

Mechanisms of influence of convention and exhibition agglomeration and information agglomeration on rural industrial prosperity

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Abstract: In the current economic transformation period, rural industrial development has become one of the important issues. And since the end of the epidemic, the rural exhibition has regained its vitality while showing a booming development trend. The development of rural industry is one of the key links to realise the integrated development of urban and rural areas, which helps to promote the farmers' income and the smooth implementation of the strategy of rural revitalisation. Therefore, as important factors in rural industrial development, convention and exhibition clustering and information clustering have potential impacts on promoting the prosperity of rural economy. This study uses three methods of descriptive statistics, regression analysis and hypothesis testing to empirically analyse the data. By collecting relevant data and conducting statistical analysis, the results show that exhibition agglomeration plays a significant role in promoting the prosperity of rural industries. Meanwhile, information agglomeration plays an intermediary role in it, which further strengthens the relationship between convention and exhibition agglomeration and rural industrial prosperity.

Keywords: rural revitalisation; convention and exhibition agglomeration; industrial prosperity; information agglomeration; industrial agglomeration

1. Research background

As a new path explored in rural revitalisation, rural exhibition organizes all kinds of market main bodies to participate in it in the form of conference and exhibition, gathers information flow in a short period of time, maximizes the advantage of information gathering effect, provides consumers and purchasers with information on agricultural products, provides trading platforms for buyers and sellers, and facilitates transactions, so as to enable supply and demand sides to obtain business opportunities and economic development. The epidemic hit the conference and exhibition economy hard. The epidemic hit the exhibition economy hard, but since the end of the epidemic in 2023, the number of rural exhibitions held has risen sharply, exhibitions have spawned the rapid development of the rural economy, and the national and social recognition of rural exhibitions has increased significantly, and it is clearly stated in the Exhibition Plan of the Ministry of Agriculture and Rural Affairs of 2022 that China's agricultural and rural exhibitions can boost the development of China's agricultural and rural economy.

2. Research hypotheses

2.1 Rural Exhibition and Industrial Prosperity

H1a: Degree of agglomeration has a positive effect on rural industrial prosperity

H1b: Human resources have a positive effect on rural industrial prosperity

H1c: Infrastructure has a positive effect on rural industrial prosperity

2.2 Information Agglomeration and Industrial Prosperity

H2a: Information agglomeration plays a mediating role in the influence of the degree of agglomeration on the prosperity of rural industries.

H2b: Information agglomeration plays a mediating role in the influence of human resources on the prosperity of rural industries.

H2c: Information agglomeration mediates the effect of infrastructure on the prosperity of rural industries.

3. Results and Analyses

3.1 Regression analysis

The following table gives the results of the benchmark regression. Among them, the regression coefficients of the degree of agglomeration, infrastructure, and human resources are significant at the 1 per cent level, indicating that all three contribute to the promotion of industrial prosperity, verifying the basic hypothesis of this paper.

Table 1 Analysis results of exhibition agglomeration and rural industry prosperity

Prosperous industry	Regression coefficient value	Standard error	T	P	R square	Adjusted R square	F
Concentration degree	10.635	9.319	3.140	0.000	0.307	0.406	100.345
infrastructure	13.259	10.963	5.210	0.000			
Human resources	0.290	1.523	6.190	0.000			
Constant term	35.223	28.356	7.240	0.000			

3.2 Analysis of mediating effect

The following table gives the mediation effect test table based on information aggregation and convention clustering. Among them, it can be seen that, no matter which path, the distribution of 95% Boot CI interval value does not contain 0, that is, there is a significant mediation effect, which verifies the basic hypothesis of this paper.

Table 2 Intermediate effect test table

path	Effect size	S.E.	bias-corrected-95%CI		direct effect	Type of intermediary effect
			Lower	Upper		
Path 1: Agglomeration degree - information agglomeration - rural industry flourishing	0.033	0.038	0.001	0.067	0.463***	Partial mediation
Path 2: Human resources - information agglomeration - rural industry flourishing	0.045	0.078	0.002	0.056	0.762***	Partial mediation
Path 3: Infrastructure - information agglomeration - rural industry prosperity	0.037	0.036	0.005	0.068	0.542***	Partial mediation

3.3 Test of the impact of the degree of exhibition concentration on industrial prosperity

From the model, it can be obtained that the regression coefficients of the degree of agglomeration are all positive, indicating that the more concentrated the information the more prosperous the rural industry in the region. Among them, the role of exhibition agglomeration on the prosperity of rural industries is highly correlated, and the higher the degree of information concentration the more prosperous the rural industries in the region. In addition, from the regression results of control variables, the coefficients of foreign direct investment (fdi) are highly positive; the coefficients of industrial structure (tir) are significantly positive; and the coefficients of financial input (afi) are significantly positive.

Table 3 Influence of convention and exhibition agglomeration on rural industry prosperity

	(1) model 1	(2) model 2	(3) model 3	(4) model 4	(5) model 5
eia	0.114** (2.38)		0.050 (1.85)	0.121 (1.52)	0.128 (1.41)
dia		0.466*** (5.78)	0.396*** (4.96)		1.772 (0.30)
fdi				0.020 (0.09)	0.018 (0.07)
tir				10.407 (0.86)	12.704 (0.82)
afi				1.682 (1.09)	3.423 (0.57)
_cons	6.283*** (23.33)	0.372 (0.41)	1.441 (1.46)	4.558 (0.49)	1.753 (0.13)

N	10	10	10	10	10
R-Square	0.415	0.807	0.870	0.892	0.894
Adj.R-Square	0.34	0.78	0.83	0.81	0.76

3.4 Summary of hypothesis testing

To sum up, the hypothesis testing in this paper is shown in the following table:

Hypothesis testing	result
H1a: The degree of agglomeration has a positive impact on the prosperity of rural industry	Set up
H1b: Human resources have a positive impact on the prosperity of rural industries	Set up
H1c: Infrastructure has a positive impact on rural industrial prosperity	Set up
H2a: Information agglomeration plays a mediating role in the influence of agglomeration degree on rural industrial prosperity	Set up
H2b: Information agglomeration plays a mediating role in the influence of human resources on rural industrial prosperity	Set up
H2c: Information agglomeration plays a mediating role in the impact of infrastructure on rural industrial prosperity	Set up

4. Research Conclusion

4.1 Convention and Exhibition Clustering is Positively Correlated with Rural Industry Prosperity

First of all, the aggregation characteristics of convention and exhibition make it an important economic, communication and innovation platform, promote the aggregation of resources and information, promote the exchange and cooperation of the industry, and promote the development of economy and society.

For a long time, the dividends brought by convention and exhibition agglomeration can greatly promote the prosperity of rural industries. And in this study, we adopt the factor steady growth as the index to measure the prosperity of rural industry, i.e., we set the amount of steady economic growth and the growth of per capita income to measure the degree and size of the prosperity of rural industry. In the process of convention and exhibition agglomeration, it can achieve a comprehensive improvement from traffic-brand-industry-industry economy. Rural exhibition clustering is a huge project that includes policy orientation, capital participation, planning and design, and risk assessment. As pointed out in the Fifth China Rural Revitalisation Strategy Promotion Conference, the purpose of convention and exhibition agglomeration is to promote the prosperity of rural industry, which needs to increase the support of the government and strongly integrate the resources; needs to increase the strength of branding; and needs to innovate the mode and improve the series of supporting services. In such an environment, a benign loop is formed from the government to enterprises and then to consumers. Therefore, we conclude that convention and exhibition clustering is positively related to the prosperity of rural industries.

4.2 Convention and exhibition agglomeration indirectly affects rural industrial prosperity through information agglomeration.

Firstly, convention and exhibition clustering not only provides a platform for the rural industry to pass on and share information, but also provides an opportunity for the rural industry to display and promote its products. Through the organisation of events, experts, scholars, entrepreneurs and government representatives from various fields are brought together to share experience, exchange technology and discuss cooperation. This helps transfer advanced science and technology, management experience and market information to rural industries and helps them expand their market share.

Secondly, convention and exhibition clustering can also be a window for rural industries to attract external investment and promote talent cultivation and exchange in rural industries. It attracts domestic and foreign investors and enterprises to come to visit and negotiate cooperation by holding them, and sends professional talents and innovative teams to the rural industry. This not only brings financial support, but also introduces new technology, new products and new markets, and enhances the development level of rural industry.

To sum up, convention and exhibition agglomeration indirectly affects the prosperous development of rural industry through information agglomeration. It helps to promote the integration of rural industries into the modern economic system through information transfer and sharing, investment attraction, marketing promotion and talent training and exchange.

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