

How agglomeration in the financial services industry influences economic growth: evidence from Chinese cities

Referee report

The paper focuses on the relationship between agglomeration in China's financial service industry and regional economic growth. The issue is very popular in economic literature and is particularly relevant for the Chinese economy. However, in my opinion the paper fails to address the main problem of the finance-growth literature, namely the causality issue. It is well known that the close association between financial system size and growth does not identify the direction of causality. Empirical literature tackled this problem in several ways: instrumental variables, panel data, time-series techniques using Granger-type causality test and Vector Auto Regressive (VAR) procedures. Neither these techniques are cited in the paper; nor are they used. Authors uses a simple cross-section of 279 prefecture-level cities belonging to China's 25 provinces in 2011. Therefore, in the best case their results are simple correlations.

The paper is extremely concise; however, sometimes it is difficult to follow for a reader. Firstly, authors state that the research question of the paper is to find a relationship between agglomeration and growth. However, they focus their attention on the knowledge and Jacobs spillovers without explaining the relationship of such spillovers with both agglomeration and economic growth. I guess the basic idea is that agglomeration promote knowledge spillovers and these, in turn, spur economic growth. I argue, looking at the equations 5.1 and 5.2, that authors hypothesis both a direct and an indirect (through financial knowledge spillovers) effect of agglomeration on city's GDP. Unfortunately, this mechanism is not explained and I am not sure my argument is correct.

Secondly, I don't understand how is the agglomeration (CFAG) index built. Authors state they use an analytic hierarchy process in order to determine the weight of each index reported in Table 1, and the Weaver index method to calculate the sequence and key elements of the different indexes. However, nothing more is then reported. Moreover, I have serious doubts about the indicators used to build the agglomeration index. The agglomeration describes the tendency of the economic activities to concentrate in the space. Deposit-income ratio and loan-to-deposit ratios (for example) are both related to the financial deepening of each provinces but not necessarily to the physical agglomeration of the financial industry.

Thirdly, I don't understand how the specialization index (CSPE) should be able to capture financial knowledge spillovers. It is well known in literature that knowledge spillovers are difficult to measure. However, the specialization of a city in the financial industry, in terms of share of employment, cannot be considered an externality of agglomeration. Therefore, considering the two indexes, it seems to me that CSPE can be

a proxy of agglomeration and CFAG a proxy of financial spillovers. It is exactly the opposite of what argued by the authors.

In conclusion, I would be very careful with policy implication. I believe that reducing government financial regulation is a very important step to promote the financial services industry. However, results shown by the authors are only based on the negative sign of SPE, the specialization index that is identified as a proxy of financial spillovers.