The Empirical Analysis of the Interaction between Textile Industry Clusters and New Urbanization- First Division of Alar City of the Xinjiang Production and Construction Corps

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ABSTRACT: As a new form of industrial organization, the industrial cluster of regional economic development plays a supporting and facilitating role. This paper adopted empirical method to build a new town development evaluation index system and then build econometric model of the interactive development division City textile industry clusters and new urbanization empirical analysis. Through co-integration test and Granger causality test that, over a longer time frame, Alar City, the textile industry cluster development and construction of new urbanization has a significant interaction between the development of textile industry cluster of Alar and new urbanization efforts to promote the construction of is more important than the construction of new urbanization drive the textile industry cluster. However, due to the development of new urbanization construction and textile industry cluster is not easy, there is a certain lag effect, so in the short term, the development of textile industry cluster of new urbanization rate increase is not significant driving effect, while the new town increase the rate of increase of textile industry cluster level and no significant promoting role.

Introduction

China's textile industry to solve the employment, exports, profits and taxes and other aspects of the creation of the economic development of the entire country has made a great contribution, not only to support the country's economic development, but also promoted the development of new industries. In Xinjiang, the development of textile and garment industry to improve employment is central to the deployment of a major work on the work of Xinjiang. The current stage of China's textile industry is still labor-intensive industries, although the yield point of view, occupies a pivotal position in the international community, but of lower value-added textile products, only a simple rough manufacturing, textile industry cluster in the global division of labor in, in most low-end global value chain, upstream development, inadequate design capabilities, while the lack of downstream marketing, brand extension link. China's textile industry cluster is usually concentrated in the low-end market, product positioning convergence issues outstanding, how to get rid of this situation is

positioned in the bottom of the global value chain is now the problem of the party and the state and business major concern.

Based on Alar City from 2004 to 2014 economic data, composite indicators, which were selected to reflect the characteristics of the new urbanization index system in terms of population, economy, environment, infrastructure, urban and rural development, with the analytic hierarchy process, entropy value method and other methods of quantitative indicators of empowerment, with the corresponding mathematical model estimates Alar new level of urbanization, and the interaction between Alar textile industrial clusters and the new urbanization is analyzed, on this basis, propose appropriate Suggestions.

New Town Development Evaluation of Alar City

Based on the new urbanization connotation essence, the spirit of comprehensive systematic, hierarchy, dominance, guidance and operational principles, drawing on the latest research related to the evaluation of new urbanization level, select the level of urbanization of the population, urbanization, economic level, the quality of people's living standards, the level of environmental protection, infrastructure construction level, and level of urban and rural development six criteria, construct new urbanization evaluation system.

In this paper, using AHP Index Weighting of Alar new urbanization level comprehensive measure, under the scientific guidance in new urbanization concept, objective and comprehensive assessment of the quality of the development of urbanization. While the use of entropy weight coefficient correction technique, to avoid cycle does not satisfy the transfer axiom lead and grasp the scale of fuzzy information to be lost, to make up for the inadequacies of the expert consultation.

Technical amendment process entropy weights as follows:

Construction of the judgment matrix $R=\{r_{ij}\}_{m \times n}$, according to the formula $\overline{r_{ij}}$ $=r_{ij}/\Sigma r_{kj}(k=1,2,3....,n)$, do the normalization process to obtain a standard matrix $\overline{R}=\{\overline{r_{ij}}\}n \times n$, then the index xj output entropy Ej is:

$$E_j = -(\ln n)^{-1} \sum_{i=1}^{n} \bar{r}_{ij} \ln \bar{r}_{ij}, \quad 0 \le E_j \le 1$$

(2) and then calculate the degree of deviation of the index xj:

$$d_{j=}1-E_j$$

(3) the right to information and then calculate the index kj weight:

$$u_j=d_j/\Sigma d_j$$

(4) Finally, the information weights amended AHP index derived initial weights $Wj=(W1, W2, W3, \cdots, Wn)$, finally get the right index corrected weight:

$$\lambda_j=u_jW_j/\Sigma u_jW_j$$

Finally obtained the evaluation index weight coefficient vector λ.

(1) Construction and standardization evaluation matrix Suppose n indexes m a comprehensive evaluation of the evaluation object, you can create a $m \times n$ matrix evaluation $X = (x_{tj})_{m \times n}$, wherein:

xij represents Alar t j-year term indicators to take, were taken value t = 1,2 ..., 10 (respectively 2004,2005, ..., 2014), j = 1,2, ..., 33. This study used a standardized method of extreme value resulting standardized evaluation matrix, of magnitude difference in metrics, dimensions and indicators in different directions interference evaluation results for exclusion,

When the index is negative indicators, the

$$X_{tj} = \min(x_j) / x_{tj}$$

When the evaluation is positive indicators,

$$X_{tj} = x_{ij} / \max(x_j)$$

Where: x_{tj} Alar t indicates the actual value of item j indexes, x'_{tj} expressed its standardized value; $\max(x_j)$ and $\min(x_j)$ represent all objects participating in paragraph j Index of the minimum and maximum value. Matrix normalized to $X' = (x_{tj})'_{m \times n}$.

(2) The calculation of the total score

Construction of new urbanization comprehensive evaluation model:

$$F_t = \Sigma X'_{tj} \lambda_j \quad (t=1, 2, 3 \cdots 10, j=1, 2, 3 .. 33)$$

Where: Fi is Alar t of new urbanization comprehensive level score, λj for the item j index weight, X'tj standardized value Alar t in paragraph j indexes. A comprehensive evaluation model, Alar City finally get with the guidelines of the new urbanization level factors and their overall level of scores.

Interaction between Textile Industry Cluster and New Urbanization

In this paper, the sample time span from 2004 to 2014; data from the "Alar City Statistical Yearbook," "China Statistical Yearbook", China Economic Information Network, these data include Alar GDP Alar first a total value of industrial production, the total population of the city of Alar Alar urban population and so on. In this paper, the new level of urbanization (XCZ) and Textile Industry Location Quotient (FLQ) this variable to build econometric models. New level of urbanization (XCZ) is above the text new urbanization comprehensive evaluation score expressed in metric textile industry cluster, the use of the textile industry, location quotient (within certain regional textile industry accounted for output indicators in the region share with the entire economy, the textile industry accounted for the ratio of the size of national output target share) to represent clusters of textile industry cluster.

Using Eviews6.0 metrology software, respectively, through the co-integration test and Granger causality test for interaction between Alar textile industry clusters and new urbanization between empirical.

1, the stationary test

First of all variables stationary test to determine the order of the difference variables. If the order of the different variables, once the spurious regression, we can not establish an empirical model. In this paper, the stability of the test variables, the

use of ADF unit root test method is relatively conventional econometrics. Alar City for the textile industry Location Quotient (FLQ), and a new level of urbanization (XCZ) do ADF unit root test, the test results shown in Table 2:

Table 1 ADF test results and variable FLQ and XCZ first difference

| value | ADF test Value | Test type | Threshold | | | P | stability |
			1%	5%	10%		
FLQ	-0.735055	(0,0,1)	-2.629843	-1.950034	-1.609239	0.3841	Unstable
XCZ	-3.145983	(C,T,1)	-4.263463	-3.547830	-3.213387	0.1135	Unstable
△ FLQ	-4.788329	(C,T,1)	-4.273975	-3.553495	-3.201248	0.0027	stable
△ XCZ	-6.238463	(0,T,1)	-3.639023	-2.953867	-2.602387	0.0000	stable

Note: (C, T, L), C is a constant term, T is the trend term, L is the lag constant term and trend items. △ represents the first difference. Wherein the lag order is based AIC, SIC criterion to determine optimal information.

According to the test results on the table, the textile industry, location quotient (FLQ), the new urbanization rate (XCZ) at the 10% significance level there is unit root, variable sequences are unstable. The first difference of the two variables (△ FLQ and △ XCZ), were rejected at 1% significance level unit root hypothesis. Description Textile Industry Location Quotient (FLQ), the new urbanization rate (XCZ) having a first-order difference stationary, all I (1) series. Because the textile industry Location Quotient (FLQ), the new urbanization rate (XCZ) is unstable economic variables and therefore cannot use the traditional method of linear regression analysis, and should be used co-integration test the correlation between them.

On the basis of a single whole and then the textile industry Location Quotient (FLQ), made between the new urbanization rate (XCZ) Johansen co-integration test, verify the existence of co-integration relationship between them, whether to have a long-term stable equilibrium relationship. Test results are shown in Table 3:

Table 3 Variable FLQ and XCZ Co-integration test results

Suppose co-integration	Eigenvalues	Measurement track	Critical value (at the 5% significance level)	rate
None	0.341559	13.73982	15.79340	0.1034
Above 1	0.249832	9.400348	9.153921	0.0432

Note: 1. The above test containing a constant term including trends and lags, according to AIC, SC optimal information criterion determining L (lag order) 1.2 * expressed at the 5% significance level to reject the null hypothesis.

The above table shows that the variable sequence of the textile industry Location Quotient (FLQ) new urbanization (XCZ) co-integration at the 5% significance level. Co-integration correspondence to:

$$XCZ=2.572809FLQ-2.842100$$

Derived from the co-integration equation, the relationship in the long term, there is the development of new urbanization and the City Alar textile industry cluster of long-term stable relationship, that Alar City, the textile industry cluster development will affect the construction of new urbanization. Alar Textile Industry Location Quotient (FLQ) for each additional one percentage point, corresponding to the new urbanization rate will rise 2.57 percentage points. Description Alar promotion of textile industry cluster development is conducive to the construction of new urbanization. From the aspect of the new urbanization on Alar textile industry cluster, in the same manner as the test results equation:

$$FLQ=0.402675XCZ+1.213421$$

According to the co-integration equation, it can be seen that over a longer time frame, the urbanization rate of increase of new textile industry cluster development has a significant role in promoting the city of Alar new urbanization rate (XCZ) each increase of one percentage point, the corresponding rise of the textile industry regional Chamber of Commerce 0.40 percentage points. By equation (1) and equation (2), we can be considered over a longer time frame, Alar City, the textile industry cluster development and the construction of new urbanization have explicit interaction between the two support each other, promote each other, development of the textile industry cluster to promote new efforts Alar urbanization is larger than the city of new urbanization led to the textile industry cluster.

Conclusion

According to the above analysis, the following recommendations will be made:

(1) Suggest that the state continue to implement high-quality cotton base construction, improve the comprehensive competitiveness of cotton production, sustainable development and risk-resisting ability, enhances the high-tech water conservation, pollution control and subsidies in cotton plastic film recycling standards. At the same time, suggested that the state set a minimum price protection in Southern cotton procurement, the implementation of counter-cyclical subsidies. Designated by the State qualified business unit of cotton, cotton enterprises prop acquisition, the difference in part by the state financial subsidies, southern cotton industry to ensure sustained and healthy development.

(2) Recommends that national authorities issued to support the development of the textile and garment industry and other special funds and tax policy as soon as possible, the textile park infrastructure, standard factory building, printing and dyeing and sewage facilities operating cost subsidies given equal support. Policies to support the introduction of the autonomous region's textile and garment industry, in particular by supporting policies autonomous financial resources, but also to cover the Corps southern textile enterprises.

(3) Accelerate the textile and garment industry base construction. Recommendations to encourage and support the use of cotton textile enterprises, cotton trading center established in Arar Economic and Technological Development support for southern textile and garment industry development, and the introduction of corporate purchasing cotton clothing using cotton policies. Proposed approval in the southern textile and garment industrial park owned power plant construction, and allows for direct power supply power to the textile and garment enterprises.

(4) It is a division of Xinjiang's largest high-quality cotton production base, the world's largest manufacturer of towels, cotton resources and industries have obvious advantages, it suggested that the state in the textile and clothing supplies military supplies procurement priority southern city division, and achieve long-term stable cooperative relations.

(5) A proposed increase teacher training in textile and garment enterprises to use subsidies Xinjiang nationality of employees, a substantial increase in textile and clothing products from Xinjiang subsidy standards for shipping. Give special financial policies to support the textile and garment enterprises. Textile and garment industry to establish a special loan fund to increase textile and clothing industry financial policy support. Construction investment in the southern textile and garment industry enterprises, the state policy banks to give special loans and give on interest rates.

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