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E-commerce Supply Chain Security and Influencing Factors of Logistics Industry Development based on VAR Model

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Abstract

With the development of E-business, logistics industry has become an important part of China's economic development. E-commerce market brings a great opportunity to traditional logistics industry, as more than 70% express business is derived from the network shopping; however, E-commerce supply chain security problem also produced some adverse effects. In this paper, the authors analyze the key factor of logistics industry in E-commerce market, and find out three factors affecting logistics capability as logistics infrastructure optimization, industrial structure and marketization degree. By using VAR model, the empirical results show that there exist a long-term relationship between the basic logistics optimization degree, industrial structure and the degree of marketization, and marketization degree has positive related to the logistics optimization degree. At the same time, the market degree has obvious promotion effect on logistics optimization in the short term. This conclusion shows that in order to play the role of logistics industry to promote economic growth, government should optimize the industrial structure, and improve network infrastructure.

Keywords*: E-business, logistics industry, network data, VAR model, logistics security*

1. Introduction

E-commerce and logistics is the mutual influence, mutual restraint, in recent years, with the rapid growth of China's e-commerce overall transaction size, to a certain extent, promote the accelerated development of logistics [1]. But our country electronic commerce through the Internet platform, its development speed to much higher than the logistics, China's modern logistics cannot meet the increasingly rapid expansion of electronic commerce, logistics has become e-commerce development bottleneck restriction have been revealed. In this context, the domestic has been a number of e-commerce companies have tried to build a logistics distribution network, to make up for the third party logistics professional degree is low; the distribution efficiency is not high[2-3]. This phenomenon has aroused wide attention from domestic scholars; scholars have made a lot of theoretical and empirical research on this phenomenon. However, the logistics industry is in rapid development, but also because of Chinese industrial structure, energy structure, unbalanced regional development and lack of resources integration mechanism and other factors facing the high cost and low efficiency, many links and other issues [4]. It is in this background, there is necessary to study the relationship between the link between the factors of the development of China's logistics industry and related factors and these factors and economic growth, in order to promote the development of China's logistics industry sustainable development. Logistics industry on economic development to accelerate the role, it is the artery of national economic development, but also to measure the modernization construction and regional economy

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as a whole comprehensive strength of an important symbol. At the same time logistics industry on economic development has certain restriction [5]. In China, the logistics industry is considered to be the national economy and new economic growth point of an important part, thus speeding up the development of modern logistics industry in China, is conducive to optimizing resource configuration, is conducive to the improvement of the adjustment of industrial structure and investment environment, conducive to comprehensive national strength and competitiveness of enterprises improved, it may conducive to improve the quality and efficiency of economic system in China, to promote the fundamental change of economic growth mode, with important and far-reaching significance.

At present, China's logistics industry is the rising period of rapid development, reflecting the logistics of the total value of each index was steady and rapid growth, ensure the smooth operation of economic development, the market potential and development prospects are very broad, but compared with the developed countries in the quality and the efficiency of operation is still a gap, mainly in logistics service ability weak, total logistics costs accounted for high proportion of GDP, integration of logistics industry progress [6]. First, from the perspective of industry chain, Chinese manufacturing enterprises are located in the industrial chain of lower level position, so Chinese logistics enterprises long-term service object and logistics demand sources to the localization of production enterprises and primary products, the industrial chain division of labor in some degree determines the service ability of logistics enterprises in China is in a low level [7-8]. At the same time, the scope and quality of the logistics infrastructure also limits the logistics industry to provide logistics services. Relevant statistical data show that in China, the construction of logistics infrastructure, logistics facilities modernization and logistics technology application level is still relatively low [9]. In addition, logistics resources integration bottlenecks, lack of social direct horizontal linkages and coordination mechanism and the vertical value chain pipe mechanism, effective system resource integration in the industry chain downstream and internal and external logistics facilities and logistics channels cannot, resulting in social logistics system operation efficiency is low, serious impact on the high quality development of the logistics industry [10].

To enhance the service ability of Chinese logistics industry, service quality and service efficiency, is to serve the economic and social development. Therefore, the research on logistics industry development and economic growth between the interaction relationship and situation under the influence of the development of the logistics industry factors is very necessary. Especially since the new government came to power has been emphasized to the transformation of the mode of economic development, promote the adjustment of industrial structure and the transformation and upgrading, under such a background, the balance and interaction relationship between the two sides can is formulated to promote the healthy development of China's logistics industry related policy measures to provide certain theoretical support, this is also the topic of reason. In this paper, a comprehensive system analysis, principal component analysis, vector auto regression model analysis method. Analysis between the development of logistics industry and economic growth in China is long-term, short-term relationship and interactive process, based on proposed relevant policy recommendations.

2. E-commerce Supply Chain

2.1. B2C E-commerce Logistics Distribution

Before the advent of electronic commerce, Logistics is the mode of operation of a single, relatively traditional industries, it refers to the logistics enterprises to consumers need to mail goods or other forms of physical goods from one place to another in the

process of receiving. After the emergence of electronic commerce, the traditional sense of the logistics has changed a lot, simply said, e-commerce logistics is the basis of e-commerce in the modern logistics. E-commerce logistics relationship commodity by the merchant to the consumer between circulation link, before the goods transferred to the hands of consumers in the end is required from suppliers of raw materials to manufacturing enterprises to big channels to retailers, and finally to the end user, now logistics eliminates the need for many circulation link, greatly reduce the consumption of social resources, shorten the time from a link to another circulation, but also to avoid the friction between different enterprises.

The basic mode of logistics distribution is the basic strategy and method of the enterprise according to the nature, characteristics and technological process of the distribution. From the point of view of domestic e-commerce logistics development, B2C e-commerce businesses looking to adapt to e-commerce logistics distribution mode of constant exploration, at present mainly in the self-built logistics, third party logistics, logistics alliance.

- ***Self-built logistics mode:*** Self built logistics mode is refers to the electronic commerce enterprise in order to achieve business objectives, the enterprise's own money construction of logistics distribution center and logistics involved all other aspects, including cash or other aspects of fixed assets investment, and the logistics operation of the enterprise internal organization, coordination, command and control of a logistics operation mode. Its model diagram is shown in Figure 1.

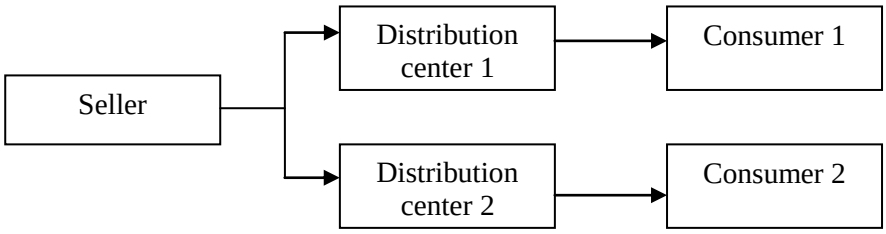

Figure 1. Self Built Logistics Mode

- ***Third party logistics model:*** third party logistics mode is an enterprise focused on the advantages of resources to develop core business, and the logistics outsourcing to except the supplier and demander of professional third-party logistics enterprises to complete a logistics operation mode. Third party logistics with the development of the logistics industry and development, is an important form of logistics, the development of the logistics industry to a certain stage, there will be third party logistics. Its model diagram is shown in Figure 2.

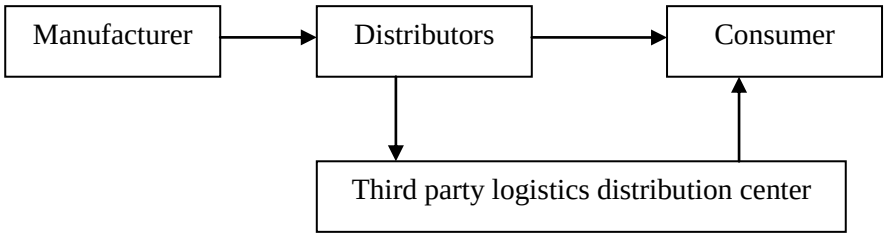

Figure 2.Third Party Logistics Mode

- ***Logistics alliance mode:*** Logistics alliance is to achieve than the individual engaged in logistics and distribution activities, the better the effect, to contract

between two or more than two companies formed by mutual trust, risk sharing, benefit sharing logistics partnership. Its model diagram is shown in Figure 3.

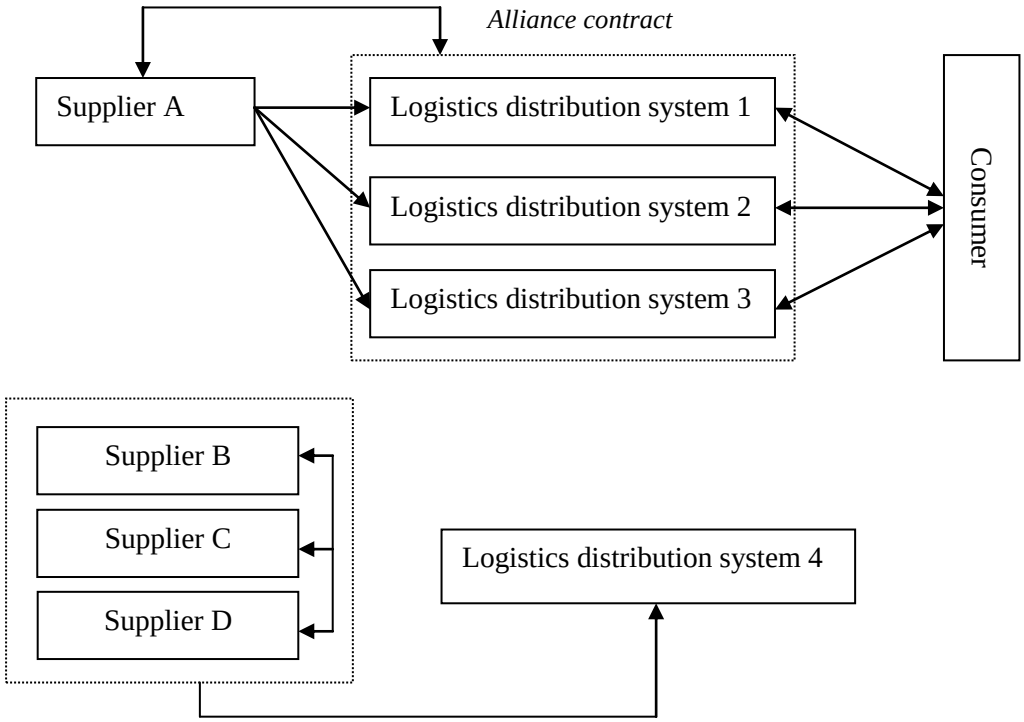

Figure 3. Logistics Alliance Model

2.2. Comparative Analysis of the Main Logistics Mode

Through the table below for three logistics models were analyzed, domestic B2C logistics mode in the indicators and analysis as shown in Table 1.

Table 1. Logistics Mode Comparison

project	Self-built logistics	Third party logistics	Logistics alliance
Control ability	strong	Losing control	general
logistics cost	huge cost	Low	low
service quality	Provide personalized service	The overall service level is low	Mutual consultation
Response speed	fast	bit slow	general
Information level	Timely, effective	delay	Timely, effective
service object	enterprise itself	unlimited	internal enterprise
coverage	smaller scale	wide range	wide range

Further draw the following conclusions:

1) In the present stage, the third party logistics is the best that can be applied to the actual optimal logistics mode, so choose a high level especially foreign advanced third-party logistics enterprise cooperation mode of logistics, is the B2C electronic commerce transaction platform logistics to solve the optimal scheme. Third party logistics is the important choice to solve the problems of B2C e-commerce logistics in our company at the present stage.

2) Self-built logistics need to invest a lot of capital and manpower, to bring great pressure to the enterprise capital flow; therefore, the operational risk of self-built

logistics is the biggest. And the other two logistics distribution mode in risk to much smaller, but risks and vulnerabilities still cannot be ignored, companies need to according to itself in different growth stages and different geographical distribution of the characteristics to choose and adjust logistics distribution mode.

3. Model Analysis

3.1. Nonlinear Time Series Model

We assume the time series (Q) model as following:

$$\begin{bmatrix} y_1 \\ x_2 \end{bmatrix} = \begin{bmatrix} \beta_1 \\ \gamma_1 \end{bmatrix} + \begin{bmatrix} \alpha_1 & \alpha_2 \\ \varphi_1 & \varphi_2 \end{bmatrix} \begin{bmatrix} y_{t-1} \\ x_{t-1} \end{bmatrix} + \ldots + \begin{bmatrix} \alpha_{1Q} & \alpha_{2Q} \\ \varphi_{1Q} & \varphi_{2Q} \end{bmatrix} \begin{bmatrix} y_{t-Q} \\ x_{t-Q} \end{bmatrix} + \begin{bmatrix} e_1 \\ e_2 \end{bmatrix} \tag{1}$$

In this formula, Q is the lag augmentation of panel model. We consider now that coefficients that determine causal relationships in the time series model (α2q and φ1q) are not stable but change over time following a logistic smooth transition functional form as:

$$\alpha_{2q} = a_{2q}^{*} + a_{2q}^{**} F\left(\lambda_{1q}, c_{1q}; \tau\right) = a_{2q}^{*} + a_{2q}^{**} \left[1 + \exp\left(-\lambda_{1q}\left(\tau - c_{1q}T\right)\right)\right]^{-1} \tag{2}$$

$$\alpha_{1q} = \varphi_{1q}^{*} + \varphi_{1q}^{**} F\left(\theta_{1q}, g_{1q}; \tau\right) = \varphi_{1q}^{*} + \varphi_{1q}^{**} \left[1 + \exp\left(-\varphi_{1q}\left(\tau - g_{1q}T\right)\right)\right]^{-1} \tag{3}$$

We test for nonlinear granger causality from xt to yt using two different hypotheses:

$$H_0^1 : \alpha_{21}^{*} = \alpha_{22}^{*} = \ldots = \alpha_{2Q}^{*} = 0 \tag{4}$$

$$H_0^2 : \alpha_{21}^{*} + \alpha_{21}^{**} = \alpha_{22}^{*} + \alpha_{22}^{**} = \ldots = \alpha_{2Q}^{*} + \alpha_{2Q}^{**} = 0 \tag{5}$$

Equally, testing for granger causality from yt to xt, then we would have:

$$H_0^1 : \varphi_{11}^{*} = \varphi_{12}^{*} = \ldots = \varphi_{1Q}^{*} = 0 \tag{6}$$

$$H_0^2 : \varphi_{11}^{*} + \varphi_{11}^{**} = \varphi_{12}^{*} + \varphi_{12}^{**} = \ldots = \varphi_{1Q}^{*} + \varphi_{1Q}^{**} = 0 \tag{7}$$

Hypotheses H_1 (formula 4 and 6) and H_2 (formula 5 and 7) are tests for granger causality before and after the break respectively. The combination of these two tests allows us to address causality issues and analyse whether causal patterns have changed after the break.

3.2. Stability Conditions

The stability of the panel model means that when we put an impulse to the innovation of on formula in the time series mode, the impact of the effect will gradually reduce .The basic condition of stability is that: all the eigenvalue of Π_1 should be located within the unit circle. According to the formula 1, when t=1, it should be:

$$Y_1 = c + \prod_1 Y_0 + \mu_1 \tag{8}$$

And when t=2, we calculate the formula with iterative method, as:

$$Y_2 = c + \prod_1 Y_1 + \mu_2 = \left(1 + \prod_1\right)c + \prod_1{}^2 Y_0 + \prod_1 \mu_1 + \mu_2 \tag{9}$$

So that, when t=t, it could be written as:

$$Y_t = \left(1 + \prod_1 + \prod_1^{\ 2} + \cdots + \prod_1^{\ t-1}\right)c + \prod_1^{\ t} Y_0 + \sum_{i=0}^{t-1} \prod_1^{\ i} \mu_{t-i} \quad (10)$$

From the formula above, we can get that Y_t becomes a function to the vector μ, Y_0 and μt after the formula transformation. So we can analysis the impact result of these vectors to find out whether the panel model is stable. If the time series model is stable, it will satisfy the conditions as:

- If give one unit impulse to c at t=1 period, when $t \to \infty$,the effect will have a Limit value as $(I-\Pi_1)$-1
- If give one unit impulse to Y_0, the effect will be Π_{1t} when t=t and will be gradually disappeared with time has been increased.

From the analysis about panel model, we can get that if the panel model has the unit root, it will have the memory about impulse impact for a long time, so this panel model is not stable. Also, the response of endogenous variables will not reduce with time increased in this case.

4. Empirical Analysis

4.1. Index Selection

In the choice of index factors which influence the development of the logistics industry, the main consideration is the index of "hardware" and "software" index of two types, the "hardware" is refers to the infrastructure construction, fixed investment, "software" index of intangible resources support, such as talent, technology, policy and legal. Among them, "hardware" indicators easily from the relevant statistical yearbook find data easy to quantitative analysis; talents in software "index", science and technology status indicators are easy to quantify, but laws and policies, the index is not easy to quantify. From another point of view to analysis influence of effects of policies and laws of the logistics industry reflected in the influence of the rest of the index of the logistics industry, such as infrastructure construction conditions, logistics industry investment in fixed condition, industry personnel training status, current situation of the development of science and technology, market-oriented shape etc. of the logistics industry, so you can select the remaining indicators to alternative indicators of policy and law.

To sum up the above about the logistics industry and economic growth of the common methods for analysis of main index weights are determined by the level analysis method, comprehensive index on the principal component analysis method, the efficiency evaluation data envelopment analysis method and regression analysis on the vector auto regression analysis method.

1) ***Analytic Hierarchy Process:*** a systematic analysis of the qualitative analysis and quantitative analysis by Saaty first proposed. Through the establishment of AHP hierarchy will decompose complex problems, the factors contained in the question stratified hierarchy decomposed into target layer, criterion layer, object layer. Wherein the target layer refers to the actual problem to be solved eventually, guidelines layer is based on decomposition of the object layer is a practical measure or means to solve the problem. Analytic Hierarchy Process is often used in industrial capacity right index weight coefficient logistics assessment, in a more convenient logistics industry reaction actual operating conditions.

2) ***Principle Components Analysis:*** multiple indicators to reduce dimension into the original index data can contain a small amount of information as a comprehensive index, these comprehensive indicator represents the primary indicators of the same type in certain types of properties, and therefore is the principal component

analysis an indicator of a comprehensive analysis. In the study of the logistics industry and economic growth, factors affecting the level of competence of the logistics industry contains many aspects, if these factors can be integrated indicators are difficult to draw some common substantive conclusions. Therefore, principal component analysis is a common method of research in this area, for finding common factors, so that the research process is simplified.

3) ***Data Envelopment Analysis:*** Evaluation is commonly used investment analysis tool output efficiency, generally used in the evaluation of regional logistics efficiency. This method is more in terms of AHP, no need to consider the weight of the indicators, just need to get input data and output data of the logistics industry will be able to get the efficiency value, and therefore the evaluation results more objective truth. With the development of technology, DEA, derived from technical analysis methods and other two-stage DEA analysis efficiency evaluation conclusions so that efficiency is not limited to the value of the problem, but also extended to the input-output process, so that research findings to guide practice more meaningful. In addition, the DEA scholars also further expand the scope of use, and create a production under unknown circumstances specific form of function can be performed Efficiency Evaluation of Stochastic Frontier Analysis.

4) ***Vector Auto Regression:*** the system each endogenous variable as a function of all the endogenous variables lagged value of the system to build the model, univariate Autoregressive to develop multivariate time series variable vector autoregression model composition. When the relationship between interaction and Economic Growth in the logistics industry influence factors, through the establishment of VAR model to analyze the relationship between the factors contained in the parties can provide theoretical support for the formulation of policy recommendations.

4.2. ADF Stability Test

Indicator data was collected from the 2001 to 2015 annual economic data, due to index dimensions too large to make use of principal component analysis to reduce the dimensionality. First, the index data by KMO and Bartlett tests showed the shots for component analysis. After factor rotation, the first principal component contribution rate of 38.7%, which in the railway mileage, highway mileage, river miles, air miles, pipeline mileage, the number of railway wagons, the number of civilian trucks, the number of civilian transport ships, fixed investment in logistics, Telephone high load on the penetration, the cable mileage, the number of graduate students, research and development, patents granted, the proportion of urban population and other indicators, reflects the impact of information technology, urbanization, infrastructure and investment, human resources, technology development indicators logistics capabilities, can be named as the underlying factor (F_1); the second principal component contribution rate of 38.2%, load it in the tertiary industry accounted for a higher proportion of the GDP index, reflecting the impact of the industrial structure of the logistics capabilities, It can be named structural factor (F_2); the third principal component contribution rate of 22.8%, it is state-owned enterprise workers accounted for a higher load on the proportion of urban workers and the actual use of foreign investment indicators reflect the impact of market-oriented logistics capabilities can be named as the market factor (F_3).

It should be noted F_1, F_2, F_3, although independent of each other between, but the original data because they have certain interference, not purely represent the real "foundation, structure and market the" three factors, particularly F_2, F_3. Therefore, they need to be adjusted, the adjustment method is a direct indicator of the original data belonging to three factors polymerized obtain new three factorsi, $NF_2 > NF_3$. In the original data, the index underlying factor principal component analysis, KMO value of

0.847, Bartlett is 487.533, both through testing, component analysis showed that for the shots. After principal component analysis, the main component of NF_1, the cumulative variance explained reach 95.014%, indicating that the main component of an effective combination of basic factors of 15 original indicators. Similarly, you can draw NF_2 and NF_3, index value after the polymerization is shown in Table 2.

Table 2. Comprehensive Index Value

Year	F_1	F_2	F_3	NF_1	NF_2	NF_3
2001	-0.5392	-1.4402	0.9549	-0.7296	-1.1027	-0.4381
2002	-0.8341	-0.6745	0.8631	-0.6436	-0.5704	-0.1821
2003	-0.8499	0.0624	0.2644	-0.5250	-0.1719	-0.1948
2004	-1.0753	0.4685	0.4334	-0.4300	0.1508	0.0371
2005	-1.0176	1.2375	-0.3477	-0.2937	0.5220	-0.0691
2006	-1.0947	1.5353	-0.2477	-0.1654	0.7837	0.1278
2007	-0.8151	1.2945	-0.0713	0.0337	0.7233	0.2123
2008	0.5503	0.6456	0.5968	0.2008	0.5029	0.4172
2009	-0.2264	0.5966	0.4743	0.3826	0.5363	0.4589
2010	0.2143	0.5739	0.3455	0.6511	0.6468	0.5854
2011	0.4540	0.7066	0.3895	0.8913	0.8934	0.8426
2012	0.6220	0.2768	1.1162	1.0802	0.8754	1.2065
2013	1.5473	0.8468	-0.1908	1.4920	1.2901	1.1601
2014	2.1512	0.2247	0.3719	1.8545	1.2169	1.5209
2015	2.4304	0.0855	0.5763	2.0957	1.2700	1.7048

Table 3. ADF Test Results

variable	type	ADF test value	10% critical value	conclusion
ZDGP	(c,t,3)	-0.9247	-3.2978	Non-stable
DZGDP	(c,t,2)	-1.8615	-3.2978	Non-stable
D (DZGDP)	(c,t,1)	-6.5682	-3.2978	stable
NF_1	(c,t,2)	7.1031	-3.2869	Non-stable
DNF_1	(c,t,3)	1.0101	-3.3103	Non-stable
$D(DNF_1)$	(c,t,2)	-5.6733	-3.3103	stable
NF_2	(c,t,1)	-2.7440	-3.2774	Non-stable
DNF_2	(c,t,2)	-4.9369	-3.3250	stable
NF_3	(c,t,0)	-3.1136	-3.2690	Non-stable
DNF_3	(c,t,0)	-5.1521	-3.2774	stable

4.3. VAR Model and Co-integration Analysis

The vector auto regression model is established based on the optimization of logistics and economic growth, and the coefficients of each variable are shown in Table 4. The model test proved that the stability test of VAR model is usually used for testing for AR, if the model according to the simulation of inverse is less than 1, which appeared in the unit circle, the VAR model is stable, otherwise the model is not stable, the result is not effective. Data results show that all of the characteristics of the model are AR test in the unit circle, which shows that the model is stable, and the results are valid. At the same time, the goodness of fit of the VAR model is 0.75 and 0.95 respectively, which shows that the model is better fit for the R-squared model.

According to the results of empirical analysis, from the basic logistics optimization of short-term changes, in addition to its own influence, industrial structure and market

impact on the current logistics optimization based respectively 1.27% and 8.43%, indicating that in the short-term market of the optimization of logistics infrastructure has a positive role in promoting, and effect is obvious; in contrast, industrial structure of logistics based optimization effect is not obvious. In addition, in the case of the interaction between logistics industry and economic growth, the economic growth rate in the short-term changes in addition to its own impact, but also by the impact of logistics infrastructure, industrial structure and market. Among them, basic logistics optimization of degree on economic growth) had significant effects, and industrial structure and market on the economic growth degree in the short term effect is not very significant that economic growth in the industrial structure and market of long-term equilibrium relationship has great dependence.

Table 4. VAR Model

variable	DNF_1	DZGDP
DZGDP(-1)		0.3987 [2.7857]
DNF_1(-1)	0.0521 [0.1992]	0.7196 [4.7845]
NF_2(-1)	0.0127 [0.4029]	0.0123 [0.7480]
NF_3(-1)	0.0843 [2.0385]	-0.0081 [-0.3423]
C	0.1577 [3.7005]	-0.0024 [-0.0948]
R-squared	0.7506	0-9559
Adj. R-squared	0.7008	0.9433

This paper adopts Johansen test method to determine the existence of cointegration, test results and the cointegration equation, first consider whether there exists a cointegration relationship among the three factors: DNF1, NF2, NF3, and test results table 4 shows: under 1% of the level of inspection and DNF1, NF2, NF3 exist a cointegration relationship, the standardized vector as (1.0000,0.0236, -0.1383), so we can get the cointegration equation.

$$DNF_1 = -0.0236NF_2 + 0.1383NF_3$$

Then take DZGDP and DNF1, NF2, NF3 between cointegration relationship, the empirical results in Table 5, it showed that the above variables under 1% of the level of inspection exist a cointegration relationship, standardized co integer vector as (1.0000, -2.9737, -0.0381, 0.2605), so we can get the cointegration equation.

$$DZGDP = 2.9737DNF_1 + 0.0381NF_2 - 0.2605NF_3$$

Cointegration test results show that there is a long-term equilibrium relationship between the basic logistics optimization degree, industrial structure, market, the three factors, and industrial structure and logistics infrastructure optimization degree negative correlation, marketing and logistics infrastructure optimization degree of positive correlation. Because of the investment in infrastructure construction in the optimization of logistics base occupies a certain weight, and the optimization of the industrial structure will generally reduce the investment in infrastructure, so the degree of industrial structure and logistics based optimization presents negative correlation. At the same time, the degree of marketization promotion will bring further good logistics base, so market and logistics infrastructure optimization appeared positive correlation.

Table 5. Johansen Test Results (1)

hypothesis	characteristic value	Trace statistic	1% critical value
none	0.8629	46.149	35.458
At most one	0.4332*	10.384	19.937
At most two	0.0090	0.1636	6.6349

Table 6. Johansen Test Results (2)

hypothesis	characteristic value	Trace statistic	1% critical value
none	0.8424	63.035	54.682
At most one	0.5450*	29.772	35.458
At most two	0.4690	15.596	19.937

5. Conclusions

Co-integration Analysis and VAR model empirical results show that: in the long run, the basic logistics optimization degree, industrial structure and the degree of marketization is equilibrium relationship, the degree of marketization and logistics infrastructure optimization is positively related, industrial structure, and optimization of logistics base was negatively correlated; and economic growth and logistics infrastructure optimization degree, industrial structure and the degree of marketization is equilibrium relationship, basic logistics optimization degree, industrial structure and economic growth is positive relationship, and degree of market development and the economic growth is negatively related to. In the short term, the market degree of logistics based optimization also has a more obvious role in promoting, at the same time, the short-term impact of the logistics infrastructure to economic growth. The conclusion shows that to play logistics industry role in promoting economic growth, vigorously poor logistics base, logistics base here including hardware and software foundation also the optimization of the industrial structure, in particular, vigorously develop the tertiary industry, promote economic growth, but to promote the role is limited in a certain extent. Finally, the empirical results show that the market in a certain extent restrain economic growth, this is not to say that China's economic development is the need of the market, causes the suppression phenomenon, mainly because the degree of marketization and the economic base and the industrial structure does not adapt.

Empirical analysis has been the basis of the optimization of logistics and economic growth between the long-term interactive relationship, so to play the function of economic growth in the logistics, first of all to strengthen the logistics infrastructure, sound and perfect. Modern logistics industry from the point of view of the social point of view, its revenue is more objective, but the logistics infrastructure due to the huge investment, government agencies as the main body of investment, or as to initiate the body to attract private capital to enter the field of infrastructure construction. China in the development of the logistics industry, due to the lack of large-scale logistics base and perfect function distribution center, industrial development has been greatly restricted. However, the logistics base and other logistics infrastructure investment is huge, and the payback period is long, the risk of investment is large, the private sector generally do not want to intervene. Therefore, the government should assume the logistics base node logistics infrastructure construction, combine the logistics infrastructure construction and urban comprehensive development strategy planning and economic development planning, the logistics infrastructure become the true sense of the public products, to achieve comprehensive social benefits. At the same time, government departments should also strengthen the construction of transportation infrastructure, improve the transport network, the modes of transport convergence more quickly and effectively, and strive to

achieve seamless docking, in order to improve the compatibility and efficiency of the whole logistics system. In addition, in infrastructure construction should also make full use of social idle resources, to attract private capital into infrastructure construction, by means of merger and acquisition, financing lease and assets replacement and in tax policy, land use rights, the formulation flexible measures to encourage, speeding up the logistics industry, infrastructure construction and improvement.

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