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The impacts of competition and shadow banking on profitability: Evidence from the Chinese banking industry

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ABSTRACT

This paper contributes to the empirical literature on banking profitability by testing the impacts of competition and shadow banking on bank profitability using a sample of 100 Chinese commercial banks over 2003–2013 with 417 and 395 observations. The current study fills the gaps in the empirical studies by examining the competition in different banking markets (i.e. deposit market, loan market and non-interest income market) in China and further evaluating their impacts on bank profitability. The findings show that the non-interest income market has a higher level of competition compared to the deposit market and loan market. It is further reported that a lower level of competition in deposit market leads to an increase in the profitability of Chinese commercial banks. Finally, the results suggest that shadow banking improves the profitability of Chinese banks.

1. Introduction

The Chinese government has initiated several rounds of banking reforms since 1978. The main purpose of these banking reforms has been to increase competitive conditions, enhance stability and improve the performance of the Chinese banking sector (Tan, 2016b). The main purpose of these banking reforms has been to increase competitive conditions, enhance stability and improve the performance of the Chinese banking sector. With regards to the competitive condition in the Chinese banking industry, it is noticed that the state-owned commercial banks (SOCBs)[1] still dominate the industry. However, according to statistics from the China Banking Regulatory Commission (CBRC), the share of SOCB assets in total banking sector assets decreased between 2003 and 2013 to a low point of 43.3%. On the other hand, the joint-stock commercial banks (JSCBs) and city commercial banks (CCBs) have kept increasing in size and in 2013 they held 17.8% and 10.03% of total banking sector assets. Therefore, this statistic shows that the competitive condition is still quite low given that the five largest banks hold more than 40% of total banking sector assets. Fig. 1 summarises the assets of SOCBs, JSCBs, CCBs and total banking institutions in China over the period 2003–2013.

In order to improve the competitive conditions in the deposit market and the loan market, the Central Bank of China (the Peoples' Bank of China) had made efforts to liberalise the interest rate since 1996. From 20th July 2013 and 23rd October 2015, the loan interest rate, as well as the deposit interest rate in China, had been liberalized. The process of interest rate

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[1] There are five state-owned commercial banks in China now, including Bank of China, Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China and Bank of Communication.

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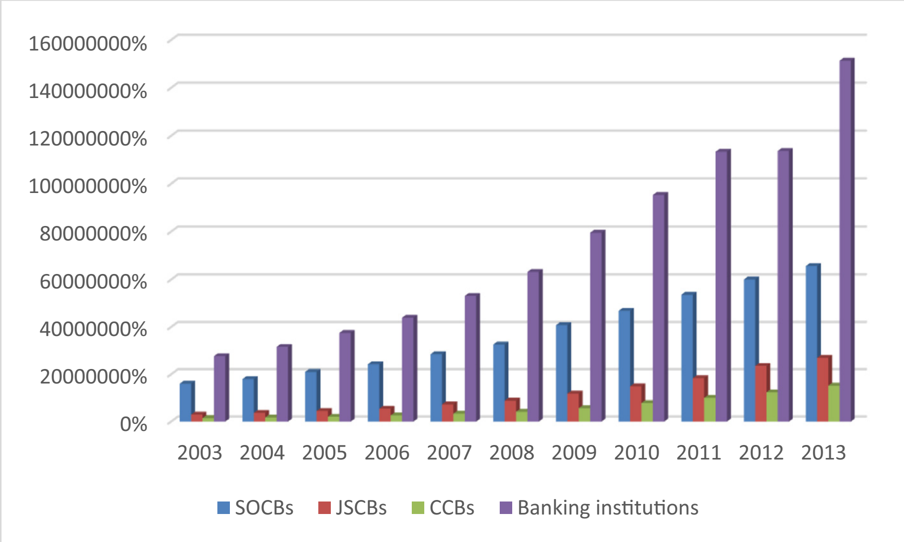

Fig. 1. Summary of the assets of SOCBs, JSCBs, CCBs and total banking institutions in China over the period 2003–2013.

liberalisation in these two different markets is supposed to have an impact on their competitive conditions. In the Chinese banking industry, the traditional interest generating activities still contribute to the largest proportion of bank income; however, interest generating activities are affected significantly by economic cycles as well as by credit risk. Thus, the Chinese commercial banks have sought to further develop the non-interest generating businesses, which can not only reduce bank risk, but also significantly promote bank profitability. The effectiveness of interest rate liberalisation, in other words, the impact of interest rate liberalisation on the competitive conditions in the deposit market, the loan market, as well as the non-interest income market in China, has been a concern not only for the Chinese government and banking regulatory authorities in China, but should also be investigated by academic researchers in order to provide evidence with regard to the effectiveness of Chinese financial reforms. In addition, a piece of academic research should be pioneered to test the impact of competition in different banking markets on bank profitability. The evaluation of this issue will provide information to the Chinese government and banking regulatory authorities to assist them in making relevant policies to improve bank profitability in China.

Although the financial reform in China, as characterised by the interest rate liberalisation, is supposed to increase the competitive conditions in different banking markets in China, because of the specific and special characteristics of the Chinese banking industry, the banking sector still allocates the credits (providing loan services) focusing on large or state-owned enterprises and the medium and small size enterprises find obtaining loans difficult, and thus, it is very difficult for them to be competitive and survive in the market. This biased treatment to the micro, small and medium-sized enterprises has a significant and negative impact on Chinese economic growth. Elliott, Kroeber, and Qiao (2015) report that the small and medium-sized enterprises in China provided 70% of employment in 2012 and 60% of China's GDP is attributed to the contribution from the small and medium-sized enterprises, although they received just 30% of bank loans. Because of the strong government intervention, the SOCBs mainly engage in providing credits to large state-owned enterprises. In comparison, JSCBs are more actively engaged in providing funds to small and medium enterprises. This is mainly attributed to the liberalised environment and less government intervention. In particular, the CCBs, because of their size, are locked out of state-owned enterprises lending and focus their lending on city level infrastructure construction, as well as private sector lending.

As indicated previously, although some JSCBs and CCBs are engaged in private sector lending, small and medium-sized enterprise in China can only receive a very small percentage of credit allocated by commercial banks. Most of the funds for small and medium-sized enterprises are from shadow banking[2]. Table 1 shows the size and composition of China's shadow banking over the period 2003–2013 (Elliott *et al.* 2015). The table shows that the percentage of shadow banking in GDP over the examined period kept increasing, in other words, the shadow banking is becoming more and more important in China. In comparison, the ratio of domestic credit provided to the private sector by banks over GDP is used as the measurement of size of traditional banking, which is shown by the last column of the table. It is shown that, although the figures are significantly larger than the ones for shadow banking, traditional banking had undergone strong volatility over the period. As an alternative method to receive funds besides the credits granted by commercial banks, shadow banking is supposed to have a significant impact on the operation and performance of commercial banks. On the one hand, shadow banking takes away businesses from small and medium enterprises, the resultant reduction in the volumes of businesses engaged in by commercial banks is supposed to decrease

[2] The Financial Stability Board. Global Shadow Banking Monitoring Report (2013) defines shadow banking as credit intermediation involving entities and activities outside the regular banking system.