Research on the Current Situation of Banking Competition in Beijing-Tianjin-Hebei Rural Area

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Abstract: The banking industry, as the core of finance, the competition behavior will produce various economic benefits. Therefore, it is particularly important to study the level of banking competition in a certain place. Beijing-tianjin-hebei region, located in the North China Plain, has a superior geographical environment. In 2006, the number of banking outlets in the Beijing-Tianjin-Hebei rural areas was 3,138, but in 2021, the number reached 10,474, with an average annual growth rate of 8.37%. This paper finds that the competition level of county banking industry in Beijing-Tianjin-Hebei region is increasing year by year, but the growth rate is decreasing year by year.

Keywords: Bank competition; Beijing-Tianjin-Hebei region; Rural economy

1. Introduction

China has been a big agricultural country since ancient times, and a solid agricultural foundation is the basic material guarantee for the continuation of the Chinese nation. With the reform and opening up, China's agriculture has made great development. However, compared with urban areas, the development of rural areas lags behind. One of the important reasons is the absence of banks and other financial institutions. In the late 1990s, with the market-oriented reform of state-owned commercial banks, large commercial banks have shrunk rural branches and cut down rural business, resulting in the phenomenon of "vacancy" of rural financial institutions, followed by the weakening of competition in rural financial institutions. As a result, rural credit institutions (including rural credit cooperatives, rural cooperative banks and rural commercial banks) are in a relatively "monopoly" position in the rural financial supply market (Ma et al., 2021). However, with the increasing attention of the state to rural issues and the rapid development of rural itself, the rural financial environment is more and more suitable for the development of commercial banks. In 2006, the former China Banking Regulatory Commission (CBRC) began to adjust and relax the access policy of banking financial institutions in rural areas, and encouraged rural banks and other new rural financial institutions to be set up in areas below county (city) and county (city) levels, hoping to inject vitality into the rural financial market by increasing the number of financial institutions in rural areas. Around 2010, large commercial banks also returned rural and began to deploy rural services.

2. Literature review

As for the economic benefits of banking competition, scholars have not reached a unified conclusion. Some scholars believe that the intensification of banking competition will weaken credit rationing and stimulate economic development. Some scholars also believe that competition will break the long-term customer relationship between banks and customers, weaken banks' ability to identify customers, and increase banks' own operational risks, which is not conducive to economic development. Some scholars have also found that different degrees of competition in the banking industry will also have different effects. Ximei Li (2013) found that there was a significant positive correlation between bank competition and regional economic development. However, in Japan, where the financial industry is developed, fierce banking competition undermines the financial stability within the Japanese system and inhibits economic development (ojima, 2019). Some scholars have also found that there is a U-shaped relationship between banking competition and economic stability. a higher level of bank competition promotes macroeconomic stability, There is an optimal level of bank competition beyond which it may foster economic and financial instability(Habib Hussain Khan,2022).

3. Research design

3.1 Index construction method

At present, there are mainly two analytical frameworks for the measurement of competition level in banking industry. One is structural analysis framework, which is generally measured by market concentration, market share, entry barriers and other indicators; the other is unstructured analysis framework, which is generally tested by PR model, Bresnahan model and Iwata model. The construction of the unstructured analysis framework requires a large amount of internal bank data, which is difficult for the banks in the county region to achieve, and its construction method is subjective and limited (Defa Lin, 2018). In this paper, the structural analysis framework will be used to measure the competition level of banks, and the selected index is the Herfindahl-Hirschmann index. Many scholars have used this index to measure the level of bank competition. Moreover, there is a strong stickiness between banking and financial institutions and residents in the county, so this index can more objectively reflect the current situation of competition in the county.

3.2 Index Construction

Referring to previous research literature, this paper selects three dimensions: bank penetration, bank service availability and bank system usage. Bank penetration includes two sub-indexes: Geographic branch penetration and Demographic branch penetration; bank service availability includes two sub-indexes: savings deposit per capita and loan per capita; and the bank system usage includes two sub-indexes: saving rate and deposit rate Loan–income ratio and Deposit–income ratio. Coefficient of variation method was used to determine the weight of two sub-indexes in the same dimension, and the data of this dimension was synthesized. Then, coefficient of variation method was also used to determine the weight between each dimension, and the Herfindahl-Hirschmann index was synthesized.

3.3 Data Sources

The data used in this study mainly come from the financial license information data on the official website of CBRC. The specific data processing is as follows: The number of bank financial institutions approved to be established in a certain year in a district or county, minus the number of bank financial institutions withdrawn in the current year, shall be taken as the total number of bank financial institutions in the region in the current year. This paper classifies the number of branches of banking financial institutions in counties from 2010 to 2019. In addition, this paper selects 127 counties in the Beijing-Tianjin-Hebei region as the research objects.

4. Statistical analysis

Chart 1 2010-2019 year the number of banking outlets in the Beijing‑Tianjin‑Hebei rural areas

Chart 2　2010-2019 year the number of various types of banks in the Beijing-Tianjin-Hebei County area
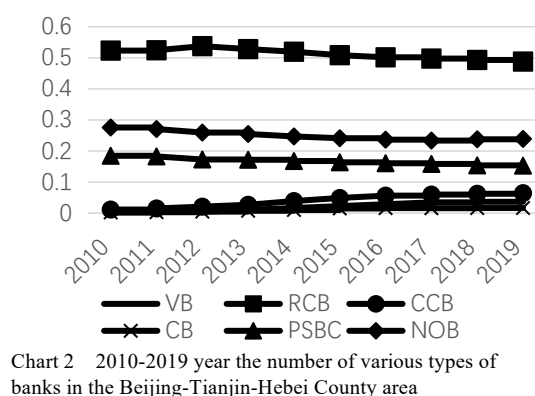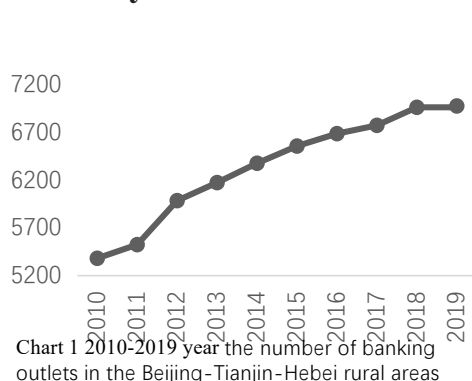
Chart 1 and Chart 2 intuitively reflect the changing trend of the distribution of banks in Beijing-Tianjin-Hebei counties from 2010 to 2019,　Chart 1 shows that the overall number of banks is increasing, but at a slower rate over time. In Chart 2, VB represents Village banks, RCB stands for Rural Commercial Bank, CCB stands for City commercial bank, CB stands for national commercial bank, and PSBC stands for Postal Savings Bank of China, and NOB represents state-owned bank (Including Industrial and Commercial Bank of China, China Construction Bank, Bank of China, Agricultural Bank of China and Bank of Communications). It can be seen from the chart that the largest number of banks in the Beijing-Tianjin-Hebei county area are rural commercial banks, which account for about 50% in the past ten years, followed by postal savings banks and state-owned banks, which account for about 20% of the total. The number of city commercial banks, national commercial banks and rural banks is small, accounting for less than 10%. However, the proportion of city commercial banks, national commercial banks and village banks that account for a relatively small proportion in the total number of banks is slowly increasing, which account

for a relatively small proportion, is slowly rising in all banks, while the proportion of rural commercial banks, postal savings banks and the state-owned banks, which account for a relatively large proportion, is gradually declining. This has a lot to do with China gradually relaxing the non-local access management policy of banking industry and encouraging the development of small and medium-sized financial institutions such as rural banks after 2010. In order to clearly show the changes in the competition level of county banking industry in the Beijing-Tianjin-Hebei region from 2010 to 2019, this paper draws the competition map of county banking industry in each year with the help of ArcGIS software (limited by space, this paper will not show it). The level of county banking competition in the Beijing-Tianjin-Hebei region is increasing year by year, but the growth rate is decreasing year by year.

5. Conclusions and suggestions

Through analysis, this paper finds that from 2010 to 2019, the number of banking financial institutions in the Beijing-Tianjin-Hebei region increased year by year, and the degree of competition increased year by year. In addition, the proportion of city commercial banks, national commercial banks and village banks is slowly rising, while the proportion of rural commercial banks, postal savings banks and the state-owned banks is gradually declining.

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