Economic Effects of Administrative Boundary Adjustment on Tourism: A Case Study in Shanghai

By Yang Guo, Jia Hu & Shengyang Wang

Fudan University, China

Abstract- In recent years, China's government has enforced several adjustment steps in relation to administrative divisions. It brought all kinds of the economic effects to city's development and reflected the government's exploration on urban economic spatial adjustment. This paper chose Huangpu District in China as the research case, the empirical analysis results showed that these boundary adjustments led to a series of economic and policy effects. These effects collectively advanced high regulatory demands for government behaviours in the context of an internationalization tourism strategy. Local governments should cope with the new opportunities and challenges caused by these adjustments to develop the tourism economy.

Keywords: administrative division, boundary adjustment, economic effects.

GJMBR-F Classification : JEL Code: R00

ECONOMICEFFECTSOFADMINISTRATIVEBOUNDARYADJUSTMENTONTOURISMACASESTUDYINSHANGHAI

Strictly as per the compliance and regulations of:

Economic Effects of Administrative Boundary Adjustment on Tourism: A Case Study in Shanghai

Yang Guo [α], Jia Hu [σ] & Shengyang Wang [ρ]

Abstract- In recent years, China's government has enforced several adjustment steps in relation to administrative divisions. It brought all kinds of the economic effects to city's development and reflected the government's exploration on urban economic spatial adjustment. This paper chose Huangpu District in China as the research case, the empirical analysis results showed that these boundary adjustments led to a series of economic and policy effects. These effects collectively advanced high regulatory demands for government behaviours in the context of an internationalization tourism strategy. Local governments should cope with the new opportunities and challenges caused by these adjustments to develop the tourism economy.

Keywords: administrative division, boundary adjustment, economic effects.

I. Introduction

The governance model based on the units of administrative divisions immensely affects the economic and cultural development of society. The organization of administrative divisions can facilitate a rapid regional economic development with regional resources. However, it can also hinder coordinated development because of the economic competition between industrial isomorphism and protectionism. As a comprehensive industry involving other industries and departments, the tourism industry characteristically crosses over various fields, regions, and areas. However, the industry similarly faces numerous issues on the administration of a scenic region, environmental consumption, market source, and rational competition, which are caused by adjustments in the administrative division. In recent years, China's government has enforced several adjustment steps in relation to administrative divisions. In 2009, Tianjin canceled the districts of Tanggu, Hangu, and Dagang, and established the Tianjin Binhai New Area. In 2010, the districts of Dongcheng, Chongwen, Xicheng, and Xuanwu in Beijing were adjusted into two new districts: the new Dongcheng and Xicheng Districts. In the same year, Shenzhen and Xiamen expanded their scales in the administrative division. Chongqing also established

the Liangjiang New District, which covers three previous administrative districts (Jiangbei, Yubei, and Beibei) and several previous functional economic zones (Chongqing's Northern New District, Lianglu-Cuntan Free Trade Port Zone, and Liangjiang Industrial Zone). In addition, numerous national-level New Districts, such as the Zhoushan Archipelago New District in Zhejiang Province, the Lanzhou New District in Gansu Province, the Nansha New District in Guangzhou City, and the Zhengdong New District in Zhengzhou City, were founded.

In 2009, the administrative district of Nanhui was integrated into the Pudong New Area. In 2000, the Nanshi and Huangpu Districts were integrated into the New Huangpu District, whereas the Luwan District was merged with the New Huangpu District in 2010. The two adjustments on the administrative division of the central area in Shanghai within a decade reflect the government's exploration on urban economic spatial development.

This paper discusses the following three main questions relative to administrative adjustments: Does the adjustment of administrative boundaries positively influence the improvement of urban spatial administrative structure and the function of the central area? How should local governments cope with the new opportunities and challenges caused by these adjustments? How should they maximize such adjustments to develop the tourism economy?

II. Review of Relevant Literature

Chinese researchers have discussed numerous aspects of administrative division adjustments and consequently, these studies engendered several categorizations. First, some studies put forward different definitions of administrative division. From the perspective of law, the administrative division is a portion of the hierarchical management system with a national government function. From the political point of view, administrative division is the national territory formed for the purpose of strengthening resident governance. In geography, the geographical conditions, regional historical traditions, economic relation, and ethnic distribution are deemed as the divisions of the management area. The adjustment of administrative

Author α σ: Department of Tourism, Fudan University, Shanghai 200433, China. e-mails: fdgy@fudan.edu.cn, hujia_milan@msn.com
Author ρ: McCallum Graduate School of Business, Bentley University, MA 02452, USA. e-mail: wsy5906@gmail.com

division mainly includes modifications in the organizational system (such as adding, dissolving, and resetting), administrative region boundary, administrative government location, subordinate relations, administrative level changes, and administrative designation.

Regional economic development typically expands within a specific geographical space. Administrative districts and economic zones, which are connected but differentiated, are the carriers of regional economic development. An administrative district is a complex political and economic body that depends on the horizontal economic network, the major participants of which are the corporate enterprises (Zhou, 1999). An economic zone, which is a production complex built based on regional economic differences and division of labor, emphasizes external collaboration and optimal resource allocation. In contrast, an administrative district depends on the jurisdiction of the authority and is characterized by geographical restrictions on economic policies. To some extent, the local protectionism can block resource flow and results in market fragmentation. Administrative districts and economic zones mutually affect one another. An administrative district with outstanding economic development may have a radiation effect on its surrounding areas and thus, it contributes to the formation of a broad economic zone.

Second, some studies have focused on the "administrative district economy" as a special regional economic phenomenon. This phenomenon emerged in the processes of China's transformation from planned to market economy and of the change of the regional economy from vertical to horizontal mode of cooperation. The administrative district economy is a result of the rigid administrative division constraints on regional economy (Liu, 1996). In addition, the administrative district economy also refers to a special type of regional economy. This concept demonstrates how enterprise competition and production flow factors are considerably affected by the economic behaviors of the local government and how the administrative center and economic center are highly consistent, and characterized with intense economic centralization and exhaustive economic boundaries (Shu, 2003). To eliminate the "administrative district economy" phenomenon, the government should improve legal protection, promote the diversification of the administrative subject, and ensure the smooth coordination of economic operations (Meng, 2006). The administrative district economy leads to a block of factors that facilitate the flow or stagnation of economic development. Thus, the government should establish and improve resource sharing mechanisms, encourage regional cooperation, and enhance coordinated development (Xiong, 2007). The government can promote the integration of economic zones and administrative districts and avoid vicious competition on industry layout and resource allocation (Gao, 2010).

Third, studies have reported the economic effects of administrative division adjustment on tourism. The current literature mainly comprises research from the perspectives of economic development and planning layout. Case studies primarily focus on the division adjustment of traditional tourism cities, the impact of administrative boundary adjustment, and the centralized management of tourism resources and tourism image. The adjustment of administrative division has positive effects on regional tourism development. However, tourism cities should conduct risk assessments to address concerns, such as, whether the adjustment is beneficial to the preservation of the integrity of the tourism culture and resources, whether it favors the environmental protection of the scenic spot and the urban landscape, whether it is conducive to the sustainable development of regional tourism industry, whether it is advantageous to the coordination between the interests of local residents and economic development, and whether it enhances tourism management (Yu et al., 2006). Administrative boundary adjustment is a means to adapt the superstructure to the economic base, reconstruct tourism resources, and coordinate the interest structure. This approach can weaken the limits of market barriers, release development space, and improve tourism management efficiency. Thus, the government should consider the potential positive and negative effects of the administrative boundary adjustment in practice (Yin, 2009), because such consideration positively affects the division adjustment of the tourism city and could address some existing problems (Wang & Zhao, 2007). Administrative division adjustment is a policy instrument that can be employed to promote regional coordination. However, despite its capability to promote the innovative development of tourism city, it should be applied prudently (Wang, 2009).

Finally, studies have also focused on government behaviors in regional tourism development. From a macro perspective, the role of government in the tourism industry development lies in legal improvement, guidance policy, tourism planning, infrastructure construction, and tourism environment creation (Zhang, 2002). The government should devote pertinent attention to formulating a tourism development strategy, cultivating a sound market system, implementing favorable industrial policies, improving the supporting facilities, and fostering tourism enterprises that have immense potential and viability (Deng, 2000). The government should play a leading role in creating tourism regulations, strengthening the protection of tourism resources, providing public goods, gathering and delivering tourism market information, and promoting tourism image (Li et al., 2000). The

government should act as a pioneer at the beginning of China's tourism development and serve as a policy regulator, image propagandist, and interest coordinator as the tourism industry prospers (Hao, 2001). From the micro point of view, the development of regional tourism products should not be relegated to the government. The government's monopoly in relation to investing on public tourism products should be broken up and non-state economic investments should be promoted because these can speed up the reform of tourism management system (Liang et al., 2002).

The studies by foreign scholars mainly focused on the role played by the government in tourism development. The International Union of Official Travel Organizations (IUOTO) was the first to conduct a study on the government's role in the tourism industry. The organization pointed out that government should play the role of interest coordinator, whose connotation deepens with the rapid development of tourism and increasing complexity (IUOTO, 1974). The government should also act as planner, legislator and administrator, and development driver (Mill & Morrion, 1997). The roles of social tourism provider and interest protector should also be played by the government (Hall, 1994). However, the mistrust of enterprises on the government and the government's ineffective tourism management are the two main factors that hinder the sustainable development of the regional tourism industry (Berry & Ladkin, 1997). Jose and de Oliveira (2003) investigated the role of government in tourism investment management from the perspective of environment management through a case study.

III. Economic Effects of Administrative Boundary Adjustment on Tourism

This study chose the Huangpu District in Shanghai as the research subject and used the panel data of the other eight central districts in Shanghai as reference. Linear regression results were combined to analyze the impacts of regional economy and tourism development in the context of the administrative boundary adjustment in the Huangpu District in 2010. In this context, the increment of economy aggregate (X11), increment of tertiary industry (X22), fiscal revenue (X33), local fiscal revenue (X44), total retail sales of consumer goods (X55), travel agency reception of tourists (X66), operating revenue of travel agency (X77), hotel reception of visitors (X88), number of hotel rooms (X99), occupancy rate of hotel rooms (X100), and operating revenue of hotel (X110) were selected as the variables for statistical analysis. The data resources were as follows: Huangpu Statistical Yearbook, Shanghai Tourism Yearbook, Shanghai Almanac, and Counties Statistical Bulletin.

After analyzing the linear regression of travel agency reception of tourists (X66) and increment of economy aggregate (X11), increment of tertiary industry (X22), and local fiscal revenue (X44), we found a corresponding relation among these variables. In 2010, when the administrative division in Huangpu District was adjusted, the association relationship between X44 and X66 depicted a significant fluctuation.
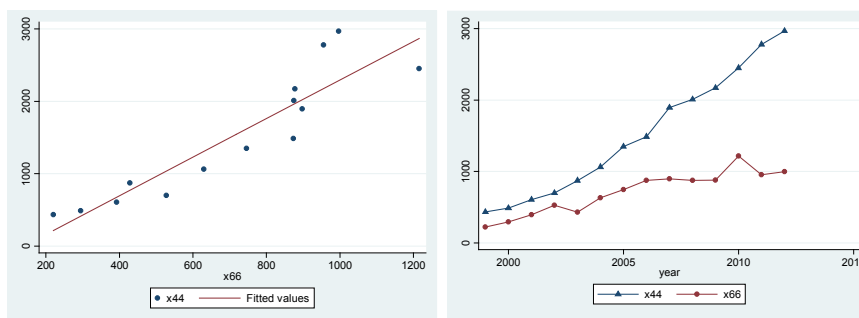

Figure 1 : Scatter diagram and data trend of associated variables

Testing the structure and characteristics of the data set allowed us to determine that these data are in accordance with the requirements of the panel data: $n = 14$, $T = 10$, and n is bigger than T; therefore the data set can be considered as the panel data. In the development process, data from the travel agency were directly collected to reflect the development of tourism industry. Thus, we selected the travel agency's reception of tourists (X66) as the explained variable to show its relevance in tourism development. Considering the co-linear relation between the explanatory variables, the function model is specified as:

$$X66_{it} = X_0 + X_1 X11_{it} + X_2 X33it + X_3 X77_{it} + X_4 X100_{it} + \S, \quad (1)$$

where $X66it$ denotes the travel agency reception of tourists of district i in year t, $X11it$ refers to the increment of economy aggregate of district i in year t, $X33it$ represents local fiscal revenue of district i in year t, $X77it$ is the operating revenue of the travel agency of district i in year t, and $X100it$ refers to the occupancy rate of district i hotel rooms in year t.

Data correction was initially accomplished by discounting price factors. Moreover, according to the multicollinearity estimating method of variance inflation

factor, VIF=1/ (1-Rk^2) shows that the maximum value of VIF is 3.06, which is below 10, and thus, no multicollinearity is observed. Finally, based on the Hausman Test, we selected an appropriate regression model for the analysis of the panel data. The value of P is 0.0077, which indicates the suitability of the fixed effect (FE) model for the analysis.

We chose the method of piecewise regression to analyze the effect of the administrative boundary adjustment in the Huangpu District in 2010 on the urban tourism development, and we conducted FE analysis on the data from 1999 to 2010 and from 2011 to 2012. Regression results are as shown in Table.

Table 1 : Analysis of Data from 1999 to 2010（Base on X66)

X66	Coef.	Std. Err.	t	P>|t|	[95% conf.	Internal]
X11	.0015102	.0338464	0.04	0.965	-.0657021	.0687225
X77	1.417274	.4776762	2.97	0.004	.4687035	2.365844
X33	-.2651008	.2069081	-1.28	0.209	-.6759793	.1457777
X100	-.0501805	.4892727	-0.10	0.919	-1.021779	.9214181
_cons	68.45674	31.69654	2.16	0.033	5.513686	131.3998
sigma_u	30.719513					
Sigma_e	41.747385					
rho	.35126634					

Table 2 : Analysis of data from 2011 to 2012（Base on X66)

X66	Coef.	Std. Err.	t	P> |t|	[95% conf.	Internal]
X11	-.0210167	.0435884	-0.48	0.640	-.1181377	.0761043
X77	1.70436	.7506507	2.27	0.047	.0318057	3.376913
X33	.0509967	.1668191	0.31	0.766	-.3206995	.4226928
X100	.4581598	.5867255	0.78	0.453	-.8491462	1.765466
_cons	37.50753	24.33402	1.54	0.154	-16.71205	91.7271
sigma_u	3.3390142					
Sigma_e	45.652813					
rho	.00532089					

Regression analysis results show that X66 will increase 0.0015102 when X11 increases by 1, which demonstrates the existence of a positive correlation before the integration of Huangpu District. After the integration of the administrative division, the changing tendency of X11 shows a negative correlation with X66. Furthermore, the analysis of the data from 2011 indicates the positive correlation of X33 and X100 with X66, which explains the change in the tourism industry from traditional sight-seeing to self-service travel mode in the context of urban tourism development.

We selected X22 as the explained variable to verify the impact of administrative boundary adjustment on the development of service industries, which are closely related to the tourism industry. We divided the panel data into three sections: the complete period from 1999 to 2012, the sub-period from 1999 to 2010, and the sub-period from 2011 to 2012. Considering the co-linear relation between the explanatory variables, the function model is specified as:

$$X22_{it} = X_0 + X_1 X11_{it} + X_2 X44_{it} + X_3 X55_{it} + X_4 X66_{it} + X_5 X88_{it} + X_6 X100_{it} + \S, \qquad (2)$$

where $X22_{it}$ represents the tertiary industry increment of district i in year t, $X11_{it}$ denotes the increment of economy aggregate of district i in year t, $X44_{it}$ represents the local fiscal revenue of district i in year t, $X55_{it}$ refers to the total retail sales of consumer goods of district i in year t, $X66_{it}$ represents the travel agency reception of tourists of district i in year t, $X88_{it}$ refers to the hotel reception of visitors of district i in year t, $X100_{it}$ represents the occupancy rate of hotel rooms of district i in year t.

Results of the data analysis indicate a significant positive correlation between X22 and X44 after the integration of the administrative division. Each 1% increase in the local fiscal revenue will lead to a 3.68267% increase in the increment of the tertiary industry. X100 is also positively correlated with X22, whereas the explained variable X22 demonstrates a strong positive correlation with X55, X66, and X88. Results of the data analysis suggest that the spatial adjustment of administrative division has economic effects on the tourism development, local fiscal revenue, and service industries.

IV. Results and Discussion

The administrative boundary adjustment of the Huangpu District led to a series of economic and policy regulatory effects, including re-organizing effect on the urban tourism resources of the new Huangpu District, an integrating effect on tourism image, a disseminating function of tourism culture, and a policy effect on the urban tourism development in the Huangpu District. These effects collectively advanced high regulatory demands for government behaviors in the context of an internationalization tourism strategy.

Based on the economic statistics from 1999 to 2012, the study selected and analyzed the following variables: the increment of economy aggregate, increment of tertiary industry, fiscal revenue, local fiscal revenue, total retail sales of consumer goods, travel agency reception of tourists, operating revenue of travel agency, hotel reception of visitors, number of hotel rooms, occupancy rate of hotel rooms, and operating revenue of hotel, with the corresponding codes of X11, X22, X33, X44, X55, X66, X77, X88, X99, X100, and X110. Results of the linear regression analysis indicate a fluctuation of these variables when the Huangpu District was undergoing an administrative boundary adjustment.

After analyzing data before and after the adjustment in 2010, we found a positive correlation between increment of economy aggregate and travel agency reception of tourists before the integration of the Huangpu District. Moreover, a changing tendency that depicts a negative correlation was observed afterwards. In addition, the data indicate that local fiscal revenue and the occupancy rate of hotel rooms are positively correlated with travel agency reception of tourists. The increment of the tertiary industry is associated with, but with varying levels of effect, the following variables: total retail sales of consumer goods, travel agency reception of tourists, hotel reception of visitors, and occupancy rate of hotel rooms.

The reconstruction of the regional tourism planning policy on the adjustment of administrative division in the central urban area, specifically for the Huangpu District, which underwent the integration adjustment in 2010, is a complex mechanism. This process is characterized by continuous adjustment along with the overall development framework of Shanghai urban tourism, economic social development progress, and the people's tourism consumption concept. As a core factor of the regional tourism, urban tourism resources are considerably promoted by the administrative boundary adjustment. If the local government prefers to maximize the economic impact after integration, scattered resources should be re-organized under an overall regional economic development framework.

Given the background of internationalization, the local government of the central urban area should devote sufficient attention to the supporting factors of urban tourism development, such as, improving the infrastructure of urban tourism, strengthening the industry supervision, and encouraging the innovation of tourism enterprises. The local government should also place increased emphasis on protecting local tourism culture and eco-system, promoting the image of urban tourism and brand marketing strategies, and transmitting local tourism culture through events and promotions.

Owing to the internal institutional and spatial boundary changes of the administrative division, the adjustments can create problems, including reversed policies, low efficiency, and negative work attitude, which can comprehensively affect the regional tourism economy. These problems will demand high governing capacity from the local government.

V. Acknowledgement

References Références Referencias

1. Berry, S., & Ladkin, A (1997). Sustainable tourism: a regional perspective. *Tourism Management*. (7): pp. 433-440.
2. Deng, Z. (2000). East Asian Model and the Government-leading Tourism Development Strategy. *Academic Forum*. (3): 47-50.

3. Gao, X., Wang, Y., & Mai, S. (2010). A Research on Economic Division in Regional Economic Development: Based on Thoughts of the Conflict between Economic divisions and Administrative divisions. *Guizhou Social Sciences*. (11): 72-76.
4. Hall, C. M. (1994). *Tourism and politics: policy, power, and place*. John Wiley and Sons Ltd.,: 230-235.
5. Hao, S. (2001). A Study on the Market Development of China's Tourism Industry and Government Behavior. *Tourism Tribune*. (2): 19-22.
6. IUOTO. (1974).The role of the state in tourism. *Annals of Tourism Research*. (3):66-72.
7. Jose, A., & Puppim de Oliveira. (2003). Governmental responses to tourism development: three Brazilian case studies. *Tourism Management*. (24):97-110.
8. Li, J., & Lin, X. (2000). A Discussion on the Government-leading Tourism Development Strategy in China. *Social Scientist*. (6): 45-47.
9. Liang, X., & Ding, D. (2002). A Study on Administrative Behavior in Developing Regional Tourism. *Productivity Research*. (1): 99-101.
10. Liu, J. (1996). *Theory and Practice of Chinese Administrative Division*. Shanghai: East China Normal University Press.
11. Meng, L. (2006). Cause, Harm and Countermeasure of China's Administrative District Economy. *Administrative Tribune*. (2): 80-82.
12. Mill, R. C., & Morrison, A. M. (1997). T*he Tourism System: An Introductory Text*. Kendall Hunt Publishing Company: 143-146.
13. Shu, Q., & Zhou, K. (2003). *From Closed to Open: An Insight into China's Administrative District Economy*. Shanghai: East China Normal University Press.
14. Wang, X., & Zhao, L. (2007). The City Rename Method in the Service of Urban Tourism. *Urban Problems*. (10): 52-55.
15. Wang, Y. (2009). *Tourism Cooperation and Regional Innovation. Beijing:* Science Press.
16. Xiong, X., Wu, D., & Cao, J. (2007). A Thought about China's Administrative District Economy. *Journal of Chongqing Technology and Business University*. (6): 18-20.
17. Yin, F. (2009). *A Research on Tourism Effect of Adjustment of Administrative Demarcation*. Master Dissertation Research Paper submitted to Southeast University.
18. Yu, F., Lu, L., Cao, W., & Zhu, T. (2006). A Study on the Effect of Administrative Division Adjustment: A Comparison between Jingangshan, Jiangxi and Huangshan, Anhui. *Geosciences*. (2): 20-25.
19. Zhang, S. (2002). A Discussion on Development Strategies in Government-leading Tourism. *Journal of Anhui University (Philosophy and Social Science)*. (1): 118-121.
20. Zhou, K. (1999). *To Go to Market Economy: the Relation between China's Administrative Area and Economic Zone and Their Integration*. Shanghai: Fudan University Press.