

# Research on the Integration of Manufacturing Industry and Logistics Industry in Huaihe River Ecological Economic Belt

Lin Tang

Anhui University of Finance and Economics, Hefei 233030, China.

---

**Abstract:** Along with the emphasis on improving the high quality development of manufacturing industry, the integration of manufacturing industry and logistics industry is called the main way to realize this goal. At present, Chinese manufacturing industry is in the stage of "big but not strong", with all kinds of manufacturing industry but no core competitiveness, low proportion of services for manufacturing industry, low degree of integration of manufacturing and service industry, and the service industry to improve the efficiency of manufacturing industry. The logistics industry is an important part of the service industry and plays an important role in the integration of manufacturing and service industry. At present, the Huaihe ecological economic Belt in China has great potential in the integration of the two industries. The Huaihe ecological economic Belt has a large scale of manufacturing industry, developed shipping, transportation and obvious geographical advantages. Therefore, it is of great significance to study the integration of manufacturing industry and logistics industry in the Huaihe Ecological economic Belt. This article from the huaihe river, the present situation of the ecological economic zone industrial structure of huaihe river ecological economic zone of the two industry changes state were analyzed, and the results showed that the ecological development of logistics industry in the manufacturing industry is relatively lagging behind of the huaihe river, according to the research conclusion is put forward how to speed up the integration of the two industry policy advice, to vigorously support of manufacturing in terms of economy, improve the level of the huaihe river ecological economic belt manufacturing, In THE logistics industry, we should strengthen the establishment of logistics infrastructure and perfect the integration of the two industries, promote the training of logistics professionals, and speed up the construction of logistics informatization.

**Keywords:** Manufacturing logistics Huaihe River Ecological Economic Belt manufacturing and logistics integration

---

## 1. Research background and significance

### 1.1 Research Background

Manufacturing industry is the main body of national economy, since the reform and opening up for 40 years, pull rapid economic growth, improve the national living standard of the important guarantee. Statistics from 2010 to 2020 show that the added value of China's manufacturing industry increased from \$1,924,324 million to \$3,853,808 million, with a huge increase. But these three years 2018201, 9202, the added value of manufacturing is basically unchanged, while the trade war in 2018 to the influence of the outbreak causes national macroeconomic growth is slowing, but the main reason is due to the overall "big but not strong" of China's manufacturing industry, most of the manufacturing enterprise is still in the traditional "heavy production. As a result, China's manufacturing industry is still in the middle and low end of the global manufacturing value chain, with low added value and insufficient technology content. Therefore, how to get out of the predicament faced by the current manufacturing industry, improve the industrial structure of the manufacturing industry, increase the core competitiveness of the manufacturing industry and industrial added value, is the top priority at present.

## 2. Domestic and foreign research review

### 2.1 Research on the integration of manufacturing and logistics industry

Early corresponding attention has been given to the logistics industry, is often seen as one part of the producer services, so the early research mainly study the relationship between manufacturing industry and producer services, the logistics industry as the main part of producer services, the fusion of these literature reference for manufacturing and logistics industry research has a major

role, Foreign studies on the relationship between logistics industry and manufacturing industry began in the 1970s with the attention to the relationship between producer services and manufacturing industry. In-depth studies have been conducted around the status of the two industries and their interaction. The most representative views are demand compliance theory, supply-leading theory, interaction theory and integration theory. According to the demand compliance theory, manufacturing industry is the prerequisite for the emergence of producer services and also the source for the development and growth of producer services. Cohen(1987), Marshall (1989), Goe (1991), Martinelli (1991) and others hold this view. In addition, Guerrieri and Meliciani(2005) studied the industrial structure of different countries and used the input-output model to find that changes in the development level and industrial structure of a country's manufacturing industry completely affect and limit the development of producer services. The supply-oriented theory Karaomerioglu (1999), Ficlcr(1999), Hutton (2004), Francois (2005), Tanaka(2009) and other scholars all hold this view. They believe that in the whole process of manufacturing production, Producer services play a vital role as a decisive factor in the development of manufacturing industry. Bernard Hoekman and Ben Shepherd(2017) analyzed the production efficiency of manufacturing industry and the production efficiency of producer services and found that the two efficiency had the same direction, indicating that the service industry had an obvious decision on the manufacturing industry. Similarly, Chinese scholars Jiang Xiaojuan and Li Hui (2004) pointed out that the low development level of china's service industry seriously affected the competitiveness of china's manufacturing industry through a survey of international companies' investment in China. Interaction theory holds that manufacturing industry and producer services influence each other, they are interdependent and promote each other. Interaction theory is the combination of demand compliance theory and supply dominance theory. Scholars such as Francois (1990), Fuentes (1999) and Illeris (2010) hold the view of interaction theory. The convergence theory holds that with the continuous development of technology, the boundary between manufacturing and producer services will become more and more blurred until they are integrated. Quinm(1988), Lundvall(1998) and other scholars advocate the convergence theory and believe that the integration of the two industries will make the two industries grow stronger and promote economic development.

### **3. Analysis of the current situation of the integration of the two industries**

#### **3.1 Overall changes in manufacturing industry**

From 2010-2015, huaihe river ecological economy overall manufacturing economies of scale has been increased, in 2017 reached 1.323478 trillion yuan, but the increase rate is first and lowered later that the huaihe river ecological economic belt manufacturing development encountered bottleneck, this is because the huaihe river has been in vulgar development of ecological economic zone, did not pay attention to quality development, The lack of emphasis on high-tech manufacturing and the integration of the two industries has resulted in a gradual decline in the rate of growth in the current context. The Huaihe Ecological Economic Belt has always been dominated by industrial economy, mainly relying on traditional industries with high consumption and high output, such as chemical manufacturing, metal manufacturing and equipment manufacturing. If we want to achieve high-quality development, we must adjust the industrial structure and realize the integration with the logistics industry.

#### **3.2 Overall changes in the logistics industry**

From 2010 to 2015, the demand of logistics industry in the Huaihe River Ecological Economic Belt is gradually decreasing, and the total amount of logistics is also in a state of overall decline. This is because the manufacturing level of the Huaihe River ecological Economic belt cannot match the level of logistics industry, resulting in low demand for logistics industry. The logistics industry in the Huaihe River Ecological Economic Belt is developing well, and all the indicators are in the forefront of the country, but the internal structure of the logistics industry is still unreasonable. The logistics industry of the Huaihe River Ecological Economic Belt mainly depends on industrial logistics and relies too much on the manufacturing industry. However, the development level of the manufacturing industry in the Huaihe River Ecological Economic Belt is not high, and the integration degree of the two industries is also low. This will be an important problem to be solved in the future development of the Huaihe River ecological Economic Belt.

### **4. It proposes the integrated development of manufacturing industry and logistics industry in Huaihe River Ecological Economic Belt**

#### **4.1 Accelerate the level of urbanization and promote the development of manufacturing**

The government should formulate corresponding policies to promote the development of manufacturing industry, attach

importance to the upgrading and transformation of manufacturing equipment and technology, promote intelligent and mechanized manufacturing equipment, improve the management level of manufacturing industry, verify the cost of manufacturing industry, and realize economic management.

## 4.2 Promote the upgrading of logistics structure

Relying on the existing logistics advantages, frequent trade relations with neighboring provinces, create a good logistics business environment, promote the realization of upstream and downstream logistics industry supporting development, develop the characteristics of the Huaihe River ecological economic belt, strengthen the development of agricultural logistics in the Huaihe River ecological economic belt

## 4.3 Introduce talents and promote the training of professional talents

We should introduce high-quality labor force and professional talents, improve the current training system for relevant talents, build a team with comprehensive service management ability, and provide guarantee for the long-term development of the logistics industry.

## References

- [1] Cohen SS. Manufacturing matters : the myth of the post-industrial economy [J]. Southern Economic Journal, 1988,54(3): 97-103.
- [2] Marshall, JN. Corporate reorganization and the geography of services: evidence from the motor vehicle aftermarket in the west midlands region of the UK[J]. Regional Studies, 1989,23(2): 139-150.
- [3] Goe RW. The growth of producer services industries: sorting through the externalization debate[J]. Growth & Change, 1991,22(4): 118-141.
- [4] Martinelli F. Producer Service's Location And Regional Development In P.W. Daniels and F.Moulaert(eds), The Changing Geography Of Advanced Producer Services[M]. London Belhaven Press, 1991: 14-18.
- [5] Guerrieri P., Maggi B. & Meliciani V. Technology Diffusion, Services, And Endogenous Growth In Europe: Is The Lisbon Strategy Useful?[J]. Bruges European Economic Research Papers, 2005.
- [6] Karaomerioglu DC, Carlaaon B. Manufacturing in decline? A matter of definition[J]. Economy, Innovation, New Technology, 1999,8: 175-196.
- [7] Fixler DJ, Siegel D. Outsourcing and productivity growth in services[J]. Structural Change & Economic Dynamics, 1999,10(2): 177-194.
- [8] Hutton TA. Service Industries, Globalization And Urban Restructuring Within The Asia-Pacific: New Development Trajectories And Planning Responses[J]. Progress In Planning, 2004(1): 1-74.
- [9] Francois JF. Producer Services, Scale, And The Division Of Labor[J]. Oxford Economic Papers, 2005, 42(4): 715-729.
- [10] Tanaka K. Producer Services And Manufacturing Productivity: Evidence From Japan Industrial Productivity Database[J]. Global COE Hi-Stat Discussion Paper Series, 2009.
- [11] Varnado. Empirical Analysis on the Linkage Development of China's Manufacturing Industry and Logistics Industry -- Based on the perspective of industry panel data analysis in economic transition period [J]. China Circulation Economy, 2013 (7) : 29-36.
- [12] Jing XQ. Research on the Linkage Development of Manufacturing Industry and Logistics Industry in Yangtze River Economic Belt [J]. Journal of nantong university (social science edition), 2017,01:16-22.
- [13] Ma ML. Analysis of Linkage Development between Manufacturing Industry and logistics industry in Hebei Province based on Grey correlation degree [J]. Logistics engineering and management, 2019,41(11): 13-15.
- [14] Zhao XM, Tong J. Coordination degree of regional manufacturing industry and logistics industry: a case study of Shanghai [J]. Systems engineering,2018,36 (5) :95-103.
- [15] Zhou XY, Ma XY, Zhu ML, Zhong Y. Research on the coupling and coordinated development of manufacturing industry and logistics industry under the background of intelligent manufacturing [J]. Logistics Engineering and Management, 2022(2): 14-17.
- [16] Dong QL, Zhang L, Shen L. Industrial coordination degree research on the linkage development of manufacturing and logistics industry -- Empirical analysis based on Shaanxi Province data [J]. Technology Economics and Management Research,2015 (3) :119-123.
- [17] Zhao XM, Tong J. Coordination degree of regional manufacturing industry and logistics industry: a case study of Shanghai [J]. Systems engineering,2018,36 (5) :95-103.
- [18] Fan M. Efficiency analysis and development Strategy Research of logistics industry in Chinese urban agglomerations -- Based on the perspective of industrial operation and linkage development. Soft Science, 2010 (5) :11-16.

[19] Jia HC, Yuan XX. Study on the Adaptability of Logistics and Industrial Structure in Jiangsu Province: An empirical analysis based on DEA and VAR [J]. Logistics Technology, 2012 (2): 290-352.