

Extended Abstract

Paper/Poster Title	A Study of the Impact of Agricultural Industry Agglomeration on the Agricultural Economic Resilience
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Abstract	200 words max
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Improving the resilience of agricultural economy is very important for alleviating external negative effects such as natural disasters and public social unrest. However, the scattered production of small farmers in China limits the agricultural economic resilience. Raising the degree of agricultural industrial agglomeration can effectively improve this dilemma. The reason is that industrial agglomeration leads to the concentration of production factors, which is conducive to the horizontal and vertical integration of agricultural industrial chain. Faster information exchange and more efficient production facilities are conducive to improving the efficiency and risk resistance of agricultural production, thus enhancing the resilience of agricultural economy. Taking 77 cities in the Yangtze River basin from 2004 to 2021 as sample areas, this paper analyzes the influence of agricultural industrial agglomeration on agricultural economic elasticity by using fixed effect, intermediary effect and spatial Dubin model. The results show that agricultural industrial agglomeration significantly improves agricultural economic elasticity, and agricultural technical efficiency is an mechanism. In addition, agricultural industrial agglomeration has spatial spillover effect on improving agricultural economic elasticity. The decomposition analysis shows that agricultural industrial agglomeration can improve the resilience of low-agglomeration cities better, but it can not improve the resilience of agricultural basic cities.

Keywords	Agricultural industrial agglomeration; agricultural economic resilience; agricultural technological progress; agricultural technological efficiency
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JEL Code	Panel Data Models C23; Industrial Structure and Structural Change L16; Macroeconomic Analyses of Economic Development O11; Agriculture Economy Q10
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Introduction	100 – 250 words
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Increasing the resilience of the agricultural economy is critical to mitigating shocks caused by external uncertainties, such as natural disasters, pests and diseases, and public social unrest. However, the fragmented and inefficient production of smallholder farmers in China limits the increase in the resilience of the agricultural economy. Increasing agricultural industrial agglomeration is an effective way to improve agricultural economic resilience. The reason is that industrial agglomeration leads to the concentration of factors of production, which facilitates horizontal and vertical integration in the agricultural chain. More rapid information exchange and more efficient production facilities are conducive to improving the efficiency and risk-resistance of agricultural production, thus contributing to the resilience of the agricultural economy. This study will analyze the impact of agricultural industrial



agglomeration on agricultural economic elasticity and its mechanism.	
Methodology	100 – 250 words
<p>The dependent variable of this study is agricultural economic resilience. We choose the added value of agricultural industry as the basic variable of agricultural economic resilience, and measure its sensitivity index to measure the agricultural economic resilience of cities. The independent variable of this study is agricultural industrial agglomeration, and we choose the agricultural location entropy index method to measure it. In addition, we use the double fixed effect model to explore the impact of agricultural industrial agglomeration on agricultural economic resilience. The spatial effect of agricultural industrial agglomeration on agricultural economic resilience is explored by using spatial Dobbin model.</p>	
Results	100 – 250 words
<p>The results show that agricultural industrial agglomeration significantly improves agricultural economic resilience and that agricultural technical efficiency is an important mechanism. In addition, the agricultural industrial agglomeration has a spatial spillover effect on improving agricultural economic resilience, which is conducive to advancing agricultural economic resilience in neighboring regions. Disaggregated analysis shows that the improvement effect of agricultural industry agglomeration on cities with a high degree of agglomeration is weaker than that on cities with a low degree of agglomeration, and the improvement effect on agricultural economic resilience of agricultural base cities is relatively weak.</p>	
Discussion and Conclusion	100 – 250 words
<p>Our study emphasizes the positive effects of agro-industrial agglomeration on the resilience of the agricultural economy. We also make some policy recommendations. First, strengthen the infrastructure and guidance policies required for industrial agglomeration, and actively promote the scale and intensification of agricultural production and operation to form a high-level agglomeration economy in the agricultural industry. Second, promote agricultural technological innovation, increase the subsidies for agricultural technological innovation, increase the number of agricultural technology extension institutions, and improve the frequency and quality of agricultural machinery extension, in order to incentivize technological innovation and increase the rate of scientific and technological transformation. Thirdly, based on the advantages of different regions, formulate industrial agglomeration policies applicable to different regions. At the same time, taking into account the spatial spillover effect of industrial agglomeration, the higher-level government should consider the possible mutual influence of the neighboring regions when planning the development of each region, so as to realize the overall optimal effect of industrial agglomeration.</p>	