

## Mechanism, Path and Practice of the Convergence Development of Tourism Industry in the Context of Economic Transformation

Hui Liu

*Institute of Tourism and Mice, Henan University of Economics and Law,  
Zhengzhou 450002, China  
E-mail: tea\_time@126.com*

**KEYWORDS** Human Behavior and Cognition. Path Choice. Tourism Market. Transformation and Upgrading

**ABSTRACT** This paper aims to deal with the mechanism, path and practice of the convergence development of tourism industry in the context of economic transformation. This paper proposes convergence models of tourism industry based on a conceptual model by combining and discriminating of convergence concepts of tourism industry. The paper studies the patterns of integrating culture industry and tourism industry in the perspective of the theory of industry integration, generalizes three patterns of industry integration, that is, extended pattern, restructuring pattern and permeable pattern, makes the theoretic analysis of them systematically. In light of the characteristics of the culture and the tourism in China, the paper illustrates the base and the feasible patterns of integrating the culture industry and the tourism industry in China, and also gives some suggestions on integrating and developing the culture industry and the tourism industry for China.

### INTRODUCTION

Facing the contradiction of the diversity and depth of the tourism demands and the tourism products' single function and less connotation of the tourism supply, seeking a new model of development of tourism industry has become an urgent issue to solve. The tourism industry is a concept formed of an integration of tourism and industry. It is a new format formed by primary to senior evolution in a state of continuous development of tourism activities. The word "tourism" is not innately, it is a product of social productive forces to a certain stage. Early travel is only an activity of a few persons for entertainment, recreation and games (Varte 2016). Tourism industry has input and output function and the input-output relate to many industries, as the tourism industry is closely associated with the other industries. Therefore, tourism is an industry. But tourism is not the same as in the

tourism industry. It did not form a unified theoretical research framework. Current researches are insufficient to give right proposals to the development of practice, resulting in promoting the tourism industry's convergence with all industries in the practice. In this background, this paper proposes the research topic of the convergence models of tourism industry.

Tjasa and Metod (2014) proposed convergence models of tourism industry based on conceptual model by combining and discriminating of convergence concepts of tourism industry. In order to validate the convergence models of the tourism industry, this paper makes empirical analyses to the three convergence models and puts forward further suggestions and comments for the future development of tourism industry's convergence based on the results of empirical analyses. Marija and Matjaz (2014) selected the tourism industry's convergence with agriculture, cultural industry and information industry as the research objects to argumentation the feasibility of the theory applied in practice. The research of the convergence of tourism industry and agriculture mainly puts forward hypotheses based on the relation between the industry association and convergence and then tests the hypotheses by measuring and analyzing of the input rate and convergence degree.

---

*Address for correspondence:*

Hui Liu

*Lecturer*

Institute of Tourism and Mice,  
HeNan University of Economics and Law,  
Zhengzhou (450002),  
Henan, China

*Mobile:* 86 18503886075

*E-mail:* huiliu\_603@163.com

Marianna and Kalotina (2014) summarized the features of the three convergence models and proposes the advice to develop the tourism industry's convergence based on empirical research findings. In this paper, the innovations are reflected in three aspects. Firstly, this paper builds conceptual model of tourism industry and proposes three convergence models of tourism industry based on conceptual model in the theoretical research.

The convergence models of tourism industry based on conceptual model embody the difference of essence of different convergence model and covering all kinds of integration phenomenon. Secondly, this paper breaks the limitation of qualitative analysis in the current convergence model research of tourism industry. Sunil et al. (2014) proposed hypotheses based on the relationship of industry association, coupling, clusters and industry convergence and tests them by input rates analysis, counteraction analysis and correlation analysis. The conclusions of the study proves that the convergence between tourism industry and agricultural industry is tourism industry's active convergence and confirms that active model can bring together to improve added value of the both industries, tests that the convergence between tourism industry and cultural industry is tourism industry's interactive convergence and identifies the driven industry and sectors in the interactive convergence, verifies that the information industry's role of driving the tourism industry to converge.

### **The Measurement on Tourism Industry in China**

With the rapid development of the tourism worldwide, the role of tourism in promoting employment, stimulating economic is becoming even more significant. The development on tourism is an important symbol of a national and regional modernization, opening and the internationalization. Governments at all levels begin to divert attention to actively play a function of tourism industry on driving others, and vigorously promote the level of tourism industrialization, which means tourism has been not only an activity carried out by the individual for a pursuit of pleasure and also not an undertaking, but an industry with a market competitive nature, and associating and driving a large number

of industries. Although tourism has been really an industry in reality there, but the concept and scope of which have not be solved in theory. The nature of the tourism industry is not clearly known, which brings about a difficulty to evaluate the socio-economic contribution and clear the status of tourism industry in the national economy. The measure of the industrialization level of tourism is an issue that is yet to be resolved in theory but very important in the practical application. The measure of the tourism industrialization level needs to solve two problems. First, on the basis of collating and summarizing the basic concepts, define the concept and scope of the tourism industry, clear the contents included in it. Second, under the premise of the established basic scope, starting from the connotation and characteristics of industrialization, the paper proposes methods and models to measure the industrialization level of tourism, and using of the model and the method in empirical research. Research on these two issues will play a crucial role in the development of tourism industry and government to develop policy.

Ponting and O'Brien (2014) firstly summarize the research progress and theoretical basis of the measure of the tourism industrialization level. Therefore, travel is seen as a social phenomenon and an activity for tourists. Tourism is different, which is an industry that provides products and services for tourists. With the popularity of tourism activities, tourism is becoming an industry, which involves multi-level, multi-domain from that only constituted by the travel agency. Academia has not reached an agreement about the nature of tourism industry, and the reason is that tourism industry determined by the concept and the characteristics of tourism activity is different from the general industry. The traditional definition of the travel and tourism is from the perspective of demand, while the industry is defined from the perspective of supply, meaning that an industry can be constituted as long as the enterprises produce the same or similar products. It is easy to determine the boundaries of an estate. For the tourism industry, those enterprises, from the point of view of supply, which produce tourism products also produce non-tourism products, in other words, those enterprises provide products and services for tourists and also for non-tourists.

It is difficult to determine whether these enterprises are tourism enterprises. The bound-

ary of the tourism industry is difficult to determine as well. Therefore, from this point of view, the tourism industry is not the strict sense of the concept of industry. By discriminating the concept of travel and tourism, Joan's paper (2014) proposed that tourism could still be an industry, because in accordance with the definition of the traditional industries, the tourism industry also provides tourist products just that such a product is a combined product that is produced by travel agencies, scenic locations, hotels and other enterprises. The production process of a tourism product is different from the traditional industries, but this cannot deny that tourism is an industry.

Tourism industry has input and output functions and the input-output relates to many industries, as tourism industry has closely associated with the other industries. Therefore, tourism is an industry. But tourism is not the same as in the tourism industry. As defined in the Tourism Satellite Account, tourism is from the perspective of demand, is all that directly related to tourism consumption. Tourism industry is from the perspective of supply, only including those enterprises closely related to tourism activities, regardless of whether these provided products are all tourism products. From this point of view, the tourism industry is more in line with the connotation of the traditional industries. Recognition of tourism as an industry, then it cannot be denied the significance of tourism industry development (Zhou and Yang 2014). The tourism industrialization means a type of effective integration that various sectors of the tourism industry to achieve, and means that a model of high related, a high degree of synergy will be formed. It seems that the advantages of the department's resources, environment and management strengths will change into industrial advantages, so as to enhance the size and competitiveness of the tourism industry as a whole. The tourism industrialization level is not only associated with the level of the tourism industry as a whole, but also related with the structure and the scale of the industry (Stephen and Shamiso 2015). To elaborate the association of demand and supply within the tourism industry and technical economic ties between tourism industry and other industries of the national economy, this paper also discussed the industry association theory and the demand and supply theory. The industry association is the tech-

nical economic ties of national economic sectors directly and indirectly interdependence and mutual restraint in the process of social reproduction, which is an important content to reflect the industrialization level of tourism. The tourism industry association analysis is to use a quantitative method to analyze the interaction between supply and demand in the tourism industry and the upstream and downstream industries, providing a reference for formulating industrial policies and establishing the direction of industrial development. The important tools of industry association analysis are the input-output tables. Using input-output tables can clearly measure the value of one industry to be consumed in the production process of other industries, and it can also be used to measure the value of other industries that to be consumed in the industry. For the industry association analysis relating to the impact between demand and supply of internal departments of tourism industry as well as the tourism industry and other industries, therefore, it is necessary to sort out the theory of tourism demand and tourism supply. Tourism demand is reflected in the various aspects of tourists demand to travel product. Tourism supply is the supplied products directly for tourists, and can be classified as basic tourism supply and auxiliary tourism supplies (Andrew 2014).

When measuring the industrialization level of the tourism industry, the indicators that are applied to reflect the tourists' demand is tourism consumption indicators, and the indicators that are applied to reflect the tourists' supply are output. The measure of the industrialization level of tourism industry can not only conform to the characteristics of the industry itself but also be comparable with other industries in the national economy, only if it considers both supply and demand (Roberto and Martina 2014). The key is the choice of the method for measure of the tourism industrialization level, which determines the authenticity of the results directly, while the measure of the industrialization level of tourism industry is still in the exploratory stage. The process of industrialization is dynamic and mutative, with features of comprehensive and complexity. Industrialization level reflects the level of industrial development stage, the sophistication and the level of intensive. Therefore, based on the connotation and characteristics of tourism industrialization, this paper major

proposed a model and method of the measure of the tourism industrialization level.

### **The Model on Convergence Tourism Industry in China**

According to the file Tourism Satellite Account Recommended Methodological Framework, the scope of the tourism industry is classified in accordance with the interrelated degree to tourism activities in Yim et al.'s paper (2014), while it is difficult to distinguish the degree, meaning that the criteria for the classification in Tourism Satellite Account are conceptual. Therefore, the boundary between specific and non-tourism specific industries, also characteristic and tourism-related industries are not clear in the Tourism Satellite Account. Based on this, Cowling et al.'s paper (2014) proposed a technical classification of tourism industry by using the indicator of the proportion of tourism demand on supply. Propose a defined standard between specific and non-tourism specific industries, and also characteristic and tourism-related industries, and further give a classification of tourism characteristic industries, putting forward the concept and scope of tourism core industries and tourism infrastructure industries. The proposed model (Pai et al. 2014) and methods to measure the contribution to the national economy of the sectors within the tourism industry (Lori et al. 2014), which is an important aspect to measure the tourism industrialization level, using of input-output and multiplier analysis method to measure the contribution of the sectors within tourism industry to the national economy, not only can reflect the scale level of the internal sectors of the tourism industry, but can also reflect the degree of optimization level, as well as the association impact of tourism industry to other industries in the national economy. Again, proposed model and methods to measure the contribution to the national economy of the tourism industry as a whole, which should reflect the level of the size and effectiveness of the overall development of the tourism industry. Using of integration model in the econometrics theory to measure the long-run equilibrium relationship between the tourism industry and the national economy can reflect the impact of the tourism industry on the national economy for a long period, which is a dynamic and long-term performance (Jang et al. 2014).

The model and method in this paper is based on two aspects. On the one hand, to reflect the size levels, benefit levels, associate degree, structure degree of optimization of the internal sectors, as well as the correlation and driven level between the industry by measuring the contribution of the sectors within tourism industry to the national economy, on the other hand, to reflect the scale of the tourism industry as a whole by measuring the contribution of the tourism industry as a whole to the national economy in the long term. The result of the tourism industrialization level is integrated by the above method and model. Based on the proposal of the tourism industry definition and the model and method of the tourism industrialization level, it takes an empirical study of the measure of the tourism industrialization level in China. On the basis of the input-output tables in China, the tourism income shall be deemed to output in Hubei's statistics. According to the earlier definition of the tourism industry, the tourism industry in China is defined and including the 16 departments of the eight categories. The eight major categories respectively are long-distance transport services (including railways, highways, waterways and air), accommodation services, catering services, scenic tours, travel agents, entertainment services, shopping and the city's transportation. Travel agencies and scenic tours are the core sectors of the tourism industry, because these two departments are survival and developing completely dependent on tourism activities.

By measuring the tourism industrialization level in China with the input-output and multiplier analysis methods, the author finds that tourism industrialization the Hubei is at a low level, mainly in those aspects, for example, the contribution is low of the sectors in the tourism industry to the national economy, it is uncoordinated in the sectors, industrial structure needs to be optimized, and overall level of the tourism industry is not high, the long-term role in promoting the regional economy is not obvious. Therefore, the mode of development in China should be further improved from extensive to intensive, the rational allocation of resources should be promoted, and the structure of the tourism industry should be adjusted toward a upgrading and rational direction, and thus improve department productivity. The tourism industrialization level plays a key role in the government's tourism-related policies to develop the industry, and

has an impact on the future tourism industry development. Therefore, it is necessary to put forward suggestions for some of the problems existing. Based on the empirical research of measuring of tourism industrialization level in China, puts forward the tourism statistics protecting system and tourism-related policies and countermeasures for enhancing the tourism industrialization level from the point of the national level. There are certain defects in the current system of China's tourism statistics, mainly in these aspects, for example, tourism-related concepts are not clearly defined, a single means of investigation and the small sample size, advanced statistical techniques and analytical methods lack, tourism survey is not linked by the Tourism Satellite Account convergence international authority recognized by the international authority recognized Tourism Satellite Account. Therefore, in order to raise the overall quality of tourism statistics, to ensure the authenticity of the accounting content, there should be a comprehensive reform of the system. The concept of tourism statistics system should be further classified, and the tourism statistical indicators system and tourism statistics survey methodology should be improved.

### METHODOLOGY

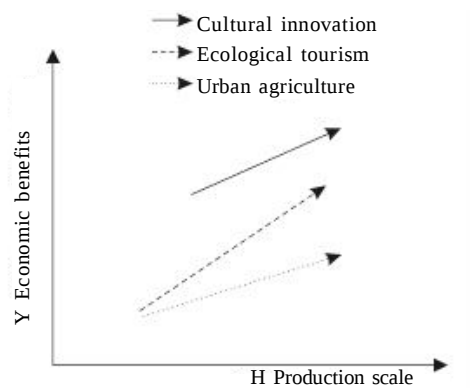
The model and method in this paper is based on two aspects. On the one hand, to reflect the size levels, benefit levels, associate degree, structure degree of optimization of the internal sectors, as well as the correlation and driven level between the industry by measuring the contribution of the sectors within tourism industry to the national economy. On the other hand, to reflect the scale of the tourism industry as a whole by measuring the contribution of the tourism industry as a whole to the national economy in the long term. By the measure of the tourism industrialization level in China, the author finds that the factors affecting the tourism industrialization level is mainly manifested in two aspects of the internal and external, the scale of the internal organization and the overall level of the tourism industry development and association to other industries. The former determines the efficiency of resource use, specialization, and the degree of intensification of the tourism industry, while the latter determines the scale of the tourism industry. Therefore, to raise the tour-

ism industrialization level should focus on improving the overall level of the tourism industry, and optimize the organizational structure by promoting the coordination of the tourism industry structure, improve concentration of industrial structure, and promote the sophistication of tourism industrial structure. Based on the summary of the content and the basic viewpoints of the full paper, the author puts forward some shortcomings of the article and prospects for future research. Because of the imperfect tourism consumption data in the system of tourism statistics, and the tourism output data lack, this affected the results to define and measure the tourism industrialization level. Another deficiency of this study is that there is not a regional comparison with China in the measure of tourism industrialization level, and therefore, the result reflects only an absolute level in China not the relative level. In future research, this paper will further improve and deepen in the following three aspects. Further deepen and perfect the theory and methodology, analyze in-depth of the theory of whether tourism can constitute an industry, further improve the application of the method. To further expand the theoretical research, from the point of view of the industrial organization, discuss in-depth and detailed the impact mechanism between the sectors in tourism industry and the space-time evolution of the industrial structure. To further develop different regional comparative studies, combining of econometrics to give a comparative analysis of the different regions of the tourism industrialization level, and in turn propose the spatial difference and targeted suggestions of the tourism industrialization level.

### RESULTS

Coupling content and mode of tourism industrial network based on circular economy each system has its own mechanism, structure and mode to run. Tourism industrial network also has its own self-running mechanism, structure and mode. Generally speaking, tourism industrial network consists of three layers, that is, core layer, which is the tourism attraction enterprises and tourists, service layer consisting of travel agents, restaurants, hotels, tourism transportation, and retailers of tourist commodities, support layer composed of government, academic institutions, educational institutions, and other

related industries. These three layers mainly have three coupling modes, which are the vertical coupling between network node enterprise and its relevant industry, the transversal coupling among node enterprises within network, and the coupling among different layers within network. Superposition of the coupling units of three modes mentioned above can form a complete coupling unit of tourism industrial network. The coupling units of three modes are not independent, but are closely linked to each other on the basis of economic transaction, industrial relationship and knowledge sharing. Status of one coupling unit affects other two, and influences the coupling function at each layer. High degree of coupling of elements in all levels of the network structure can improve the functions of sub network system and the whole industrial network system, and enhance its own profits at the same time. Figure 1 presents the economy benefits from the fusion development of tourism industry.



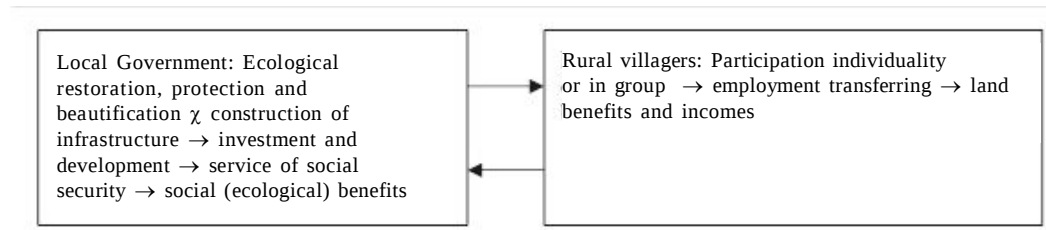
**Fig. 1. The economy benefits from the fusion development of tourism industry**  
Source: Author

Material coupling among node enterprises in tourism industrial network and among the vertically related industries is important to the whole industry. Material coupling includes the material transformation and exchange, waste exchange and recycling within node enterprises. During the process of material coupling, the upstream and downstream relations among the members should be determined. In accordance with the requirements of the material supply and demand sides, routes, flow rate and composition of material flow are adjusted, so as to complete the construction of industry coupling

chain. At the same time, resources recycling and cascade use should be taken into account in order to reduce the consumption of material resources to the maximum.

An integrated resource recycling system to support system operation needed to be established to achieve material coupling. Besides, harmless central treatment system can be established, such as construction of ecological scenic spot, to lower the impact of environment and to improve scale benefit. Transversal service coupling among node enterprises in tourism industrial network offering services to tourists is the major function of tourism industry. Transversal relationship in tourism industrial network is node enterprises together facing the tourists. They obtain their own interests when offering service. Therefore, each node enterprise often shows the situation of competition during the process of tourism. However, tourists buy not only a visible service of one node enterprises, but also all the visible services, information, care and other elements comprising the “service products” combination of all the node enterprises. In this sense, any of the node enterprise is not isolated in the tourism industrial network, and its service quality affects the interests of other node enterprises in network. Therefore, service coupling among node enterprises in tourism industrial network becomes inevitable. Figures 2 and 3 show whole development model led by government and enterprise development model led by government.

Service coupling requires all the node enterprises in tourism industrial network to accept the concept of “whole is greater than parts”, to construct an interest community of tourism industrial network, to vigorously promote the integration process of the common interests of tourism industrial network, to form and strengthen the cohesion and competitiveness of interest community of tourism industrial network. Information is coupling at different layers of tourism industrial network. The rapid development of information technology has a dramatic impact on the organization mode and lifestyle of the whole society. Supply and demand information is the premise of effective production and service among members of tourism industrial network, which include information needs of tourists, production information of industries on related industry chain (including its radiation industries), market information, technical informa-



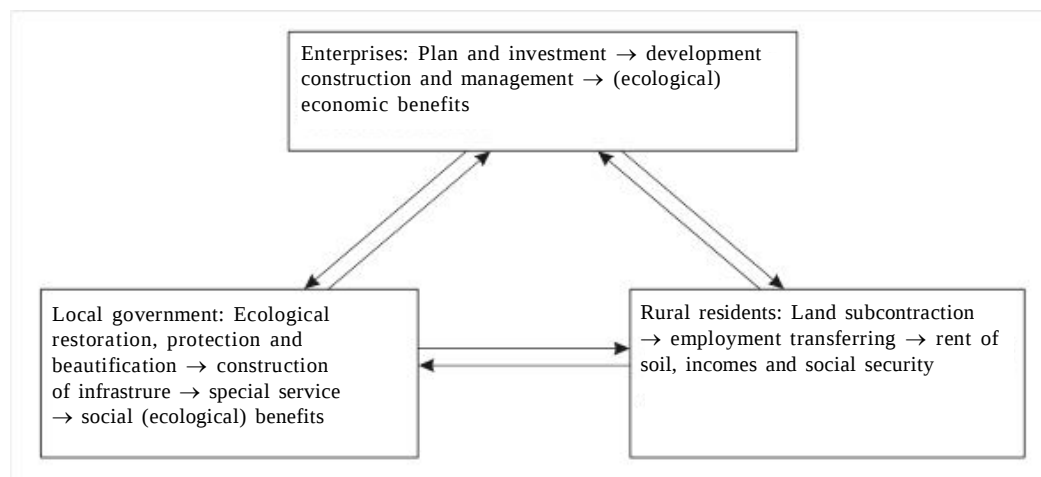
**Fig. 2. The whole development model led by government**

Source: Author

tion, legal information, personnel information, and information related to other fields. Information coupling is mainly composed of tourism management information system, environmental management geographic information system, and database management information system.

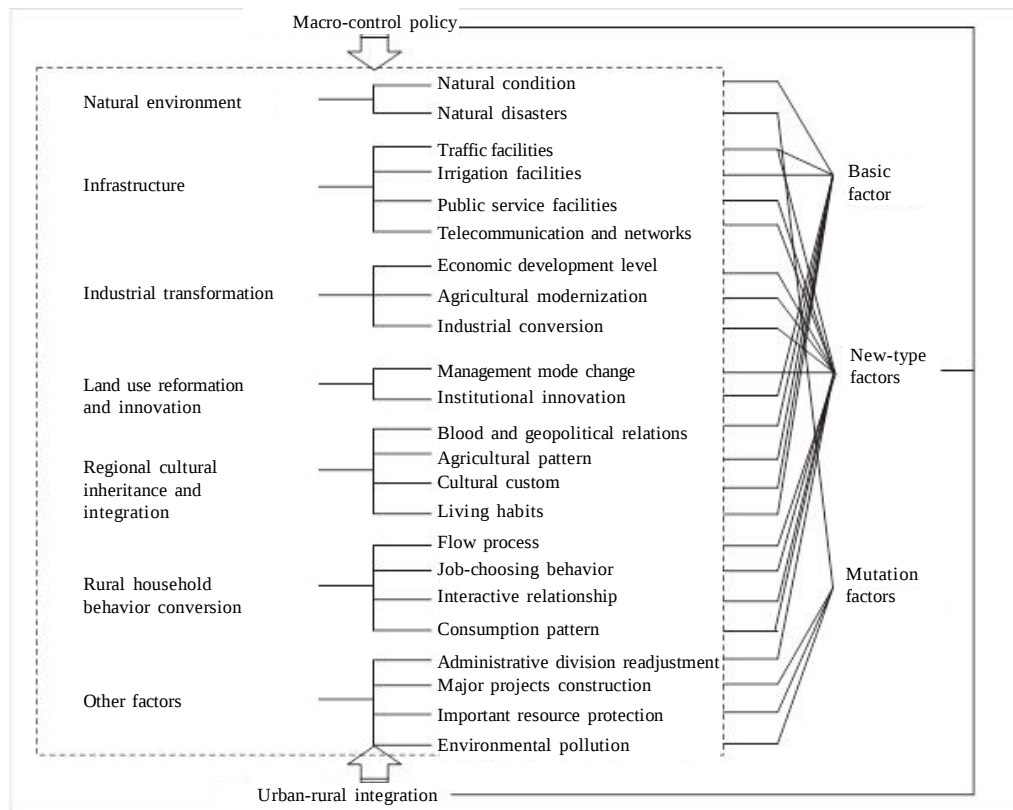
Each system generates different data, and forms an orderly flow and contact with higher institute, environmental management sector, news media and other relevant departments through database service layer, application service layer and application expression layer. Departments and agencies can carry out effective management and supervision and offer practical guidance for enterprise production or service in tourism industrial network based on a variety of analytical data and results. Figure 4 shows influence on the convergence development of tourism industry in the context of economic transformation.

Realization of the coupling mechanism of tourism industrial network based on circular economy under circular economy, good coupling operation of tourism industrial network should have the following characteristics. Firstly, behavior of enterprises in tourism industry is reasonable and normative. Secondly, production chain and service chain can deliver smoothly among related industries and within one industry in the tourism industrial network, so that a relatively stable industry chain of circular economy can be formed. Thirdly, realize the harmony and unification of economy, society and environment. To achieve the above goals, a wide range of coupling strength is still needed. In the current tourism industrial network in China, there are three basic organizational forms or forces, which are tourist, enterprise and government. They show a relationship of interdependence and mutual restraint, and jointly promote the development of tourism economy.



**Fig. 3. The enterprise development model led by government**

Source: Author



**Fig. 4. The influence on the convergence development of tourism industry in the context of economic transformation**

Source: Author

## DISCUSSION

First of all, in a certain sense, a tourist is the producer of tourism products and the final consumer and the service object. Therefore, tourists' demand for tourism products, as well as the cognitive level of their own, will feed back to people offering tourism service through the market, and further affect the production and service of each node enterprise. Besides, supervision function of public opinions of tourists can be realized by a perfect government supervision system, in order to overcome the loopholes of government supervision, and to effectively supervise enterprises. Secondly, government decision and industrial policy directly affect the development of circular economy and industrial network. In addition, environmental externality and other issues of market failure also require

government intervention. Thirdly, enterprise is the cell of industry, as well as the main force of circular economy. Production mode of circular economy cannot be realized without the participation of enterprises. In a word, formation and development of industry based on circular economy are promoted by the three forces together. There are certain defects in the current system of China's tourism statistics, mainly in these aspects, for example, tourism-related concepts are not clearly defined, a single means of investigation and the small sample size, advanced statistical techniques and analytical methods lack, tourism survey is not linked up by the Tourism Satellite Account convergence international authority recognized by the international authority recognized Tourism Satellite Account. Therefore, in order to raise the overall quality of tourism statistics, to ensure the authenticity of the

accounting content, there should be a comprehensive reform of the system. The concept of tourism statistics system should be further classified, and the tourism statistical indicators system and tourism statistics survey methodology should be improved. Therefore, mechanism construction should be conducted based on the interaction and mutual support of the three forces.

### CONCLUSION

This paper aims to deal with the mechanism, path and practice of the convergence development of tourism industry in the context of economic transformation. Tourism industry's convergence with other industries can get rich in the number of tourism products, improve the quality of tourism products and develop the new tourism industry, becoming an important way to solve the bottleneck in the development of the tourism industry. By measuring the tourism industrialization level in China with the input-output and multiplier analysis methods, the author finds that tourism industrialization the Hubei is at a low level, mainly in those aspects, for example, the contribution is low of the sectors in the tourism industry to the national economy, it is uncoordinated in the sectors, industrial structure needs to be optimized, and overall level of the tourism industry is not high, the long-term role in promoting the regional economy is not obvious. Therefore, the mode of development in China should be further improved from extensive to intensive, the rational allocation of resources should be promoted, and the structure of the tourism industry should be adjusted toward a upgrading and rational direction, and thus improve department productivity. There are certain defects in the current system of China's tourism statistics, mainly in these aspects, for example, tourism-related concepts are not clearly defined, a single means of investigation and the small sample size, advanced statistical techniques and analytical methods lack, tourism survey is not linked up by the Tourism Satellite Account convergence international authority recognized by the international authority recognized Tourism Satellite Account. Therefore, in order to raise the overall quality of tourism statistics, to ensure the authenticity of the accounting content, there should be a comprehensive reform of the system. The paper studies the patterns of integrating culture industry and tour-

ism industry in the perspective of the theory of industry integration, generalizes three patterns of industry integration: extended pattern, restructuring pattern and permeable pattern, makes the theoretic analysis of them systematically. In light of the characteristics of the culture and the tourism in China, the paper illustrates the base and the feasible patterns of integrating the culture industry and the tourism industry in China.

### ACKNOWLEDGEMENTS

The author is indebted to the grant of the Center for Collaborative Innovation Research on New Urbanization and CPEZ Construction, the Major Bidding Project of National Social Science Project titled Key and Policies Research on Accepting Industrial Transfer in Midwest Regions, China 11&ZD050 and the National Social Science Project titled Research on Merging Development of Industrial Cultures and "Made in China" (12CJL031).

### REFERENCES

- Andrew A 2014. Wine in the show me state: Tourism, retail and sweet wines key to building Missouri's wine industry. *Wines & Vines*, 95(1): 90-93.
- Cowling M, Kirkwood R, Boren LJ, Scarpaci C 2014. The effects of seal-swim activities on the New Zealand fur seal (*Arctophoca australis forsteri*) in the Bay of Plenty, New Zealand, and recommendations for a sustainable tourism industry. *Marine Policy*, 45: 39-44.
- Jang YC, Hong S, Lee J, Lee MJ, Shim WJ 2014. Estimation of lost tourism revenue in Geoje Island from the 2011 marine debris pollution event in South Korea. *Marine Pollution Bulletin*, 81(1): 49-54.
- Joan CC 2014. Spain's new coastal destinations, 1883-1936: The mainstay of the development of tourism before the Second World War. *Annals of Tourism Research: A Social Sciences Journal*, 45: 18-29.
- Lori PG, Ashley S, Betty W, Donohoe H, Cahyanto I 2014. Travelers' perceptions of crisis preparedness certification in the United States. *Journal of Travel Research: The International Association of Travel Research and Marketing Professionals*, 53(3): 353-365.
- Marianna S, Kalotina C 2014. Investigating the exploitation of web 2.0 for knowledge management in the Greek tourism industry: A utilization-importance analysis. *Computers in Human Behavior*, 30: 800-812.
- Marija R, Matjaz M 2014. CSR-based model for HRM in tourism and hospitality. *Kybernetes: The International Journal of Systems & Cybernetics*, 43(3/4): 346-362.
- Pai PF, Hung KC, Lin KP 2014. Tourism demand forecasting using novel hybrid system. *Expert Systems with Application*, 41(8): 3691-3702.

- Ponting J, O'Brien D 2014. Liberalizing nirvana: an analysis of the consequences of common pool resource deregulation for the sustainability of fiji's surf tourism industry. *Journal of Sustainable Tourism*, 22(3): 384-402.
- Roberto R, Martina S 2014. Climate change, tourism and water resources in the Mediterranean: A general equilibrium analysis. *International Journal of Climate Change Strategies and Management*, 6(2): 212-288.
- Stephen M, Shamiso M 2015. Information and communications technologies (ICTs) and livelihoods enhancement in agro-rural communities in Zimbabwe: Connections using the capabilities approach. *Journal of Communication*, 6(1): 93-103.
- Sunil M, Mohan N, Essam H, Juhabi E 2014. Oil price risk exposure: The case of the US travel and leisure industry. *Energy Economics*, 41: 117-124.
- Tjasa S, Metod S 2014. Holism and social responsibility for tourism enterprise governance. *Kybernetes: The International Journal of Systems & Cybernetics*, 43(3/4): 394-412.

---

**Paper received for publication on November 2016**

**Paper accepted for publication on July 2017**