assets of banking institutions (excluding central bank) to GDP was 1.33. These ratios in 2007 became 1.38, 0.93, and 1.87 respectively. As a comparison, according to the World Bank Financial structure Database, the median of the ratio of financial system deposits to GDP across countries in 2007 was 0.42, the 95% percentile 1.38; the median of the ratio of deposit money bank assets to GDP across the world in 2007 was 0.48 and the 95% percentile 1.79. Therefore, the size of Chinese banking sector relative to GDP in 2007 was at or above the 95% percentile across the world (Lin et al, 2012).

### China’s Banking System and Unemployment Rate

Since the beginning of the century, the Unemployment Rate in China averaged 4.14 % from 2002 until 2013, reaching an all time high of 4.30% in the second quarter of 2011 and a record low of 3.90 % in the third quarter of 2002 (see figure “10”).

(% of the labour force)

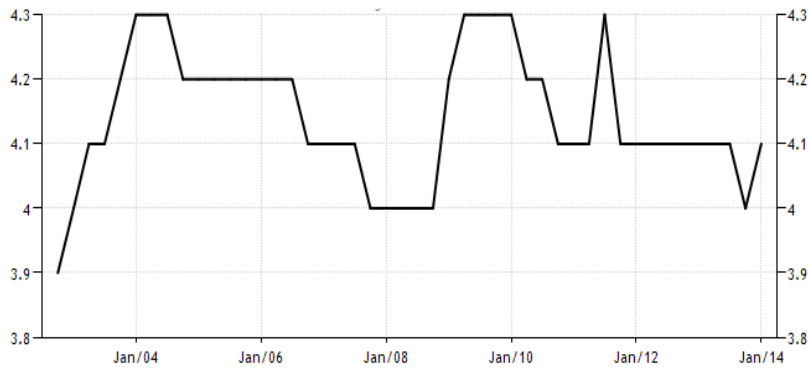


Figure 10. China's Unemployment Rate 2002/2014  
Source: Trading Economics (2014)

Many sectors have contributed to reduce the unemployment rate, the most important sectors was the financial sector (In general), and especially the banking sector. For example, at the end of 2013, the Industrial and Commercial Bank of China (ICBC) had 408,859 employees under payroll. In 2011, ICBC has organized 38,000 training sessions for 2.23 million employees (in terms of person-times).

In the same side, by the end of 2009, domestic and overseas branches of Bank of China totalled 10,961, including 9,988 branches in Chinese mainland and 973 overseas branches, with a total staff of 262,566 persons.

### China's Banking System and SME

Most SMEs in China came about in the last 15 years. With the opening up of China to market economy in the 1980s as part of the market-oriented reforms initiated by Chinese leader Deng Xiaoping, private SMEs were finally recognized as vital to the country's economic development (Liu, X., 2008). SMEs represent a major step towards an improved business environment and aim at promoting entrepreneurship, investments and growth. They are an essential source of jobs, create entrepreneurial spirit and innovation and are thus crucial for fostering competitiveness and employment (European commission, 2005).

Between 2008 and 2011 the number of small loan companies increased 7 fold. Quarterly data shows that over the past year and a half the industry has progressed rapidly in terms of both loans outstanding and number of companies (Nicholas, 2012).

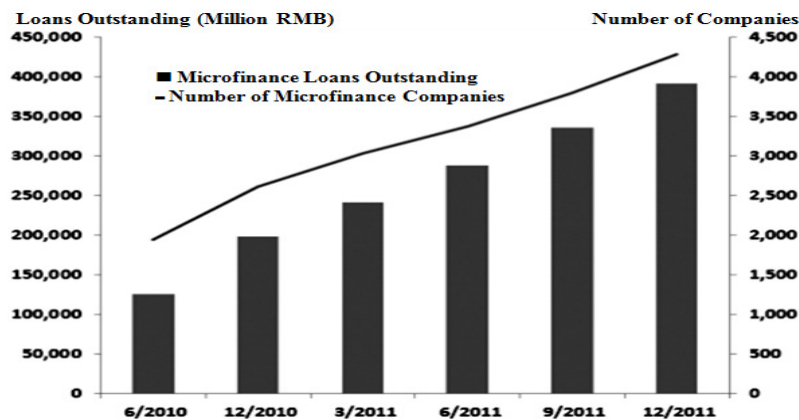


Figure 11. Loans and Number of SME in China (2010/2011)  
Source: Nicholas (2012)

Funding for small loan companies come primarily from 3 main sources: shareholders, loans from banks, and donations. The banks are the most important source. For example, Industrial and Commercial Bank (ICBC) has been named "Excellent SME Service Organization" by China Association of Small & Medium Enterprises ("CASME"). "Online revolving loans" was named "Unique Product in Small Business Financial Services by National Financial Institutions in the Banking Sector" by China Banking Regulatory Commission. At the end of 2011, 85,324 small business customers had loan balance with the Bank, representing an increase of 22,243 over end of the previous year.

## **CONCLUSION**

As a conclusion, we can say that China's Banking System played a very important role as one of its economic rise factors. The banking system has contributed a lot in improving the performance and the status of many of the indicators related to China's development. The unemployment rates had reduced fewer than 4% in cause of the large employment policy of the banks through its subsidiaries, as well as through loans granted by the institutions and employees in the market.

On the other hand, banks have played a major role in supporting development in China through financing different sectors such as: funding small and medium enterprises, at the same time financing institutions and through financing international trade.

But, this optimistic image, however, may be changed. According to many studies China's banking industry is facing three major problems:

1. Over dependence on the banking sector for financing,
2. Serious non-performing assets in the banking industry,
3. Poor corporate governance and management.

Those problems can be problematic for the future studies to address the role of developing China's banking system. As well, it reduces the size of the signatures on optimism about the Chinese economic growth rates.

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