Fiscal Competition, Industrial Structure Upgrading and Economic Growth—An Empirical Analysis Based on the Yangtze River Delta Region

Chen Yao

School of Finance and Public Administration, Anhui University of Finance and Economics, Bengbu, 233030, China

Abstract: This paper selects the panel data of 26 prefecture-level cities in the Yangtze River Delta from 2011 to 2019, uses the adjacency matrix and economic geographical distance matrix to construct the spatial Durbin model, and empirically tests the spatial spillover effect of fiscal competition on economic growth. The results show that: economic growth has the characteristics of spatial agglomeration, and both fiscal competition and industrial structure upgrading have spatial spillover effect on economic growth; the indirect effect coefficient of the two on the spatial spillover of economic growth is greater than the direct effect coefficient; the proportion of fixed asset investment and human capital level are positively correlated with the economic growth of the province, and have positive spatial spillover to adjacent cities. This paper provides reference for the formulation of policies related to government investment, talent introduction and industrial structure transformation and upgrading.

Keywords: economic growth; fiscal competition; industrial structure upgrading; spatial Durbin model; Yangtze River Delta

1. Introduction and Literature Review

Chinese-style economic growth rate has become a hot topic for scholars at home and abroad in recent years, and industrial structure upgrading has gradually replaced investment as the new engine of economic growth. The report of the 19th National Congress pointed out that China's economic growth has shifted from a high-speed growth mode to a high-quality growth mode, and the government should play the role of fiscal macro-control of the economy to promote the optimization and upgrading of the industrial structure while stabilizing the fluctuation of the economy. With the increasing improvement of the national fiscal and taxation system, China has formed a set of top-down system of financial decentralization from the central to the local level, the central government's assessment of local officials has evolved into a local government competition among each other's "Championship of Performance", local officials out of the "competition for the growth of the The purpose of "competition for growth" produces inter-regional financial expenditure competition and revenue competition, which brings economic dividends in the short term to promote economic growth [1], but in the process of continuous optimization and upgrading of industrial structure, it brings drawbacks for long-term stable economic growth.

First of all, what are the influencing factors of economic growth, from the point of view of fiscal expenditure competition precise research found that the intensification of inter-regional fiscal competition not only directly affects economic fluctuations, but also indirectly exacerbates economic fluctuations through the transmission mechanism of resource allocation [2]; In addition, the optimization of the government expenditure structure contributes to the improvement of the quality of economic growth, while the increase in the scale of expenditure in the opposite direction of the role of economic growth [3] [4]; Scholars For the exploration of the spatial effect of regional economic growth found that the level of investment in fixed assets, the level of opening up significantly affects economic growth [5]; some other scholars have found that industrial structure upgrading promotes economic growth, from the "hardware" transportation infrastructure and "software" institutional environment are the most important factors to promote economic growth [6]. From the "hardware" transportation infrastructure and "software" institutional structure upgrading has a positive impact on economic growth [6]. Based on the above research content, it can be seen that economic growth is the result of political, economic, ecological and other factors, and economic growth has spatial

heterogeneity, thus making it possible to study economic growth in terms of spatial measurement.

As the first law of geography has become more familiar to more scholars, spatial correlation has become a new perspective for studying economic growth, the The use of spatial econometric models can not only find out whether economic growth itself has spatial spillover effects, but also observe whether fiscal competition and industrial structure upgrading have spatial spillovers on economic growth. As the government is the guide and guardian of economic growth, fiscal competition has significant regional interaction, and it is particularly important to use spatial measurement to study the inter-regional government game. Tax incentives, fiscal subsidies and fiscal expenditures as three policy tools of fiscal competition, their spatial interactivity all have positive incentive effects on enterprise scientific and technological innovation, and cause neighboring governments to adopt spatial complementary strategies in fiscal competition [7]; the spatial interaction effect between various fiscal expenditure items and economic growth reflects the current situation that government fiscal competition emphasizes economic benefits over social inputs [8]; from the fiscal revenue tax competition, the total spatial effect of tax competition will inhibit the transformation and upgrading of industrial structure [9]. It is not difficult to see that fiscal competition itself has significant spatial spillover and is closely related to economic growth.

At the same time, some scholars have found that economic growth and industrial structure upgrading are also closely related to the study of regional spatial interaction. It has been proved that industrial structure upgrading has spatial spillover and has an impact on economic growth [10], industrial structure upgrading will promote technological innovation, reduce pollution and thus reduce carbon emissions in the region, but it will increase carbon emissions in neighboring regions, which is not conducive to the economic growth of neighboring regions [11]. With the in-depth study of the link between industrial structure and economic growth, some scholars have found that whether the industrial structure is reasonable or not will have different positive and negative effects on economic growth. Within the reasonable interval of resource allocation, the advanced industrial structure can help promote economic growth, but ignoring the rationalization of industrial structure and forcibly increasing the advanced industrial structure is not conducive to regional economic growth [8]. In addition, the adjustment of new urbanization and industrial structure promotes the improvement of individual and linkage effects of the economy, and the two cause the agglomeration of inter-regional infrastructure construction, industrial technology, and talents, which optimizes the allocation of resources and then drives economic growth [12]. From this we can conclude that industrial structure upgrading also has spatial spillover on economic growth, but only from the macro discussion of industrial structure upgrading spillover effect, not on the industrial structure upgrading of the factors affecting in-depth study.

Summarizing the research results of existing scholars, fiscal competition, industrial structure upgrading and economic growth have spatial spillovers, but less literature points out that the interaction between the three has spatial interaction at the same time. Fiscal competition still takes economic growth as the main goal, but under the wave of economic transformation and upgrading, local governments gradually turn to technological innovation, industrial structure upgrading to pull economic growth as the goal, so the link between fiscal competition, industrial structure upgrading and economic growth is getting closer and closer [13]. The marginal contributions of this paper: first, this paper helps to enrich the theoretical and empirical research in the related fields; second, there are few existing literatures that explore the impact on economic growth and transmission paths in depth from the perspective of fiscal competition and industrial structure upgrading on economic growth, and the role of fiscal competition, industrial structure upgrading on economic growth, and the role of fiscal competition and industrial structure upgrading on economic growth, and

2. Empirical Research Design

2.1 Model Setting

The spatial Durbin model established in this paper is shown in the following equation:

$$Yit = \alpha + \rho WY + \beta Xit + \theta WXit + \mu i + \lambda t + \varepsilon it$$
(1)

where Y is the level of economic growth, X is the explanatory variable, i, t denote the region and year, respectively, α is the constant term, ρ is the spatial autoregressive coefficient, W is the spatial weight matrix, θ is the spatial correlation coefficient of the explanatory variables, β is the coefficient of the explanatory variable X, reflecting the extent of the influence of the explanatory variables on the economic growth, WY and WX denote the spatial interaction term between the explanatory variables and the

explanatory variables, respectively, μ is the spatial fixed effect, λ is the time fixed effect, and ϵ is the random error term.

2.1.1 Weighting Matrix

According to the geographic and economic characteristics of the cities in the Yangtze River Delta region, this paper constructs two weight matrices for estimation, the neighbor distance matrix and the economic geography matrix.

Where the expression for the neighbor distance matrix is

$$W_{ij} = \begin{cases} 1, \text{ when region i and region j are geographically contiguous} \\ When region i and region j are geographically non-contiguous or i=j \end{cases}$$

The expression for the economic-geographical distance matrix

$$\begin{bmatrix} \mathbf{W}_{ij}^{ed} = \begin{bmatrix} \mathbf{d}_{ij} / |\mathbf{Q}_i - \mathbf{Q}_j|, i \neq j \\ \mathbf{0} \quad i = i \end{bmatrix}$$

2.2 Variable Selection

2.2.1 Explained Variables

In order to truly reflect the quantitative and qualitative level of economic growth, and reduce the impact of price changes on the reference data, this paper adopts the real GDP per capita as a measure of economic growth indicators, i.e. PERGDP.

2.2.2 Explanatory Variables

Because of the many factors affecting economic growth, this paper draws on existing research combined with the research theme to select variable indicators from the following three aspects:

First, the fiscal competition itself influences factors indicators: X1 fixed asset investment ratio, X2 fiscal burden rate

At this stage, the way of fiscal competition is divided into fiscal expenditure competition and fiscal revenue competition, fiscal expenditure competition is reflected by the amount of investment in fixed assets, investment in fixed assets is one of the traditional "troika" of economic growth, but also an important part of the government's fiscal expenditure, investment in fixed assets (X1) is the amount of investment in fixed assets as a proportion of regional GDP; fiscal revenue is the proportion of investment in fixed assets as a proportion of regional GDP; fiscal revenue is the proportion of investment in fixed assets as a proportion of regional GDP; fiscal revenue is the proportion of investment in fixed assets as a proportion of regional GDP; the competition of fixed asset investment (X1) is the proportion of fixed asset investment to regional GDP; the competition of fiscal revenue is measured by the fiscal burden rate (X2), which is the proportion of fiscal revenue to regional GDP.

Second, industrial structure upgrading own influencing factors: X3 human capital level, X4 technological innovation rate, X5 opening-up level

According to the Solow model and C-D production function, it is known that human capital and technological innovation are the important endogenous driving force of economic growth, and also the main performance of industrial structure upgrading. In this paper, referring to Xiao Ye, the human capital level (X3) is expressed by the proportion of the number of students enrolled in higher education in each city to the total population at the end of the year, the technological innovation rate (X4) is expressed by the index of regional innovation capacity, and the level of opening up to the outside world (X5) is expressed by the total amount of imports and exports of each city as a proportion of the city's GDP.

2.2.3 Control variables: X6 consumption level of residents, X7 population density, X8 urbanization rate

Consumption level (X6) is the total retail sales of consumer goods as a proportion of city GDP; population density (X7) is the number of permanent residents per unit of land area; urbanization rate (X8) is the proportion of non-agricultural population to the total population at the end of the year.

2.3 Descriptive Statistics

The results, shown in Table 1, show that the minimum value of the economic development level of each city is 10.11 and the maximum value is 12.06, which is a big difference, indicating that the economic development of each province is unbalanced, which is consistent with the reality. In addition, the standard deviation of GDP per capita and fixed asset investment is 0.473 and 0.399 after taking logarithm due to the large base, and its value is significantly reduced, which helps to reduce the heteroskedasticity of the data, and side by side, it shows that the investment in fixed assets has been highly valued in our country, and the financial related expenditures are large, but the proportion of investment in fixed assets varies greatly in different regions, which demonstrates that the level of economic development is not balanced among the cities. The difference in the percentage of fixed asset investment in different regions is large, showing the problem of uneven economic development level among cities. The minimum value of human capital in the control variables is 3.248, and the maximum value is 7.124, which shows the unevenness of the level of human capital in each province, so it is necessary to carry out 1% winsor2 shrinking to deal with the outliers to reduce the interference in the regression analysis.

variables	variable	Ν	mean	p50	sd	min	max
GDP per capita	lnY	234	11.26	11.32	0.473	10.11	12.06
Fixed Asset Investment	lnX1	234	-0.396	-0.434	0.399	-1.407	0.288
Ratio							
Fiscal burden ratio	lnX2	234	-2.345	-2.368	0.247	-2.807	-1.526
Human Capital	lnX3	234	5.260	5.332	0.816	3.248	7.124
Technological Innovation	LnX4	234	4.452	4.493	0.131	4.076	4.591
Rate							
Open	lnX5	234	-1.203	-1.111	0.851	-3.056	0.329
Consumption level	lnX6	234	-1.021	-1.009	0.192	-1.476	-0.622
Population density	lnX7	234	6.402	6.453	0.505	5.277	7.730
Urbanization Rate	lnX8	234	3.645	3.645	0.538	2.477	4.605

Table 1: Variable selection and descriptive statistics

2.4 Empirical analysis

2.4.1 Spatial correlation test

	Moran's I -value		Geary's C -value	
Year	adjacency matrix	Economic	adjacency	Economic
		Geography Matrix	matrix	Geography Matrix
2011	-0.094**	-0.095 **	1.062 *	1.065*
2012	-0.097 ***	-0.097***	1.068 *	1.068*
2013	-0.109 ***	-0.110***	1.066 *	1.065*
2014	-0.102***	-0.102 ***	1.072*	1.072*
2015	-0.138 ***	-0.138***	1.104 ***	1.104***
2016	-0.143***	-0.143***	1.111 ***	1.111 ***
2017	-0.147***	-0.147***	1.120 ***	1.120***
2018	-0.136***	-0.136 ***	1.098***	1.098 ***
2019	-0.156***	-0.156***	1.115***	1.113*

Table 2: Moran's I and Geary's C indices of economic growth

Before studying the spatial measurement model to determine whether the selected variables have spatial correlation, in order to avoid the error of a single indicator, this paper selects Moran's I index, Geary's C index to test the spatial correlation between variables. Based on the setting of the adjacency matrix and economic-geographical distance matrix, it can be seen from Table 2 that Moran's I index is significant at the 1% level and basically negative, and the value of Geary's C index is greater than 1, which indicates that there is a negative spatial spillover of economic growth in the YRD region. Neighborhood matrix and economic-geographical distance matrix show similar spatial correlation and significance, indicating that the YRD urban agglomeration is more economically mobile between regions due to geographic proximity and has a correlation in the development process.

2.4.2 Spatial measurement model identification

Due to the wide variety of spatial econometric models, this paper will determine the suitable model

through the following four steps. Therefore, this paper selects the individual time double fixed SDM spatial Durbin model for spatial correlation analysis.

Test Methods	adjacency matrix	Economic Geographic Distance Matrix
LM Spatial Error	629.542 ***	179.944 ***
Robust LM spatial error	209.282 ***	23.798 ***
LM spatial lag	421.610***	166.632***
Robust LM spatial lag	1.350	10.486***
Hausman test	67.90***	79.74***
Individual fixed LR test	67.53***	207.57***
Time-fixed LR test	277.28***	55.38***
Spatial error LR test	26.14***	23.86***
Spatial lag LR test	23.49***	30.86***
Wald test	25.80***	24.67***

Table 3: Tests of the spatial measurement model

2.4.3 Analysis of the estimation results of the spatial Durbin model

As shown in Table 4, the relevant variables exhibit significant spatial spillover effects, but the significance and sign of the spatial spillover effects in their regions are different under two different matrices, namely, the adjacency matrix and the economic-geographical distance matrix. Under the adjacency matrix, the level of fixed asset investment, the fiscal burden rate, the level of human capital, the rate of technological innovation, the level of opening up to the outside world, and the level of consumption of residents are all significant at the 1% and 10% levels; under the economic geography matrix, the population density and the urbanization rate are significant at the 1% and 5% levels. Therefore, the following section will decompose the effects of the spatial Durbin model according to the different spatial matrices, respectively.

Variable	Neighborhood Matrix	Economic Geographic Distance Matrix
lnX1	2.124***(0.795)	0.187(0.188)
lnX2	-1.880*(0.971)	0.199*(0.103)
lnX3	2.323***(0.833)	-0.0260(0.0896)
lnX4	5.583*(3.188)	-0.174(0.287)
lnX5	2.611***(0.940)	-0.0372(0.0786)
lnX6	-2.980**(1.174)	-0.00421(0.142)
lnX7	-0.609(1.677)	-0.900***(0.259)
lnX8	1.126(0.778)	-0.506**(0.208)

Table 4: Results of parameter estimation of spatial spillover effects

The results, shown in Table 5, under the model setting of neighboring matrix, the spatial spillover effect of economic growth in the Yangtze River Delta region shows a significant spatial spillover effect and the spatial correlation coefficient is negative, indicating that the economic growth of the region brings a negative effect on the economic growth of the neighboring regions, which is a joint effect brought by the problems arising from the fiscal vicious competition and industrial structure upgrading.

The level of fixed assets (lnX1), the level of human capital (lnX3) and the level of openness to the outside world (lnX5) show positive spatial spillover effects at a significant level of 5%, and the indirect effect is stronger. The level of openness to the outside world is positively correlated with local economic growth at a significant level of 1%, and has a positive spillover effect on the economic growth of neighboring regions, on the one hand, because import and export is one of the "troika" of economic growth, and as the level of openness to the outside world increases, it will promote the forward development of economic growth, on the other hand, the import and export trade requires the division of labor and cooperation between the regions, and the increase in the level of openness of a region will lead to the increase of industrial division of labor and export trade in the neighboring regions, thus promoting economic growth.

The financial burden rate (lnX2), technological innovation rate (lnX4), consumption level (lnX6) and population density (lnX7) show negative spatial spillover effects on economic growth. The fiscal burden rate has a negative spillover effect on the economic growth of neighboring regions at a significant level

of 10%, which is because excessive fiscal revenues in the region will cause greater financial pressure on neighboring regions, and will introduce talent, technology, labor and other factor endowments of neighboring regions, which is not conducive to the economic growth of neighboring regions; the level of consumption of the population has a negative spatial spillover effect on the economic growth of the region and neighboring regions at a significant level of 5%, indicating that with the increase of the consumption level of residents in the region, there is a negative spatial spillover effect on the economic growth of the region and the neighboring regions. The negative spillover effect on the economic growth of the region and neighboring regions at a significant level of 5% indicates that with the improvement of the consumption level of the residents, the people have higher requirements for the quality and innovation of consumer goods, and the current situation of China at the primary stage of socialism, which makes the consumption level of the residents and the rate of economic growth incongruous and is not conducive to the sustained and stable growth of the economy; the population density of the region at a significant level of 1% of the economic growth of the region has a negative spatial spillover effect, mainly because the population density of the region in the background of saturated labor market and advanced industrial structure, too high population density prompts the population to move too much to labor-intensive industries, which is not conducive to the transformation of industrial structure to technology-intensive and the development of high-fine industries, and hinders the high-quality development of the economy.

As shown in Table 6, under the setting of economic geographic distance matrix, economic growth still has significant spatial spillover, and the direct effect of spatial spillover of variables is basically the same as that of the neighboring matrix above, which indicates that the model is robust. Resident consumption level (lnX6), population density (lnX7) and urbanization rate (lnX8) have significant spatial spillover effects. Among them, population density has a negative spatial spillover effect on cities with similar economic growth levels and geographic proximity at the 1% significant level. This is because the denser the population distribution will not only cause urban problems such as traffic congestion, insufficient supply of public goods, and high pressure on employment in the region, but will also increase the pressure on the capacity of cities with similar levels of economic growth in regional personnel mobility, which is not conducive to the stable development of the economy; The urbanization rate has a negative spillover effect on regions with similar levels of economic growth and geographic proximity, and the construction of urbanization will produce a siphoning effect while expanding the development space of the region, slowing down the economic growth of cities with similar levels of economic growth and close proximity. In general, under the double display of the two matrices, the representative variables of fiscal competition and industrial structure upgrading have direct or indirect aspects on economic development, which indirectly indicates the rationality of choosing the spatial Durbin model.

variant	Wx	LR_Direct	LR_Indirect	LR_Total
InX1	2.124***(0.795)	0.0596 (0.0709)	1.280**(0.613)	1.340**(0.648)
InX2	-1.880*(0.971)	0.0138 (0.0506)	-1.116*(0.651)	-1.102*(0.655)
InX3	2.323***(0.833)	-0.0103 (0.0579)	1.409**(0.664)	1.399**(0.686)
InX4	5.583*(3.188)	-0.0594 (0.180)	3.426(2.238)	3.366 (2.259)
InX5	2.611***(0.940)	0.121***(0.0427)	1.486**(0.725)	1.607**(0.736)
InX6	-2.980**(1.174)	-0.163**(0.0707)	-1.690**(0.858)	-1.853**(0.886)
InX7	-0.609(1.677)	-0.663***(0.0957)	-0.0821(0.966)	0.745(0.970)
InX8	1.1260.778)	-0.0156(0.0544)	0.670(0.477)	0.654(0.487)
rho		-0.884**(0.375)		
sigma2_e		0.00684***(0.0007)		
Log-li				
kelihood		248.7158		
Observations	234	234	234	234
R-squared	0.362	0.362	0.362	0.362
Number of ID	26	26	26	26

Table 5: N	Veighborhood	matrix	regression	results o	of the	spatial	Durbin	model
	0				•/			

Table 6: Economic geographic distance matrix regression results of the spatial Durbin model

variant	Wx	LR_Direct	LR_Indirect	LR_Total
lnX1	0.187(0.188)	-0.0570(0.0609)	0.218(0.228)	0.161(0.234)
lnX2	0.199*(0.103)	-0.0188(0.0493)	0.243*(0.129)	0.224(0.153)
lnX3	-0.0260(0.0896)	0.0153(0.0577)	-0.0314(0.114)	-0.0161(0.145)
lnX4	-0.174(0.287)	-0.164(0.178)	-0.244(0.368)	-0.408(0.450)
lnX5	-0.0372(0.0786)	0.0314(0.0423)	-0.0437(0.102)	-0.0123(0.127)

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lnX6	-0.00421(0.142)	-0.183***(0.0641)	-0.0466(0.180)	-0.229(0.203)
lnX7	0.900***(0.259)	-0.647***(0.0989)	-1.278***(0.313)	-1.925***(0.347)
lnX8	-0.506**(0.208)	-0.0283(0.0562)	-0.629**(0.254)	-0.657**(0.280)
rho		0.208**(0.0916)		
sigma2_e		0.00721***(0.0007)		
Log-likelihood		243.9356		
Observations	234	234	234	234
R-squared	0.594	0.594	0.594	0.594
Number of ID	26	26	26	26

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2.4.4 Robustness test

This paper chooses to replace the matrix with the geographic distance matrix to test the stability of the model. The results show that the results of the geographic matrix regression analysis all pass the LR test, Wald test and other relevant model tests, compared with the other two matrix regression results, the geographic matrix regression analysis results are basically similar to the results of the neighboring matrices and maintain the consistency of the sign of the variables, and there is no major change in terms of the significance of the spatial spillover effect of the variables. The direct and indirect effects are consistent with the neighboring matrix, indicating that the indirect effect of the explanatory variables on the explained variables is higher than the direct effect, which initially shows the stability of the spatial Durbin model.

Secondly, the stability of the model is further tested by replacing important explanatory variables. In this paper, human capital is replaced by industrial structure upgrading and logarithmized to make it more convenient for calculation, and other variables parameters remain unchanged. From the test results, fiscal competition and industrial structure upgrading have a significant impact on economic growth, and the spatial spillover effect of economic growth is still significant, except for the level of industrial structure upgrading itself the spatial spillover effect is not significant, and the spatial effect of the rest of the variables does not change. This may be because the level of industrial structure upgrading can not be directly or indirectly as an influencing factor to represent itself in the test regression, and the level of industrial structure upgrading is subject to the combined influence of the primary, secondary and tertiary industries, which will cancel each other out. And this precisely shows the robustness of the model, indicating that economic growth has spatial spillover effects and is closely related to the indicators of the influencing factors of industrial structure upgrading. The results are shown in Table 7:

variant	Wx	LR_Direct	LR_Indirect	LR_Total
lnX1	0.192(0.185)	-0.0473(0.0613)	0.228(0.223)	0.181(0.230)
lnX2	0.218**(0.104)	-0.0151(0.0510)	0.267**(0.131)	0.252(0.155)
lnP	-0.0400(0.196)	-0.0995(0.0841)	-0.0738(0.256)	-0.173(0.312)
lnX4	-0.160(0.283)	-0.148(0.172)	-0.212(0.371)	-0.360(0.453)
lnX5	-0.0426(0.0784)	0.0288(0.0419)	-0.0511(0.101)	-0.0224(0.126)
lnx6	-0.0112(0.144)	-0.152**(0.0680)	-0.0444(0.183)	-0.196(0.208)
lnx7	0.906***(0.249)	-0.634***(0.0839)	1.265***(0.302)	1.899***(0.329)
lnx8	-0.519**(0.210)	-0.0232(0.0546)	-0.641**(0.254)	-0.664**(0.278)
rho		0.205**(0.0916)		
sigma2_e		0.00716***(0.0007)		
Number of ID	26	26	26	26

Table 7: Regression results of robustness test

3. Conclusions and Policy Recommendations

3.1 Research Conclusion

Indirect effect coefficients are much larger than the direct effect coefficients; fixed asset investment ratio and human capital level are positively correlated with the economic growth of the province, and have positive spatial spillovers to the neighboring cities; the fiscal burden rate has negative spatial spillovers to the neighboring cities.

3.2 Policy Recommendations

First, formulate a reasonable and effective performance appraisal mechanism. A reasonable and effective performance appraisal mechanism for local governments should be formulated, abandoning the "negative" appraisal method of "GDP only", and incorporating sustainable development indexes such as ecological environment, public service, and innovation capacity into the appraisal framework from the perspective of top-level design. At the same time, in order to improve the financial efficiency of local government competition, we should improve the financial and tax management system of local governments, pay more attention to the efficiency of financial expenditure, avoid the duplication of infrastructure construction, waste of resources and other issues that lead to the intensification of the future, and lock the inter-regional financial competition into the "system of cage", and promote benign, healthy and sustainable financial competition. "Secondly, we should target the increase of financial science and education expenditure to help industrial structure transformation and upgrading. Third, strengthen regional information sharing and joint control mechanism.

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