



The neighborhood effects of provincial-level stock market participation in China[☆]

Zhifeng Liu, Tingting Zhang*, Wenquan Li, Xiong Kuang

School of Economics and Management, Hainan University, Haikou 570228, China

HIGHLIGHTS

- We study the neighborhood effects of provincial-level stock market participation in China.
- We find that participation behaviors of bordering provinces can affect each other directly and indirectly.
- Per capita GDP has a significantly positive effect on stock market participation.
- Net population inflow has a significantly negative effect on stock market participation.

ARTICLE INFO

Article history:

Received 7 February 2018

Received in revised form 22 May 2018

Available online xxxx

Keywords:

Stock market participation

Neighborhood effect

Spatial spillover

Peer effect

Social interaction

ABSTRACT

In this paper, different from the previous studies starting from the micro perspective, we address the key question on the neighborhood effects of provincial-level stock market participation in China. By choosing two different measures of participation behaviors, we have found that there exists provincial imbalance in China. Further, by using the spatial panel data models, we investigate the spatial spillover effect of stock market participation between neighboring provinces, and find that participation behaviors of bordering provinces can affect each other directly and indirectly. We also consider some effects from the explanatory variables and find that, (1) per capita GDP has a significantly positive effect on stock market participation; (2) net population inflow has a significantly negative effect.

© 2018 Elsevier B.V. All rights reserved.

1. Introduction

In past years, Chinese stock market gets a rapid development and more and more people begin to invest in stocks. By the end of the year 2014, reported by China Securities Depository and Clearing Corporation Limited (CSDC), there are more than 180 million of equity accounts in China, about 80 percent of which are in active use. Just in the year 2014, more than 9.5 million new accounts are opened to make people involved in stock market. However, considering the huge amount of China's population, there are only a little bit more than ten percent participating in the market, which indicating a serious “stock market participation puzzle”.

More than that, there also exists a serious regional imbalance, which leads to an extreme low participation rate in remote areas of China. We choose two measures to display the provincial imbalance of stock market participation in

[☆] This research was supported by the National Natural Science Foundation of China (71662009, 71463012), the Natural Science Foundation of Hainan Province, China (718QN221, 20167242), the Colleges and Universities Scientific Research Projects of the Education Department of Hainan Province, China (Hnky2016-7), the Project of Philosophy and Social Science of Hainan Province (HNSK(YB)17-4), the Youth Fund of Hainan University (qnjj1507), and the Scientific Research Foundation of Hainan University (kyqd1634, kyqd(sk)1809).

* Corresponding author.

E-mail address: mailto:zt@126.com (T. Zhang).

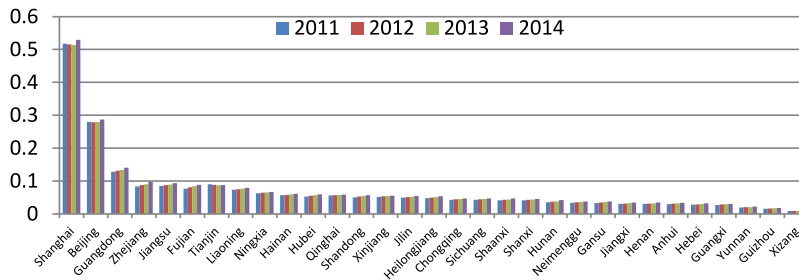


Fig. 1. Provincial stock market participation rate through time.

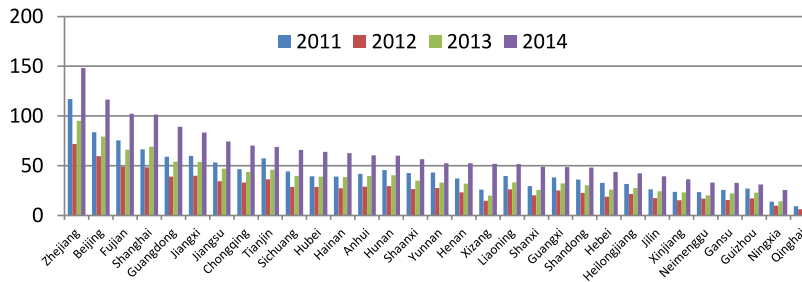


Fig. 2. Provincial average trading amount of stock market participation through time.

China. One is the participation rate of each province, which is shown in Fig. 1. After sorting, we can see that some provinces have a much higher participation rate, especially Shanghai and Beijing, while some provinces have a very low rate, such as Xizang and Guizhou. The other measure is the provincial average trading amount. As shown in Fig. 2, there are also tremendous differences between the highest and the lowest values. And more accurately, the average trading amount in Zhejiang is about nine times higher than that in Qinghai. In general, regardless of which measure we use, participation imbalance is clearly there and it results to a more unexpected non-participation behavior in stock market.

Not only is there the regional disparity of stock market participation, but there is also a phenomenon of spatial clustering. These clustering trends are revealed in Figs. 3 and 4.

Fig. 3 shows spatial variation in the proportion of stock market participation among the total population in provinces, where high proportion clusters are marked by the darkest shade, and a lighter shade represents a lower participation rate. As we can see, the proportion varies hugely across provinces in China, from a high of 52.94 percent in Shanghai to a low of 0.91 percent in Xizang. The highest proportions of participation are distributed in the eastern provinces; while, besides Xizang, the lowest proportions are more generally found in the southwestern provinces. Other regions with moderate proportions are mainly located in the middle, northwest, and northeast of China. Generally speaking, regions with high/medium/low participation rate are surrounded by similar regions. That is to say, it seems that there exists a phenomenon of spatial participation clustering on provincial level in China.

Fig. 4 visualizes local spatial clusters of average amount of stock market participation among the total population between given province and its neighbors. Average amount with lowest value in Qinghai province is only 16.54, which is about one ninth of the highest value in Zhejiang (148.14). Similar as above, provinces where people trade with a high amount in stock market are mainly lie on the east coast of China. However, there are some differences between the two cases when considering the spatial distribution of medium/low trading amount. The northwestern provinces with a relatively moderate participation rate have the lowest average trading amounts, while in the southwestern provinces except Guizhou, with the lowest participation proportion, people are trading with medium amounts.

From the above two figures, we can preliminarily conclude that there exists a locational similarity of the provincial stock market participation behaviors, no matter measured by rate or amount. In other words, a province with high/medium/low value of participation rate or amount tends to be surrounded by its neighbors with very similar values, which can be usually thought as a positive spatial autocorrelation between these behaviors.

This paper tries to add some contributions to the existing literature: First, besides adopting the traditional measure, we enrich the description of stock participation behaviors by exploring a novel variable – average trading amount – to measure investors’ behaviors after their entry. Second, we investigate the neighborhood effects of stock market participation at the provincial level, expanding our knowledge of how geographic distance affects people’s stock participation behaviors. Third, considering some explanatory variables, we find the facts that to be both expected and unexpected, and interpretations are provided.

Download English Version:

<https://daneshyari.com/en/article/7374719>

Download Persian Version:

<https://daneshyari.com/article/7374719>

[Daneshyari.com](https://daneshyari.com)