

# Research on the Impact of New Urbanization and Financial Support System Leading by Internet Entrepreneurship

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**Abstract:** Finance is the "lifeline" of the modern economy. New urbanization has brought about major changes in China's population, economy and society. Financial support and innovation are the boosters of these changes, and entrepreneurial employment is the cornerstone of new urbanization. Based on the relevant statistical data from 2006 to 2016, this paper uses the entropy method to evaluate the new urbanization, financial support and Internet entrepreneurial comprehensive indicators, and constructs a VAR model to empirically analyze the interaction mechanism of the three. Based on the empirical results, this paper proposes The path to innovation in the financial support system.

**Keywords:** new urbanization; Internet +; Internet; entrepreneurship; Financial support system Innovation

## 1. Introduction

With the rapid development of the economy, more and more farmers choose to enter the city. According to statistics from the National Bureau of Statistics, the proportion of urbanized population in China has increased from 44.34% in 2006 to 58.52% in 2017 (Figure 1). However, the urbanization rate in China is based on the resident population of urban areas. If the degree of urban household registration has been obtained, the level of urbanization in China is relatively low. It is precisely this expansionary urbanization hypothesis that has many problems, such as the basic security issues in rural areas, the cultural quality of farmers, the destruction of ecological environment, the instability of employment, the lack of public services, etc., For these reasons, urbanization has not really been achieved.

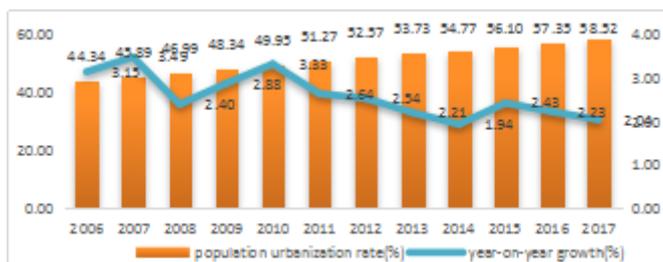


Figure 1: Changes in urbanization rate in 2006-2017

In the process of new urbanization construction, financial support provides financial support for new urbanization, improves capital allocation efficiency and optimizes industrial structure and other aspects of products and services, and promotes the rapid development of new urbanization; the agglomeration effect generated by the new urbanization process and The diffusion effect increases the diversified demand for financial services and stimulates financial development. The sustainable urbanization process is inseparable from the support of the industry. The "Internet+" based on the deep integration of the Internet and traditional industries have gradually become an important form and characteristic of entrepreneurial activities, and have

also become an important driving force for new urbanization construction. According to statistics, China's urban registered unemployment rate has dropped from 4.1% in 2006 to 3.9% in 2017. Employment has grown significantly, and the secondary and tertiary industries have developed rapidly. The Internet entrepreneurial effect is also one of the reasons. For example, the rise of rural e-commerce, the return of migrant workers to entrepreneurship, the return of returnees, etc., have achieved local urbanization. Therefore, it is of practical significance to study the influence relationship between new urbanization, financial support and Internet entrepreneurship and propose effective countermeasures.

## 2. Literature Review

Regarding the issue of financial support and urbanization construction, some scholars at home and abroad have conducted some research and discussion. By comparing regional economic conditions and regional population growth, Marton (2002)<sup>[1]</sup> and Fan (2002)<sup>[2]</sup> concludes that financial factors are important factors in promoting urbanization; Song and Zhang (2002)<sup>[3]</sup> analyze the scale distribution of Chinese cities from the financial dimension and proposes issues related to urbanization. Li Qingzheng (2015)<sup>[5]</sup>, Xu Xixiang (2017)<sup>[7]</sup> through the establishment of VAR model, panel model and spatial dynamic Dubin panel model for financial support and new urbanization The empirical study of the impact relationship; Li Wen (2017)<sup>[8]</sup> comprehensively measured the new urbanization construction in Gansu, studied its interaction with financial support and gave recommendations; Wang Jianying, Ma Degong (2017)<sup>[9]</sup> through the establishment of VAR The model empirically tests the relationship between fiscal expenditure and financial efficiency in the process of urbanization. In terms of Internet entrepreneurship and new urbanization and financial support, Yu Sheng resistance (2017)<sup>[6][4]</sup> believes that entrepreneurial employment is the cornerstone of new urbanization; entrepreneurial innovation is conducive to fostering new development momentum and realizing economic transformation to China. Economic development is of great

significance. Although there are many studies on urbanization and financial support, there are some studies that lack the necessary and sufficient research on the social mechanism of new urbanization financial support, and there are few detailed reflections and empirical studies on the relationship between Internet entrepreneurship and the two. Therefore, this paper verifies the mechanism of new urbanization, financial support and Internet entrepreneurship through empirical analysis, and proposes specific policy recommendations.

### 3. Construction and measurement of indicator system

#### 3.1 Construction of indicator system

Based on the research of relevant scholars and following the principles of science and compatibility, systematization and operability, comparability and consistency, this paper constructs a comprehensive evaluation index system for urbanization and financial support development, and comprehensive evaluation of Internet entrepreneurship. Indicator system, see Table 1-3. The data selected in this paper are from 2006 to 2017, and are derived from China Statistical Yearbook, Provincial Statistical Yearbook, China Financial Yearbook, China City Statistical Yearbook, China Population and Employment Statistics Yearbook, wind database.

#### 3.2 Comprehensive measurement of development level: based on entropy method

Based on the comprehensive evaluation index system constructed in the previous article, this paper uses SPSS statistical software to standardize the various index systems in 2006-2017, and uses the entropy method to comprehensively evaluate them. The weights of each level of evaluation indicators can be obtained (Table 1-3). The results show that industrial urbanization and ecological urbanization have greater weights, indicating that new urbanization not only focuses on industrial development, but also pays more attention to ecological issues, embodying the concept of "people-centered"; financial support structure and efficiency weights are large, indicating financial support The direct effect of direct financing on the economy and the improvement of financial efficiency have greatly promoted financial support; the Internet penetration rate and the value of venture capital investment are relatively large, indicating that the popularity of the Internet and the increase of venture capital are more effective in promoting Internet entrepreneurship. Significant.

**Table 1:** Urbanization comprehensive evaluation index system

Regional layer	Indicator definition	Weights	Attributes
Population urbanization	Urbanization rate of resident population (%)	0.1376	Positive index
Industrial urbanization	Share of secondary industry in GDP (%)	0.1737	Positive index
	Proportion of Tertiary Industry in GDP (%)	0.1190	Positive index

Economic urbanization	Per capita GDP (10,000 yuan)	0.1350	Positive index
Social urbanization	Per capita income of urban residents (10,000 yuan)	0.1315	Positive index
Facility urbanization	Per capita road area (m / person)	0.1413	Positive index
Ecological urbanization	Harmless disposal rate of domestic waste (%)	0.1618	Positive index

**Table 2:** Financial support comprehensive evaluation index system

Regional layer	Indicator definition	Weights	Attributes
Financial support scale	Financial ratio (%)	0.2061	Positive index
Financial support structure	Direct financing scale as a share of total financing (%)	0.2211	Positive index
Financial support efficiency	Ratio of savings to investment (%)	0.3620	Positive index
Financial support	Capital for urban construction (billions of yuan)	0.2107	Positive index

**Table 3:** Internet entrepreneurial comprehensive evaluation index system

Regional layer	Indicator definition	Weights	Attributes
Internet entrepreneurial opportunities	Internet penetration (%)	0.3726	Positive index
Internet entrepreneurial performance	Number of listed Internet companies in that year (number)	0.2897	Positive index
Internet entrepreneurial resources	Venture Capital in that year (\$100 million)	0.3377	Positive index

#### 3.3 Empirical evidence based on VAR model at the national level

The new type of urbanization is a comprehensive concept, so the new urbanization comprehensive index obtained by the use of the new urbanization development index is expressed as NTU. Because there are many indicators involving the three, in order to facilitate the later analysis, this paper uses the entropy method to integrate the financial support indicators into the financial support index (FS), and the Internet entrepreneurial indicators merge into the Internet Entrepreneurship Index (IE), using Eviews statistical software. Conduct an empirical test. In order to eliminate the heteroscedastic interference, the variables are processed in logarithm.

##### 3.3.1 ADF unit root test

Before the correlation analysis, in order to avoid the phenomenon of "pseudo-regression" in the time series, the ADF unit root test should be performed on the variables first. Only when this condition is met, the VAR and cointegration analysis can be performed. In this paper, the unit root test of its stationarity is carried out at 10% significance level (see Table 4). It can be seen that all the original sequences are non-stationary sequences. After the first-order difference, the ADF values are less than the corresponding critical values. And the P value is small, so the sequences are all I (1) sequences. This shows that there may be a cointegration

relationship between China's new urbanization, financial support, and Internet entrepreneurship.

**Table 4:** ADF unit root test results

Variable	ADF value	Prob.	Conclusion
LnNTU	-1.1060*	0.2252	Unstable
D(LnNTU)	-2.8187*	0.0113	Stable
LnFS	-0.3458*	0.8844	Unstable
D(LnFS)	-5.9991*	0.0010	Stable
LnIE	-2.3146*	0.1839	Unstable
D(LnIE)	-3.2345*	0.0484	Stable

**3.3.2 Johansen cointegration test**

Using Johansen cointegration to test the long-term stable relationship between new urbanization, financial support, and Internet entrepreneurship, the results are shown in Table 5. It can be seen that under the "one without" hypothesis, the corresponding statistic is greater than 10% significance level. The lower critical value, and the corresponding P value is less than 0.1, so the null hypothesis is rejected, indicating that there is at least one cointegration relationship between the three. Similarly, under the null hypothesis of "maximum one" and "maximum two", the corresponding statistic is less than the critical value at the 10% significance level, and the corresponding P value is greater than 0.1, so the null hypothesis is accepted. In summary, under the 10% significance level, there is a cointegration relationship between China's new urbanization, financial support, and Internet entrepreneurship.

**Table 5:** Johansen cointegration test results

Original hypothesis	Characteristic value	Statistical quantity	10% significant level	Prob.
None	0.7636*	27.8413*	27.0670*	0.0827
At most 1	0.6406*	13.4189*	13.4288*	0.1003
At most 2	0.2728*	3.1851*	2.7055*	0.0743

The cointegration relationship equation is:

$$\text{LnNTU} = 5.3089\text{LnFS} + 0.82226\text{LnIE}$$

This equation is a long-term equilibrium equation. It can be seen that China's financial support has improved the level of new urbanization to a certain extent; there is also a positive change in Internet entrepreneurship and new urbanization. This is because entrepreneurship has driven urban employment and realized local towns. It has improved the living standards of the urban people.

**3.3.3 Granger causality test**

The results of cointegration test indicate that there is a long-term equilibrium relationship between the variables, but whether it constitutes a causal relationship, further tests are needed. The Granger causality test is used for analysis. The results are shown in Table 6. At the 10% level of significance, financial support is the Granger cause of new urbanization, but the new urbanization is not the Granger cause of financial support. This may be because there is still much room for improvement in the current level of new urbanization. The agglomeration effect and the diffusion effect are not significant enough, and the urbanization construction cycle is too long, the capital recovery is slow

and some are non-profit. Although there is policy support, it is not attractive to commercial financial institutions with profit-seeking nature. Urbanization is not the Granger cause of financial support. There is a single causal relationship between financial support and Internet entrepreneurship. Internet entrepreneurship creates employment and promotes financial development. Financial support is not necessarily used for the development of Internet entrepreneurship. In addition, Internet regulation needs to be improved, and financial institutions have more risks for investment operations. The big Internet industry will have some reservations. There is no causal relationship between new urbanization and Internet entrepreneurship. It can be seen that the new urbanization construction lacks the integration of "Internet +", and the current stage may still be in the indirect impact.

**Tab.6:** Granger causality test results

Original hypothesis	F-Statistic	Prob.	Conclusion
LnFS does not Granger Cause LnNTU	6.049*	0.0393	Reject
LnNTU does not Granger Cause LnFS	0.0477*	0.8326	Accept
LnIE does not Granger Cause LnNTU	0.0712*	0.7963	Reject
LnNTU does not Granger Cause LnIE	2.7686*	0.1347	Accept
LnIE does not Granger Cause LnFS	7.0326*	0.0292	Reject
LnFS does not Granger Cause LnIE	0.6160*	0.4552	Accept

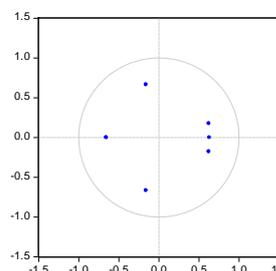
**3.3.4 Var model estimation and stability test**

Based on the correlation test, the Var model is estimated, and the matrix is built according to the model output results as follows:

$$\begin{bmatrix} \text{LnNTU}_t \\ \text{LnFS}_t \\ \text{LnIE}_t \end{bmatrix} = \begin{bmatrix} -0.6514 \\ 1.1053 \\ -4.0399 \end{bmatrix} + \begin{bmatrix} 0.8644 & -0.990 & 0.0594 \\ 2.1413 & 0.6912 & 0.4965 \\ -2.3247 & -1.5270 & -0.6603 \end{bmatrix} \begin{bmatrix} \text{LnNTU}_{t-1} \\ \text{LnFS}_{t-1} \\ \text{LnIE}_{t-1} \end{bmatrix} + \begin{bmatrix} 0.1303 & -0.1234 & -0.0107 \\ -2.1089 & 0.3854 & -0.0922 \\ 4.4289 & -0.5867 & -0.1593 \end{bmatrix} \begin{bmatrix} \text{LnNTU}_{t-2} \\ \text{LnFS}_{t-2} \\ \text{LnIE}_{t-2} \end{bmatrix}$$

Using the AR root chart to verify the stability of the model, as can be seen from Figure 2, the unit roots all fall within the unit circle, the model is stable, and the impulse response function can be analyzed.

Inverse Roots of AR Characteristic Polynomial



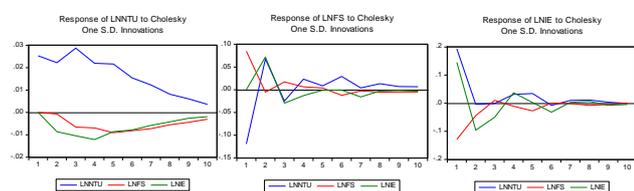
**Figure 2:** Unit root distribution map

**3.3.5 Impulse response function analysis**

This paper uses the impulse response function to further analyze the impact of new urbanization and financial support, and changes in Internet entrepreneurship. It can be seen from Figure 3 that financial support has a positive impact on new urbanization, and it has stabilized at the end. New urbanization has a positive impact on financial support, but it

has experienced different stages. The new urbanization in the early stage has less financial impact. It may be because the period of urbanization construction is long, but it tends to be stable in the later period; Internet entrepreneurship has a large positive impact on financial support, and finally stabilizes. Financial support has a positive impact on Internet entrepreneurship, but it has lagged behind in the early stage. Later, it tends to be stable.

In short, financial support can promote the rapid development of new urbanization, but the impact of new urbanization on financial support is not obvious, and there is still much room for development; with the mature development of the Internet in recent years, Internet entrepreneurship for finance The impact is more significant, and financial support for Internet entrepreneurship needs to be further strengthened; the interaction between Internet entrepreneurship and new urbanization is mostly transmitted through financial support, and the direct role between the two needs to be improved.



**Figure 2: Unit root distribution map**

#### 4. Conclusions and suggestions

Through empirical analysis, the paper shows that financial support can promote new urbanization, but the new urbanization has no significant effect on financial support, and there is still a lot of room for development; Internet entrepreneurship is financial support to a certain extent. Boosters provide more innovative tools for financial support. The continuous expansion of financial support has laid the economic foundation for Internet entrepreneurship. However, financial support for Internet entrepreneurship is not enough. It is necessary to strengthen interaction and investment in Internet entrepreneurship; Internet entrepreneurship promotes new urban employment and achieves “in situ urbanization”. However, at this stage, this impact is relatively small. The linkage between new urbanization and the Internet should be enhanced to create a “smart new town”. Based on this, the following suggestions are made:

First, to enhance the agglomeration effect and diffusion effect of new urbanization on finance. Taking the urban agglomeration as the main body to build a coordinated urban development pattern of large, medium and small cities and small towns, giving priority to the development of small and medium-sized towns with obvious location advantages and good basic conditions, and the conditions of the central towns, characteristic towns, central and western counties and important cities in the eastern region. Border crossings have gradually developed into small and medium-sized cities, driving economic development.

Second, enhance the role of finance in promoting Internet entrepreneurship. We will build a comprehensive, diversified

and sustainable financing mechanism. Under the background of the country's vigorous development of the Internet, we will strive to achieve rural economic transformation and industrial development, and promote the development of new urbanization in a green, harmonious and sustainable direction.

Third, increase the all-round combination of Internet entrepreneurship and new urbanization. The development of new urbanization should rely on the Internet and big data technology to enhance the comprehensive strength of the city with smart operation and promote the transformation and upgrading of traditional industries. Internet entrepreneurship has promoted the pace of development of new urbanization, but the drawbacks cannot be ignored. For example, the leakage of personal information and the pressure of online public opinion have all had a negative impact. Therefore, the government must strengthen strict supervision over the Internet.

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#### Author Profile



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