Study on Coordination Evaluation of Modern Logistics Industry and Regional Economy High-Quality Development in Hunan Province

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Objectives: We calculate the coupling coordination degree between modern logistics industry and high-quality development of regional economy in Hunan Province from 2008 to 2019. Methods: In this study, the coupling coordination degree model is constructed and the calculation is carried out based on Principal Component Analysis (PCA). Results: (1) The degree of coupling coordination between modern logistics industry and high-quality development of regional economy in Hunan province is generally on the rise from 2008 to 2019. (2) From 2013 to 2019, the development of modern logistics industry and regional economy in Hunan Province has been in a state of "high-level coordination". The 19th National Congress clearly put forward high-quality development. From 2018 to 2019, the degree of coupled and coordinated development between modern logistics industry and high-quality development of regional economy in Hunan Province showed a state of "high-level coordination". According to this conclusion, Combined with the "three highs and four new" strategy and the urban requirements of the new development concept in Hunan Province, this paper puts forward some suggestions on promoting the modern logistics industry in Hunan Province and promoting the coordinated development of regional economy with high quality.

Key words: Hunan province; modern logistics industry; economic development with high quality; coupling coordination
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General Secretary delivered an important speech at the 8th meeting of the Central Committee of Finance and Economics, stressing that the circulation system plays a fundamental role in the national economy. To build a new development pattern, we must take the construction of modern circulation system as an important strategic task. During the 14th Five-Year Plan period, the fundamental, strategic and leading role of the logistics industry in the national economy will be further consolidated and upgraded. The new development concept will run through the whole development process and various fields, guiding the logistics industry to change its development mode and promoting quality change, efficiency change and power change. The logistics

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industry is focusing on improving quality, reducing costs and increasing efficiency to achieve high-quality development. The new development pattern will drive the coordinated development of logistics regional layout, and the trend of regional centralization and scale of logistics elements will appear, which will promote the deep adjustment of the spatial structure of China's economic development.

However, under the new development pattern, what is the coupling and coordination relationship between modern logistics industry and high-quality development of regional economy, and how modern logistics industry can promote high-quality development of regional economy are the problems that need to be studied and solved.

OVERVIEW OF RESEARCH

Literature Review

Scholars at home and abroad have done some research on modern logistics and regional economic development. Foreign scholar T.R. Lakshmanan[1] made an empirical study on the contribution rate of transportation infrastructure to economic development in different regions by using the theories and methods of economic geography. The results show that there is an obvious causal relationship between transportation and economic development. Camuthers. R^2 found that the development of logistics industry in Hong Kong and Singapore has a significant pulling effect on economic development, and put forward the conclusion of speeding up the development of logistics industry, improving the efficiency of logistics industry and realizing economic growth. Pablo[3] and others pointed out that every 1% increase in logistics performance indicators will increase regional economic output efficiency by 0.59% without considering the changes of other indicators.

Some domestic scholars have studied the relationship between logistics and regional economy. Zou Qian et al.[4], based on the empirical analysis of the panel data of prefecture-level cities in Chengdu Economic Zone from 2008 to 2018, thinks that logistics industry agglomeration has a positive impact on the economic growth of Chengdu Economic Zone. Song Aihua[5] has established an evaluation model of the coordination degree between regional logistics industry and economic development, and calculated the coordination sensitivity among different regions. It is believed that the coordination degree between logistics industry and regional economic development in China is generally on the rise, but there are some differences among eastern, central and western regions. Some scholars have studied the evaluation index system of logistics industry and regional economy, For example, Jianrong Tang[6] constructs a comprehensive evaluation index system of logistics industry from three aspects: industrial scale, economic development level and infrastructure construction of logistics industry; Zhao Junmei[7] measured the development level of logistics industry and regional economy, and reflected the development level of logistics industry from four aspects: logistics input, logistics output, logistics structure and logistics development scale. This paper evaluates regional economic development from three aspects: economic aggregate, economic structure and economic benefit, and constructs an evaluation index system of 7 first-level indicators and 23 second-level indicators. Some scholars have also studied the promotion path of modern logistics and regional economic development. How Dawn[8] pointed out that it is necessary to accurately grasp the new development stage, conscientiously implement the new development concept, support the construction of a new development pattern, and build a modern logistics system to build a logistics power; Yi Liao, Tang Yongmei[9] put forward the concrete path of building modern logistics industry to promote the coordinated development of regional economy under the new development pattern of double circulation based on the analysis of the present situation, existing problems and causes of the development of modern logistics industry (improving the clustering effect of logistics industry, promoting the innovative development of logistics industry, strengthening the training of modern logistics talents, etc.).

From the existing relevant research results, it can be seen that although some scholars have done some research on the relationship between modern logistics

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and regional economic development, evaluation index system and promotion path, there is no unified standard on the coupling and coordination relationship between modern logistics and regional economic high-quality development. Based on panel data, the research on the coupling and coordination relationship between modern logistics industry and high-quality development of regional economy in Hunan Province has not been found, and the path of how modern logistics industry can promote high-quality development of regional economy under the new development pattern has not yet been formed. Therefore, it is of great significance to carry out this research.

Research Ideas

Based on literature research and field investigation, and fully understanding the connotation of high-quality development of regional economy and modern logistics industry, this paper explores and constructs an evaluation index system of coupling relationship between modern logistics industry and high-quality development of regional economy in Hunan Province. Based on principal component analysis, this paper measures the level of high-quality development of modern logistics industry and regional economy, builds a coupling model based on the coordinated development theory by referring to the research results of existing scholars, and calculates the coupling coordination degree between modern logistics industry and high-quality development of regional economy in Hunan province by selecting panel data from 2008 to 2019.Combined with Hunan's "three highs and four new" strategy, this paper puts forward some suggestions on promoting Hunan's modern logistics industry and promoting the coordinated development of regional economy with high quality under the new development pattern.

MODERN LOGISTICS INDUSTRY AND REGIONAL ECONOMY HIGH-QUALITY DEVELOPMENT MEASUREMENT METHOD AND COUPLING

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COORDINATION MODEL CONSTRUCTION

Principal Component Analysis Measures the High-Quality Development Level of Modern Logistics Industry and Regional Economy

Principal Component Analysis (PCA) is to transform multiple indicators into less comprehensive indicators[10] through dimension reduction technology, and its analysis steps are as follows:

1) The original data matrix composed of p indicators (variables) of n samples. $X=(X_1,X_2,X_3,\mathrm{L},X_p)$ Carry out standardization treatment.

2) According to the standardized data array, the correlation coefficient matrix r of the index is calculated, and the eigenvalues and eigenvectors are calculated by using the correlation coefficient matrix.

3) Find the eigenvalue of the correlation coefficient matrix R., λ_i Reflects the original information content represented by the ith principal component, i.e.F_iExplain the variance of the original index data, then the principal component. F_i The expressed contribution rate is: $\lambda_i / \sum_{i=1}^{n} \lambda_i$. That is to say, the contribution rate of the ith principal component is the variance of the ith principal component. λ_i Account for total variance. $\sum_{i=1}^{n} \lambda_i$ The specific gravity.

4) Sort the eigenvalues obtained from the correlation coefficient matrix from big to small, and extract the corresponding eigenvectors according to the principle that the cumulative contribution rate of eigenvalues reaches more than 85%, and the cumulative contribution rate of the current k principal components. $\sum_{i=1}^{k} \lambda_i / \sum_{i=1}^{n} \lambda_i$ When it reaches 85%, the first k principal components are selected.

5) Extract the first k principal components with a cumulative contribution rate of 85%, and calculate the feature vector. a_{ij} .

$$a_{ij} = b_{ij} / \sqrt{\lambda_i} \quad (1)$$

b_{ij} Is the factor load of the jth principal component on the ith index.

6) Write out each principal component according to the feature vector.

$$F_i = a_{1i}X_1 + a_{2i}X_2 + \mathrm{L} + a_{pi}X_p \qquad i = 1,\mathrm{L}\ ,k \tag{2}$$

7) Calculate the principal component score and make comprehensive evaluation.

The formula for calculating the principal component score is to multiply the FACtor score fac by the square root of the corresponding variance, then weight the principal component score with the variance contribution rate of each principal component as the weight, calculate the comprehensive score of samples, and sort the samples.

Modern Logistics Industry and High-Quality Development of Regional Economy Coupling Coordination Model

Coordination was first applied in physics, and then applied to the analysis of the coordinated development among economic systems. Different scholars used different coupling models. For example, a scholar named Zhang Fuqing[11] used the capacity coupling coefficient model in physics for reference to build a coupling degree model[11] for the interaction of multiple economic systems. $C_n = \left\{(u_1, u_2, \cdots, u_m)/(\prod(u_i + u_j))\right\}^{\frac{1}{n}}$. Some scholars, Zhang Xiaodong[12], described the coupling relationship with the dispersion of the system, and constructed the coupling coordination degree of the two systems[12], such as.

$$C_{ab} = (a+b)\Big/\sqrt{a^2 + b^2} \tag{3}$$

This study uses (Formula 3) for reference to evaluate the coupling coordination degree between modern logistics industry and high-quality development of regional economy in Hunan Province. In which a and b represent the high-quality development level of modern logistics industry and regional economy respectively, C_{ab} Representing the coupling coordination degree between modern logistics industry and high-quality development of regional economy, it can be known from Formula 3 that, C_{ab} The value range of is [-1.414,1.414]. When a = b > 0, C_{ab} =1.414. According to a, b Value changes, modern logistics industry and high-quality development of regional economy coupling coordination degree can be divided into the following five levels showed in table 1:

Table 1

Classification of Coupling Coordination Degree between Modern Logistics Industry and High-Quality Development of Regional Economy

C_{ab}	Coordination level	characteristic
[1.2,1.414]	High level coordination	Their development level is relatively balanced and ideal.
[1.0,1.2）	Moderate coordination	Ideal.
[0.5,1）	Basic coordination	Acceptable in the short term.
[0, 0.5）	Reluctantly coordinate	Barely acceptable.
[-1.414, 0）	inharmonious	The development of the two is not harmonious.

THE CONSTRUCTION OF COMPREHENSIVE EVALUATION INDEXC SYSTEM FOR HIGH-QUALITY DEVELOPMENT OF MODERN LOGISTICS INDUSTRY AND REGIONAL ECONOMY

Modern logistics industry and regional economic development are interrelated and interactive. In order to accurately reflect the coupled and coordinated development relationship between modern logistics industry and regional economic development, based on the coordinated development theory and the

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principle of "scientific, comprehensive, concise, accessible and applicable" of the evaluation index system, According to the connotation and characteristics of modern logistics industry and high-quality development of regional economy, drawing on relevant research results of domestic and foreign scholars, following the principle of index selection, and selecting indicators with high frequency and wide recognition, a comprehensive evaluation index system of the coupling relationship between modern logistics industry and high-quality development of regional economy is constructed, as shown in Table 2 below.

Table 2
Comprehensive Evaluation Index System of High-Quality Development of Modern Logistics Industry and Regional Economy

subsystem	Level I index	Secondary index	unit of measurement	Indicator code	Indicator type
Modern logistics industry	Logistics input	Number of employees in logistics industry	ten thousand people	X11	Positive index
		Investment in fixed assets of logistics industry.	One hundred million yuan	X12	Positive index
		New fixed assets investment in logistics industry.	One hundred million yuan	X13	Positive index
		Network mileage of logistics industry	kilometre (km)	X14	Positive index
		Number of postal outlets.	individual	X16	Positive index
	Logistics output	volume of goods transported	Ten thousand tons	X21	Positive index
		Turnover of goods	Billion tons kilometers.	X22	Positive index
		Logistics added value	One hundred million yuan	X23	Positive index
		Postal express business volume.	Ten thousand pieces	X24	Positive index
	Environment and resources	Energy consumption of logistics industry.	Tons of standard coal	X31	Inverse index
		CO2 emissions from logistics industry.	Ten thousand tons of standard coal.	X32	Inverse index
Regional economic high-quality development system.	economic aggregate	Gross Domestic Product (GDP)	One hundred million yuan	Y11	Positive index
		Per capita GDP	Ten thousand yuan/person.	Y12	Positive index
		Total retail sales of social consumer goods.	One hundred million yuan	Y13	Positive index
		total volume of imports and exports	Billion dollars	Y14	Positive index
	economic structure	The ratio of added value of tertiary industry to GDP.	%	Y21	Positive index
		The ratio of secondary industry to GDP.	%	Y22	Positive index
		Total foreign investment	Ten thousand dollars	Y23	Positive index
		Proportion of personnel in secondary industry.	%	Y24	Positive index
		Proportion of personnel in tertiary industry.	%	Y25	Positive index
	economic benefits	per capita disposable income	Yuan/person	Y31	Positive index
		Per capita public service expenditure.	One hundred million yuan	Y32	Positive index
		energy consumption per unit of gdp	Tons of standard coal/10,000 yuan.	Y33	Inverse index
		Electricity consumption of GDP per 10,000 yuan.	Kwh/10,000 yuan.	Y34	Inverse index
		The ratio of fiscal expenditure to GDP.	%	Y35	Positive index

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AN EMPIRICAL ANALYSIS OF COUPLING AND COORDINATION BETWEEN MODERN LOGISTICS INDUSTRY AND HIGH-QUALITY DEVELOPMENT OF REGIONAL ECONOMY IN HUNAN PROVINCE

Data Selection and Description

The data used in this paper are panel data of Hunan Province from 2008 to 2019, and the data sources are China Statistical Yearbook, Hunan Statistical Yearbook and Hunan Economic and Social Development Bulletin. In this study, the data of transportation, warehousing, post and telecommunications are taken as the data of logistics industry, and the specific data are omitted.

As an important index reflecting the development of logistics industry, the network mileage of logistics industry shows that the transportation modes of logistics industry mainly include railway, highway, waterway, aviation and pipeline, and the nature and transportation capacity of different modes are different, so this paper converts the mileage of various modes of transportation into the mileage of road transportation. The specific conversion method is:

$$\sum_{\text{Various modes of transport}} \frac{\text{Freight volume per mode of transport / length of its route}}{\text{Freight volume of road mode / route miles}} * \text{Highway Mileage} \quad (4)$$

Measure the Development Level of Modern Logistics Industry

According to the steps of principal component analysis, firstly, standardize the index data to eliminate the statistical differences between the dimensions and values of each index, then calculate the correlation coefficient matrix r of the index, use the correlation coefficient matrix to find the eigenvalue, and use SPSS software to make principal component analysis on the development level of modern logistics industry. The main component list of the development level of modern logistics industry is shown in Table 3 below.

Table 3
Total Variance Explained

composition	Initial eigenvalue			Select sum of squares to load.		
	add up to	% of variance.	Cumulative%	add up to	% of variance.	Cumulative%
1	6.175	56.135	56.135	6.175	56.135	56.135
2	2.483	22.571	78.706	2.483	22.571	78.706
3	.785	7.135	85.841	.785	7.135	85.841
4	.721	6.559	92.400			
5	.549	4.989	97.389			
6	.167	1.516	98.904			
7	.068	.617	99.521			
8	.039	.358	99.879			
9	.010	.093	99.972			
10	.003	.024	99.996			
11	.000	.004	100.000			

Extraction method: Principal component analysis.

Based on the principle that the contribution rate of eigenvalue cumulative variance reaches 85%, the first three principal components are extracted, and the load matrix of the first three principal components is shown in Table 4.

Table 4
Composition Matrix[a]

	composition		
	1	2	3
Zscore(X1)	.210	-.586	.719
Zscore(X2)	.979	-.108	-.022
Zscore(X3)	.906	-.218	.047
Zscore(X4)	-.478	.436	.387
Zscore(X5)	-.357	.674	.325
Zscore(X6)	.901	.394	.076
Zscore(X7)	.644	.613	-.018

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Zscore(X8)	.985	.054	.045
Zscore(X9)	-.704	.573	.018
Zscore(X10)	-.613	-.756	-.013
Zscore(X11)	-.964	-.013	-.033
Extraction method: Principal component analysis.			
A. extract three components.			

The feature vector of principal component analysis (that is, the coefficient of principal component) is the basis. $a_{ij} = b_{ij} / \sqrt{\lambda_i}$, the load of each principal component. b_{ij} Divided by the arithmetic square root of eigenvalues of each principal component, b_{ij} That is, the factor load of the jth principal component on the ith index.

The first three principal components extracted are as follows:

U1=0.085X1+0.394X2+0.365X3-0.192X4-0.144X5+0.363X6+0.259X7+0.396X8-0.283X9-0.247X10-0.388X11

U2=-0.372X1-0.069X2-0.138X3+0.277X4+0.428X5+0.25X6+0.389X7+0.034X8+0.364X9-0.480X10-0.008X11

U3=0.812X1-0.025X2+0.053X3+0.437X4+0.367X5+0.086X6-0.02X7+0.051X8+0.02X9-0.015X10-0.037X11

Index X is the standardized data of modern logistics industry.

Calculate principal component score and comprehensive score: multiply FACtor score fac by the square root of the corresponding eigenvalue to calculate the score of each principal component, and then weight the principal component score with the variance contribution rate of each principal component as the weight to calculate the comprehensive score. See Table 5.

Table 5
Comprehensive Score Table of Development Level of Modern Logistics Industry in Hunan Province From 2008 to 2019

age	U1	U2	U3	U
2008	-4.476	-0.671	0.348	-3.075
2009	-2.838	-1.752	-1.163	-2.413
2010	-2.233	-0.679	0.318	-1.612
2011	-1.393	-0.593	0.533	-1.023
2012	-0.569	0.387	0.434	-0.234
2013	-0.353	3.080	1.227	0.681
2014	-0.079	2.678	-0.530	0.609
2015	1.090	1.012	-2.029	0.810
2016	1.743	-0.178	-0.165	1.079
2017	2.753	-0.457	0.162	1.694
2018	3.654	-0.739	0.074	2.202
2019	2.700	-2.088	0.790	1.283

From Table 5, it can be seen that from 2008 to 2018, the development level of modern logistics industry in Hunan Province showed a significant growth trend, which played an important role in promoting the high-quality development of logistics industry and exploring ways to construct the modernization of supply chain. As the road freight data in 2019 adopts the special survey data of the Ministry of Communications, Therefore, compared with the overall development trend of modern logistics industry from 2008 to 2018, the comprehensive score in 2019 declined.

Measurement of High-Quality Economic Development Level

According to the steps of principal component

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analysis, first standardize the index data, then take negative numbers after standardizing the negative indicators, and use SPSS to make principal component analysis on 14 indicators of high-quality economic development level, which is similar to the steps of measuring the development level of modern logistics industry. The principal component expression, principal component score and comprehensive score of Hunan province's high-quality economic development level from 2008 to 2019 are obtained (Table 6).

The first two principal components extracted are as follows:

V1=0.298X1+0.298X2+0.299X3+0.283X4+0.278X5-0.217X6+0.298X7-0.083X8+0.289X9+0.298X10+0.293X11+0.278X12+0.270X13+0.157X14

V2=0.039X1+0.047X2+0.004X3-0.085X4-0.209X5+0.431X6-0.033X7+0.620X8-0.138X9+0.013X10+0.127X11+0.233X12+0.264X13+0.463X14

Index X is the standardized data of modern logistics industry.

Table 6
Comprehensive score table of economic development level of Hunan Province from 2008 to 2019

age	V1	V2	V
2008	-4.416	-1.989	-3.840
2009	-3.887	-1.451	-3.331
2010	-3.695	-1.173	-3.134
2011	-2.443	0.457	-1.873
2012	-1.263	2.184	-0.654
2013	-0.613	2.010	-0.164
2014	0.148	1.425	0.348
2015	0.948	1.112	0.935
2016	1.890	0.704	1.619
2017	3.269	-0.343	2.550
2018	4.427	-1.170	3.339
2019	5.634	-1.765	4.205

It can be seen from Table 6 that from 2008 to 2018, the level of economic development in Hunan Province showed a significant growth trend, and the quality of economic development was getting higher and higher, which made an important contribution to promoting the implementation of the "Three Highs and Four New" strategy and building a modern and new Hunan.

Calculation of Coupling Coordination Degree between Modern Logistics Industry and High-Quality Development of Regional Economy in Hunan Province

According to the comprehensive scores of modern logistics industry and regional economic development in Hunan province calculated above, the coupling coordination degree of high-quality development of modern logistics industry and regional economy in Hunan province from 2008 to 2019 is calculated by using the constructed coupling coordination degree model (Formula 3). See table 7.

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Table 7
Coupling Coordination Degree between Modern Logistics Industry and High-Quality Development of Regional Economy in Hunan Province from 2008 to 2019

age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
coupling factor	-1.406	-1.397	-1.347	-1.357	-1.279	0.738	1.364	1.411	1.387	1.386	1.385	1.248
condition	inharmonious					basic		High level coordination				

According to the calculation results in the above table, it can be concluded that:

(1) From 2008 to 2019, the degree of coupled and coordinated development of modern logistics industry and high-quality development of regional economy in Hunan Province showed an overall upward trend, and the coordination between the two improved steadily, from -1.406 in 2008 to 1.385 in 2018 (as the road freight data in 2019 adopted the special survey data of the Ministry of Communications, the comprehensive score of modern logistics industry declined in 2019 due to the adjustment of data sources. The degree of coupling coordination with the high-quality development of regional economy declined slightly). From 2013 to 2019, the development of modern logistics industry and regional economy in Hunan Province has been in a state of "high level coordination".

(2) The 19th National Congress clearly pointed out that China's economy has changed from a high-speed growth stage to a high-quality development stage, emphasizing high-quality development. In 2018-2019, the coupled and coordinated development of modern logistics industry and high-quality development of regional economy in Hunan Province showed a state of "high-level coordination". With the optimization and transformation and upgrading of economic structure, the stamina for high-quality development of Hunan's economy has become more and more sufficient. Regional economic coordination is getting higher and higher, which provides a solid support for speeding up the construction of the regional economic development pattern of "one core, two deputies, three belts and four districts".

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on principal component analysis, this paper calculates the coupling coordination degree between modern logistics industry and high-quality development of regional economy in Hunan Province from 2008 to 2019 by constructing a coupling coordination degree model, and draws the following conclusions.

(1) From 2008 to 2019, the degree of coupled and coordinated development of modern logistics industry and high-quality development of regional economy in Hunan Province showed an overall upward trend, and the coordination between them improved steadily. Particularly, as the road freight data in 2019 adopts the special survey data of the Ministry of Communications, the comprehensive score of modern logistics industry in 2019 has declined due to the adjustment of data sources. The degree of coupling coordination with the high-quality development of regional economy declined slightly.

(2) From 2013 to 2019, the development of modern logistics industry and regional economy in Hunan Province has been in a state of "high-level coordination". The 19th National Congress clearly pointed out that China's economy has changed from a high-speed growth stage to a high-quality development stage, emphasizing high-quality development. In 2018-2019, the degree of coupled and coordinated development of modern logistics industry and high-quality development of regional economy in Hunan Province showed a state of "high-level coordination". With the optimization and transformation and upgrading of economic structure, the stamina of high-quality development of Hunan economy became more and more sufficient, and the coordination of regional economy became higher and higher. To provide solid support for speeding up the construction of the regional economic development

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pattern of "one core, two deputies, three belts and four districts".

Countermeasures and Suggestions

According to the coupling coordination degree between modern logistics industry and high-quality development of regional economy in Hunan Province from 2008 to 2019, combined with the three highs and four new strategies of Hunan Province, this paper puts forward the following countermeasures and suggestions to promote the high-level coordinated development of modern logistics industry and high-quality development of regional economy in Hunan Province:

Continuously optimize the logistics network and focus on implementing the strategy of "three highs and four new"

Transportation, as the "pioneer" of economic and social development, is not only the basic support for building the "Three Highlands", but also an important force for practicing the "Four New" mission. On the basis of forming the main framework of transportation network, it is necessary to continuously push forward infrastructure to supplement shortcomings and continuously optimize logistics network. Grasp the new features and requirements of Hunan in the new development stage, vigorously implement the "three highs and four new" strategy and promote high-quality development.

Persist in expanding domestic demand and building a modern circulation system

We should organically combine the implementation of the strategy of expanding domestic demand with deepening the structural reform on the supply side, link up the production, distribution, circulation and consumption, meet the multi-level and diversified market demands, optimize the supply structure, improve the supply quality and form a higher level of dynamic balance between supply and demand. Focus on cultivating influential and competitive logistics enterprises, Promote the construction of a national logistics hub city, constantly improve hardware and software, channels and platforms, improve the operational efficiency of the circulation system, and build a modern circulation system.

Strengthen Coordination and Linkage, and Strive to Promote Regional Coordinated Development

Strengthen coordination and linkage, co-construction and co-governance, such as strengthening coordination and linkage with provinces and cities along the Yangtze River Economic Belt and central and western provinces, speeding up the construction of Yueyang National Logistics Hub and Huaihua National Backbone Cold Chain Logistics Base, etc., so as to solidly promote the integrated development of Changsha, Zhuzhou and Xiangtan, and drive the development of "3+5" urban agglomeration. To speed up the construction of the regional economic development pattern of "one core, two deputy, three belts and four districts", to make overall plans for the economic needs, living needs, ecological needs and safety needs of the urban layout, and to give full play to the leading role of central cities and urban agglomerations.

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